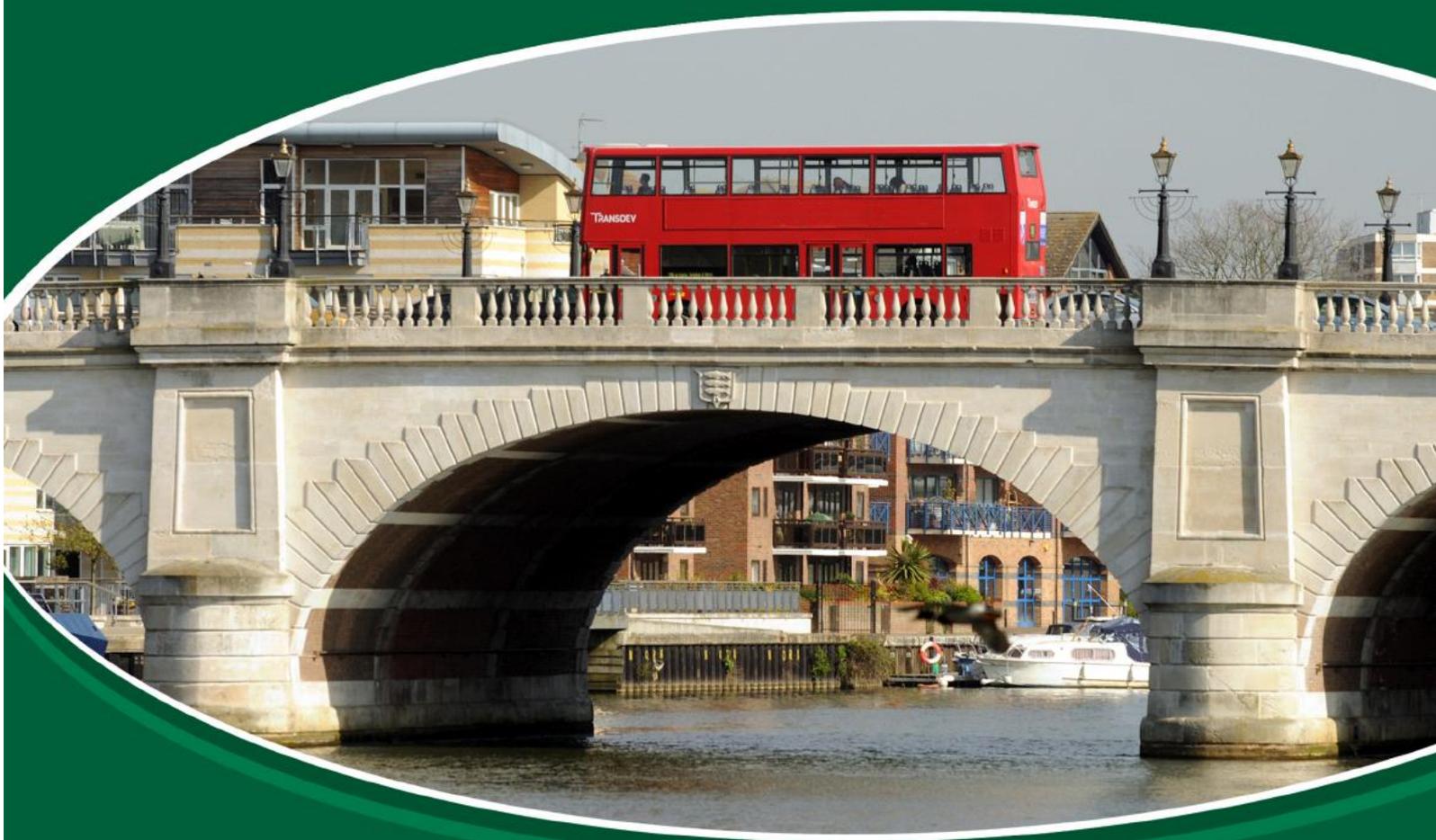


A Transport Plan for Royal Borough of Kingston upon Thames

(Second Local Implementation Plan)

2011-2031



FOREWORD FROM COUNCILLOR SIMON JAMES

As Executive Member for Sustainable Place, I am pleased to present the Kingston's Second Local Implementation Plan (LIP2) for 2011-2031.

The development of LIP2 has involved extensive consultation with the Sustainable Communities Partnership, elected members, Council staff, and the general public. We have also ensured that LIP2 supports other local documents of importance such as the Sustainable Communities Strategy (Kingston Plan). As such I am pleased to present a transport plan which I believe addresses the key transport issues facing the borough and reflects the needs and aspirations of the people of Kingston.

Transport is an essential part of life in Kingston with residents and visitors using a variety of transport modes to travel to, through, and beyond the borough. Our quality of life is influenced by the opportunities we have for safe, sustainable, and convenient transport. Transport contributes towards the borough's economic vitality, the quality of the natural and physical environment, healthy lifestyles, and general wellbeing. LIP2 aims to balance these outcomes while providing travel choices that meet the needs of residents, workers, and visitors to the borough.

Achieving the vision and aspirations of LIP2 will be a challenge, but it is a challenge that the Council is eager to embrace. The Council will deliver LIP2 by working with partners to create a safe borough that is easily accessible by all transport modes; in particular the Council will work with partners to:

- Enhance the network of safe attractive walking and cycling routes
- Maintain and enhance public transport services
- Manage and where possible reduce congestion on the borough's roads
- Improve the accessibility of the public realm and transport network for disabled users
- Ensure the borough continues to be one of the safest in London both in terms of accidents on the highway network and criminal offences
- Ensure residents, schools, workplaces, and other large organisations are well informed of sustainable travel options, and will have a strong understanding of the importance of using sustainable modes of transport
- Improve air quality in the borough (particularly along busy roads), and reduce CO₂ emissions from transport.

I encourage you to support our approach to improving transport in Kingston upon Thames.



Councillor Simon James

Executive Member for Sustainable Place

EXECUTIVE SUMMARY

Introduction

This is the Royal Borough of Kingston upon Thames (RBK) Second Local Implementation Plan (LIP2). It has been developed as a transport strategy for the borough and to demonstrate how the Council will deliver the revised Mayor's Transport Strategy (MTS) which was released in May 2010.

A Local Implementation Plan is a statutory document, prepared under Section 145 of the Greater London Authority Act 1999 and sets out how the Council proposes to implement the MTS at a local level. LIP2 will become operative when approved by the Mayor of London in July 2011 and contains objectives, policies, actions, targets that span out to 2031 (in line with the MTS).

As well as implementing the MTS, LIP2 is consistent with the emerging South London Sub-regional Transport Plan, and reflect RBK's local priorities and objectives; such as those outlined in the Local Development Framework and the Sustainable Communities Strategy (Kingston Plan).

Vision

LIP2's vision for 2031 is that we will have a safe, efficient, integrated, inclusive, responsive, and sustainable transport network. The transport network will support the economic vitality of the borough, minimise its impact on (and where possible enhance) the natural and physical environment, minimise carbon emissions, and support travel choices that meet the needs of residents, workers, and visitors to the borough.

Working with partners the Council will create a borough that is easily accessible by all transport modes; including a network of safe attractive walking and cycling routes across the borough and beyond the borough boundaries, and provision of efficient public transport services. Congestion on the borough's roads will be managed effectively and where possible improved, and the accessibility of the public realm and transport network for disabled users will improve.

The borough will continue to be one of the safest in London both in terms of accidents on the highway network and criminal offences. Perceptions of safety from crime will also improve.

Residents, schools, workplaces, and other large organisations will be well informed of sustainable travel options, and will have a strong understanding of the importance of using sustainable modes of transport. Schools, workplaces, and large organisations will also support and encourage sustainable travel to their sites.

Air quality in the borough will improve, particularly along busy roads; and CO2 emissions from transport will have been reduced.

Delivering the Vision

In order to achieve this vision LIP2 examines the borough's transport network and the challenges and opportunities it faces over the next 15-20 years. Then in light of this information outlines objectives, policies, and actions which will guide transport initiatives in the borough until 2031. Five key themes and seventeen objectives have been identified which set the focus for the strategy, these are outlined below:

THEME	OBJECTIVE	THEMES THAT OBJECTIVE SUPPORTS
THEME A – Reduce transport's contribution to climate change, and improve its resilience to the effects of climate change	1. Reduce CO2 emissions from road based transport	A, B, D
	2. Maintain and enhance the resilience of the Kingston's transport system to the effects of climate change	A, E
THEME B – Reduce congestion and traffic levels in RBK	3. Promote and enhance public transport, walking, and cycling as transport modes; particularly for people accessing employment, education, and shopping activities within RBK	A, B, D, E
	4. Reduce congestion and smooth traffic flow in congestion hotspots	A, B, D, E
	5. Reduce the need to travel during peak congestion times	A, B, E
THEME C – Create safer communities and a safer transport network	6. Reduce serious injuries and deaths on RBK's transport network	C
	7. Reduce crime and fear of crime while in the public realm and on public transport	A, B, C, E
THEME D – Improve transport opportunities and enhance the quality of life for all RBK residents	8. Improve sustainable transport links to/from/within socially deprived areas and areas with poor access to public transport	A, B, D, E
	9. Improve the physical accessibility of RBK's transport network, especially for disabled people	D
	10. Improve pedestrian and cycling permeability and connectivity throughout RBK	A, B, D, E
	11. Protect and enhance the built and natural environment	C, D, E
	12. Improve air quality and reduce impacts of noise and vibration from transport	A, D
	13. Improve transport's contribution to health and wellbeing	A, B, D
THEME E – Sustain and share economic growth and prosperity	14. Improve economic viability of the borough by improving the accessibility of key employment, retail, entertainment, education, and growth areas	A, B, D, E
	15. Improve public transport links to key attractions outside of RBK e.g. Waterloo, London's airports	A, B, E
	16. Better manage and improve freight access, particularly to key industrial and commercial areas	A, B, C, D, E
	17. Bring and maintain all transport infrastructure assets to a state of good repair	C, D, E

Funding and delivery of the LIP will be dependent on partnership working with a number of stakeholders, including Transport for London (TfL), Network Rail, the Train Operating Company (currently South West Trains), neighbouring boroughs, developers, and other stakeholders.

Improvements to rail and associated infrastructure will be made through the High Level Output Specification (HLOS), Network Rail, and the Train Operating Company. Improvements to bus services will be made by TfL; however improvements to highway infrastructure will predominantly be implemented by the Council. TfL is responsible for maintaining the A3 and its service roads and those sections of the A240 and A243 which lie south of the A3. The Council is responsible for maintaining and improving all other highways within the borough.

The principal source of funding for delivering the aspirations of this document (that will be implemented by the Council) is the TfL LIP allocation which is provided to the borough on an annual basis. Although other funding sources such as planning contributions and Council capital funding will also assist the implementation of the strategy.

The Structure of the Document

LIP2 is divided into four key sections.

Section 1: Context and LIP2 Objectives – This section briefly describes the demographics of the borough, provides some key background information on the transport network, discusses key challenges, outlines the LIP themes and objectives (which set the direction for the rest of the strategy), and discusses the results of LIP2 stakeholder consultation.

Section 2: Policy – This section provides further contextual information on RBK's transport network as well as considering challenges facing the borough and current transport initiative and then in light of this information outlines policies to deliver the MTS Goals and LIP Objectives. The policies are more targeted than the LIP Objectives and are a mixture of 'actions' and 'position statements'.

Section 3: Delivery Plan – The main focus of the Delivery Plan is a comprehensive list of actions to be delivered over the life of LIP2 and the Programme of Investment (2011/12 – 2013/14), which sets out how the borough's transport funding will be allocated over the next 3 years. The actions have been derived from the LIP Policies, have specified timeframes for delivery, and all support the achievement of the MTS Goals and LIP Objectives.

Section 4: Monitoring Plan – The Monitoring Plan sets five Core Targets and several Local Indicators that will be used to assess the effectiveness of the LIP Policies, Actions, and Programme of Investment in delivering the LIP Objectives and MTS Goals.

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Introduction and LIP2 Development

This section provides an introduction to the Royal Borough of Kingston upon Thames's Second Local Implementation Plan and covers the following:

- (0.1) What is a Local Implementation Plan
- (0.2) Mayor's Transport Strategy Goals
- (0.3) Equalities Impact Assessment
- (0.4) Strategic Environmental Assessment
- (0.5) LIP2 Consultation to Date
- (0.6) The Structure of LIP2
- (0.7) Demonstrating Compliance with MTS Goals

(0.1) What is a Local Implementation Plan

This is the Royal Borough of Kingston upon Thames (RBK) Second Local Implementation Plan (LIP2). It has been developed as a transport strategy for the borough and to demonstrate how the Council will deliver the revised Mayor's Transport Strategy (MTS) which was released in May 2010.

A Local Implementation Plan is a statutory document, prepared under Section 145 of the Greater London Authority Act 1999 (GLA) and sets out how the Council proposes to implement the MTS at a local level. LIP became operative when approved by the Mayor of London in October 2011 and contains objectives, policies, and actions that span out to 2031 (in line with the MTS).

As well as implementing the Mayor's Transport Strategy, LIP2 should be consistent with the South London Sub-regional Transport Plan, and reflect RBK's local priorities and objectives. In order to satisfy these requirements a range of national, regional, and local documents were considered in the development of LIP2. These are outlined below:

- Department for Transport (DfT) - Delivering a Sustainable Transport System
- Traffic Management Act 2004 (Network Management Duty)
- The Mayor's Transport Strategy
- The emerging Sub-regional Transport Plans (SRTP)
- RBK's Local Development Framework (K+20, and the Core Strategy)
- The Sustainable Communities Strategy (Kingston Plan)
- RBK's Local Area Agreement
- RBK's Air Quality Action Plan
- RBK's First Local Implementation Plan
- RBK Neighbourhood priorities

Appendix 1 provides a summary of national, regional, sub-regional, and local documents that influenced the development of LIP2. Appendix 2 comprises a series of matrices which demonstrate that RBK's LIP2 'themes' are consistent with the aspirations of these documents. Please also refer to 'Focus on RBK's Network Management Duty' (Section 2.2.10) for details as to how the Council is fulfilling its network management duties.

(0.2) Mayor's Transport Strategy Goals

LIP2 identifies how the Council will implement the MTS at a local level. Broadly this means that we will be working to help achieve the main goals of the MTS, which are outlined below:

MTS Goal 1 – Support economic development and population growth

MTS Goal 2 – Enhance the quality of life for all Londoners

MTS Goal 3 – Improve the safety and security of all Londoners

MTS Goal 4 – Improve transport opportunities for all Londoners

MTS Goal 5 – Reduce transport's contribution to climate change and improving its resilience

MTS Goal 6 – Support delivery of the London 2012 Olympic and Paralympic Games and its legacy

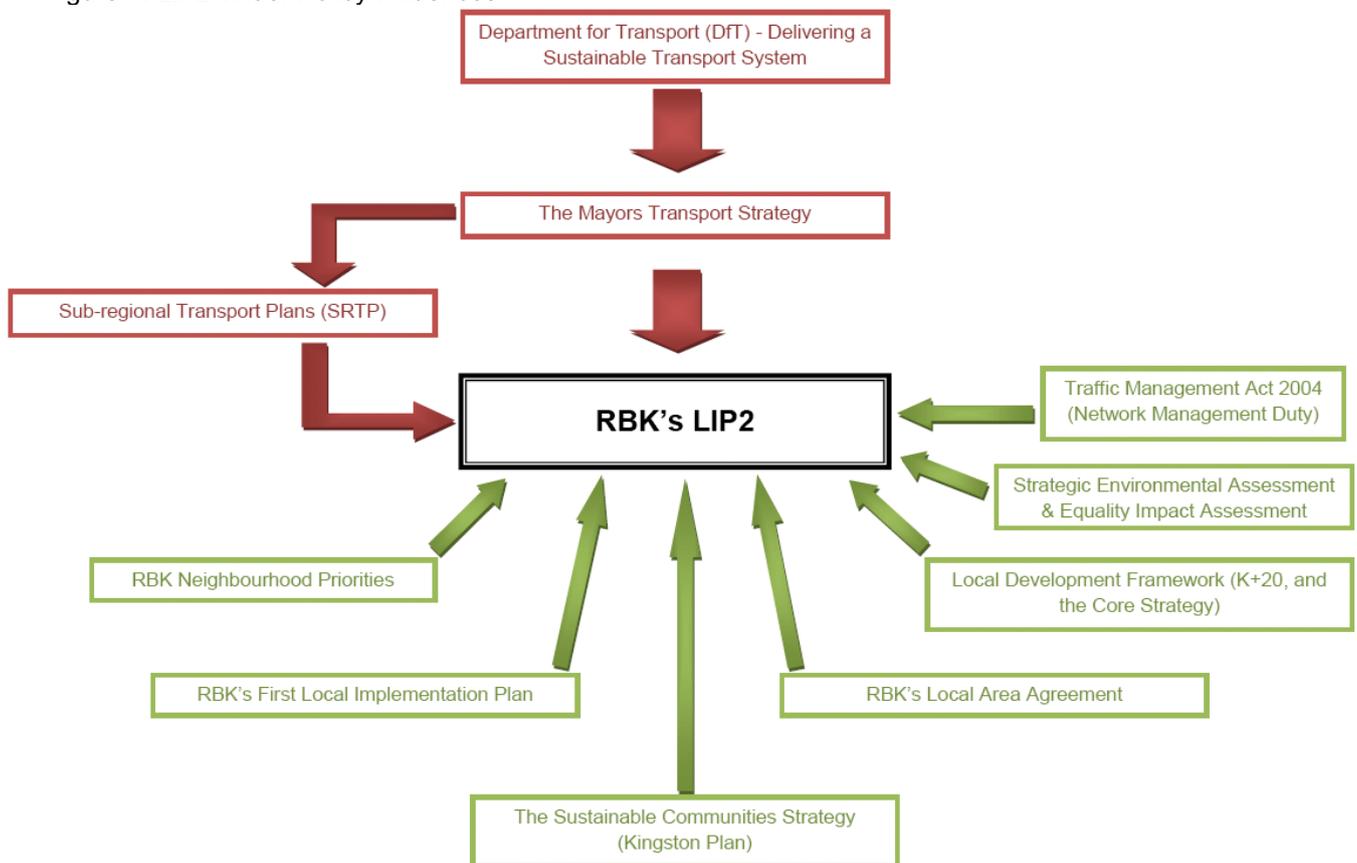
(0.3) Equalities Impact Assessment

As part of the process of developing LIP2 an Equality Impact Assessment (EQIA) was carried out to ensure the strategy was developed in an inclusive, reasonable, and measured way. The EQIA also ensures that the proposals put forward within the document do not result in discrimination or unfair treatment against equality groups. Of note is that the EQIA did not result in any changes to the LIP2 Objectives. The results of the EQIA are discussed further in Appendix 3.

(0.4) Strategic Environmental Assessment

A Strategic Environmental Assessment (SEA) was also carried out as part of the process of developing LIP2. The role of the SEA is to promote sustainable development and to ensure that LIP proposals take on board all relevant environmental considerations. The SEA has been produced in consultation with The Environment Agency, Natural England, and English Heritage. The SEA assessment of LIP2 Objectives did not result in any changes, this assessment process is outlined in detail in Appendix 4.

Figure 1: LIP2 Wider Policy Influences



(0.5) LIP2 Consultation

The Council wanted to ensure that the development of LIP2 was an inclusive process where the views of key stakeholders were considered throughout. During the development of LIP, consultation was carried out to test the quality of the themes and objectives, identify local transport issues and opportunities, and to gain input as to desired policies, actions, and investment priorities. The following consultation has been completed in the development of LIP2.

- 1) RBK held three workshops early in the development of LIP2 (February - March 2010) as a means of ensuring key stakeholders views were taken into consideration. The purpose of the workshops was to test the quality of the proposed LIP2 themes and objectives, identify local transport issues and opportunities, and to gain input as to desired policies and actions. The three workshops are briefly outlined below:
 - *RBK officer workshop* – this involved staff members from across RBK whom have an interest in the development and content of LIP2.
 - *Stakeholder workshop* – this involved stakeholders across a wide variety of groups, including: Local Strategic Partnership (Sustainable Communities Partnership), organisations representing disabled users, walking and cycling groups, older users, economic development groups, organisations representing local business etc. All statutory consultees (as required by the GLA) were invited this workshop.
 - *Councillor workshop* – all councillors were invited to attend this workshop.
- 2) The Draft Context, Objectives, and Policy Sections were completed in June 2010 and underwent the following consultation:
 - Circulated to RBK staff for comments
 - Three councillor workshops were held
 - A workshop was held to gain feedback from the Sustainable Communities Partnership
- 3) The final Draft of LIP2 was completed in October 2010, and underwent the following consultation:
 - Circulated to RBK staff for comments
 - Two councillor workshops were held

Council officers went through all points raised at the workshops, discounting some and following up on others. Many of the suggestions from workshop attendees are reflected in LIP2.

- 4) LIP2 underwent a formal six week public consultation. The Council compiled a schedule of representations, responded to each submission point, and where appropriate amended the document in response to representations. The consultation also included a 'tick box' questionnaire where respondents' were asked to rate the importance of the various initiatives included in LIP2.

Please refer to Section 1.7 and Appendix 25 for a summary of results from the LIP2 Stakeholder Workshop and consultation questionnaire.

Please Note: The GLA places a duty on boroughs to consult the following parties when preparing a LIP:

- The relevant Commissioner or Commissioners of Police for the City of London and the Metropolis
- TfL
- Organisations that represent disabled people, if the council considers it appropriate
- Each other London borough council whose area is, in the opinion of the council preparing the LIP, likely to be affected by the plan
- Any other person required by the Mayor to be consulted

The Council has fulfilled this duty by inviting all these groups to the stakeholder workshop, and directly serving them with notification of the LIP2 public consultation. Please refer to Appendix 5 for a list of stakeholders invited to the stakeholder workshops in February

2010, and who have been directly served with notification of this public consultation. Please note this is not an exhaustive list of stakeholders who were directly served with notification of the public consultation.

- 5) The Mayor of London approved RBK’s LIP2 in October 2011, and the Council formally adopted it in December 2011.

(0.6) The Structure of LIP2

LIP2 contains four main sections:

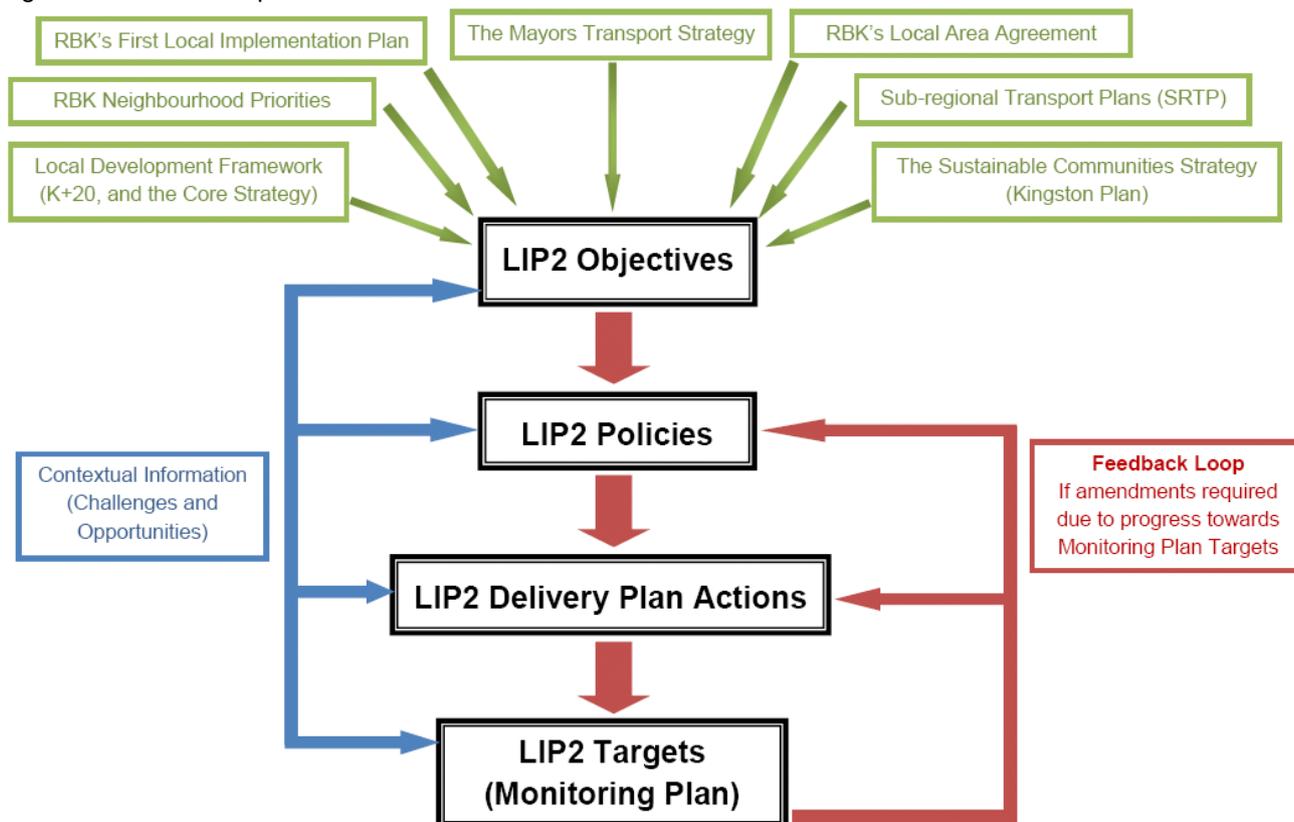
Section 1: Context and LIP2 Objectives – This section briefly describes the demographics of the borough, provides some key background information on the transport network, discusses key challenges, outlines the LIP themes and objectives (which set the direction for the rest of the strategy), and discusses the results of LIP2 stakeholder consultation.

Section 2: Policy – This section provides further contextual information on RBK’s transport network as well as considering challenges facing the borough and current transport initiatives and then in light of this information outlines policies to deliver the MTS Goals and LIP Objectives. The policies are more targeted than the LIP Objectives and are a mixture of ‘actions’ and ‘position statements’.

Section 3: Delivery Plan – The main focus of the Delivery Plan is a comprehensive list of actions to be delivered over the life of LIP2 and the Programme of Investment (2011/12 – 2013/14), which sets out how the borough’s transport funding will be allocated over the next three years. The actions have been derived from the LIP Policies, have specified timeframes for delivery, and all support the achievement of the MTS Goals and LIP Objectives.

Section 4: Monitoring Plan – The Monitoring Plan sets five Core Targets and several Local Indicators that will be used to assess the effectiveness of the LIP Policies, Actions, and Programme of Investment in delivering the LIP Objectives and MTS Goals.

Figure 2: LIP2 Development Overview



(0.7) Funding

Funding and delivery of LIP2 will be dependent on partnership working with a number of stakeholders, including Transport for London (TfL), Network Rail, the Train Operating Company (currently South West Trains), neighbouring boroughs, developers, and other stakeholders.

Improvements to rail and associated infrastructure will be made through the High Level Output Specification (HLOS), Network Rail, and the Train Operating Company. Improvements to bus services will be made by TfL; however improvements to highway infrastructure will predominantly be implemented by the Council. TfL is responsible for maintaining the A3 and its service roads and those sections of the A240 and A243 which lie south of the A3; the Council is responsible for maintaining and improving all other highways within the borough.

The principal source of funding for the Council to deliver the transport proposals set out in this document is the TfL LIP core funding allocation which is provided to all London Borough's on an annual basis. In 2010, TfL introduced a formula based system to determine the amount of core funding to be allocated to each borough. This has resulted in significant reductions in the level of overall transport funding allocated to RBK in comparison to previous years, and the proposals in LIP2 have been developed to reflect this lower funding settlement. TfL may also make additional funding available for borough's to bid for, including for major transport schemes or to support specific initiatives such as biking boroughs.

In addition to funding from TfL, there may be opportunities to bid for transport funding grants from other sources, such as the European Union. The Council can seek planning contributions towards transport schemes from new development in the borough and also provide funding from Council budgets to support the implementation of transport schemes.

(0.8) Demonstrating Compliance with the MTS

Throughout the strategy the compatibility of the LIP Themes/ Objectives/ Policies/ Actions and the MTS are demonstrated using tables ('compliance checks'); there are 2 table formats:

- 1) Tables that list the MTS Goals and Challenges in the first columns. Beside each MTS Goal/Challenge the LIP Objectives, Policies, and Actions that help deliver the goal are listed; as per below:

Table 1: MTS Compliance Check Table (Example 1)

MTS GOAL	MTS CHALLENGE	SUPPORTING LIP POLICIES
Goal 1 – Support economic development and population growth	Supporting sustainable population and employment growth	GP1, GP4, RT1, PT1, PT4, PT5, ST1
	Improving transport connectivity	GP1, GP4, GP5, RT1-RT4, PT1, PT4, PT5, IT1, ST1, MV5, MV6, P1-P3
	Delivering an efficient and effective transport system for people and goods	GP1, GP2, GP5, RT1, RT4, PT1, PT5, IT1, C1, MV1-MV5, M1-M4, P1- P3, CC3-CC5

2) Tables that list LIP Objectives, Policies, or Actions in the first column. Then beside each objective/policy/action the MTS Goals being delivered are listed.

Table 2: MTS Compliance Check Table (Example 2)

Roads and Managing Vehicle Use			
General Delivery Plan Action	Supports MTS Goal	Supports Objectives	Timeframe for Delivery
Review RBK's road hierarchy. If the review recommends changes that will be beneficial from a network management or maintenance perspective, then the Council will work with DfT and TfL to reclassify the road hierarchy.	1	14, 16, 17	2013/14

This method of demonstrating compliance with the MTS is seen as a comprehensive approach as it allows us to demonstrate that some objectives, policies, and actions will contribute towards delivering more than one MTS Goal or Challenge. It also allows the strategy to be structured in a way that best reflects key areas of the transport network.

Please Note:

- Policies ('position statements') have been included in LIP as they are important aspects of managing and developing the transport network and will significantly contribute to achieving MTS Goals and LIP Objectives.
- A summary of interventions/initiatives being promoted in LIP2 that will deliver the MTS Goals and Challenges is outlined in Table 14 (p152).
- A summary of all interventions/initiatives being promoted in LIP2 that will deliver the LIP2 Objectives are outlined in Section 3.2.2. For tables demonstrating how the LIP Policies and Actions deliver the LIP Objectives please refer to the Delivery Plan Actions and Appendix 6.

Section 1: Context and LIP2 Objectives

This section covers the following topics:

- (1.1) *Borough Context* – Looks at key attributes of the borough such as geography and population demographics.
- (1.2) *Transport Context and Characteristics* – Provides some key background information on the transport network under topic based headings.
- (1.3) *Confirmed Investment in RBK by other organisations*
- (1.4) *Challenges Facing the Borough* – Summarises the key challenges and opportunities facing RBK's transport network.
- (1.5) *Themes and Objectives* – Outlines the LIP Themes and Objectives and briefly describes how they were developed.
- (1.6) *Compliance Check 1* – LIP2 Objectives compatibility with MTS Goals, SRTP Challenges, Kingston Plan Objectives.
- (1.7) *Consultation with Stakeholders* – Outlines consultation completed with stakeholders; namely results of the stakeholder workshop and public consultation.

(1.1) BOROUGH CONTEXT

The following sets out RBK's geographic and demographic context. Further information on the Borough's local context can be found in RBK's Borough Profile 2009.

(1.1.1) Geography

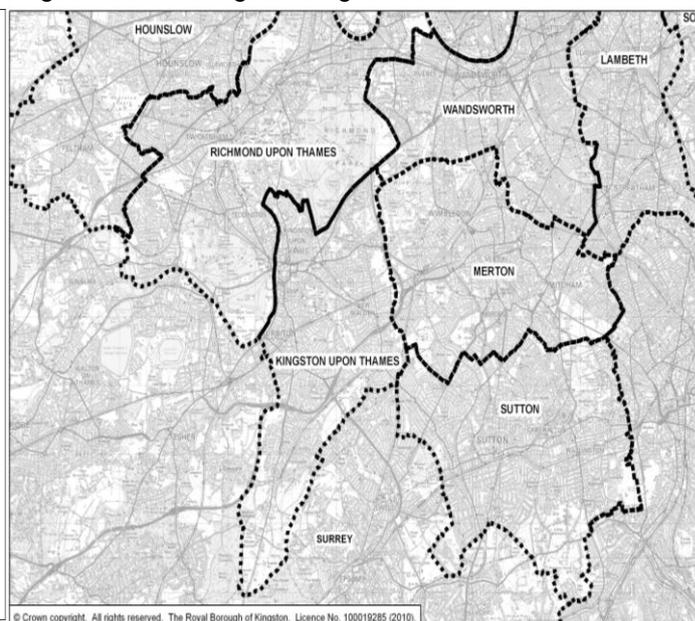
RBK is situated in the Southwest of London and is bordered by the London Boroughs of Richmond, Wandsworth, Merton, and Sutton; as well as Surrey County Council boroughs of Elmbridge, Mole Valley, and Epsom and Ewell.

The borough covers an area of 38.66 square kilometres, which makes it the seventh smallest London borough in terms of its geographical area. The Borough has one Metropolitan Town Centre (Kingston Town Centre), and three District Centres (Surbiton, New Malden, and Tolworth).

Figure 3: RBK London Context



Figure 4: RBK Neighbouring Authorities



(1.1.2) Population Demographics

According to the Office for National Statistics (ONS) Population Mid-Year Estimates RBK had a population of 164,600 residents in 2008; it is currently the smallest London Borough by population. There are large discrepancies between the ONS and Greater London Authority (GLA) population growth forecasts for RBK out to 2018 making it difficult to select a reliable population projection. Council officers have analysed ONS and GLA projections as well as other available data, and estimated that the borough's population is likely to increase by 5-6% between 2008 and 2018 (from the ONS 2008 base). This would equate to a total population for the borough of between 172,800 and 174,500 residents by 2018. An increasing population has many implications for the provision of transport services and facilities in the borough.

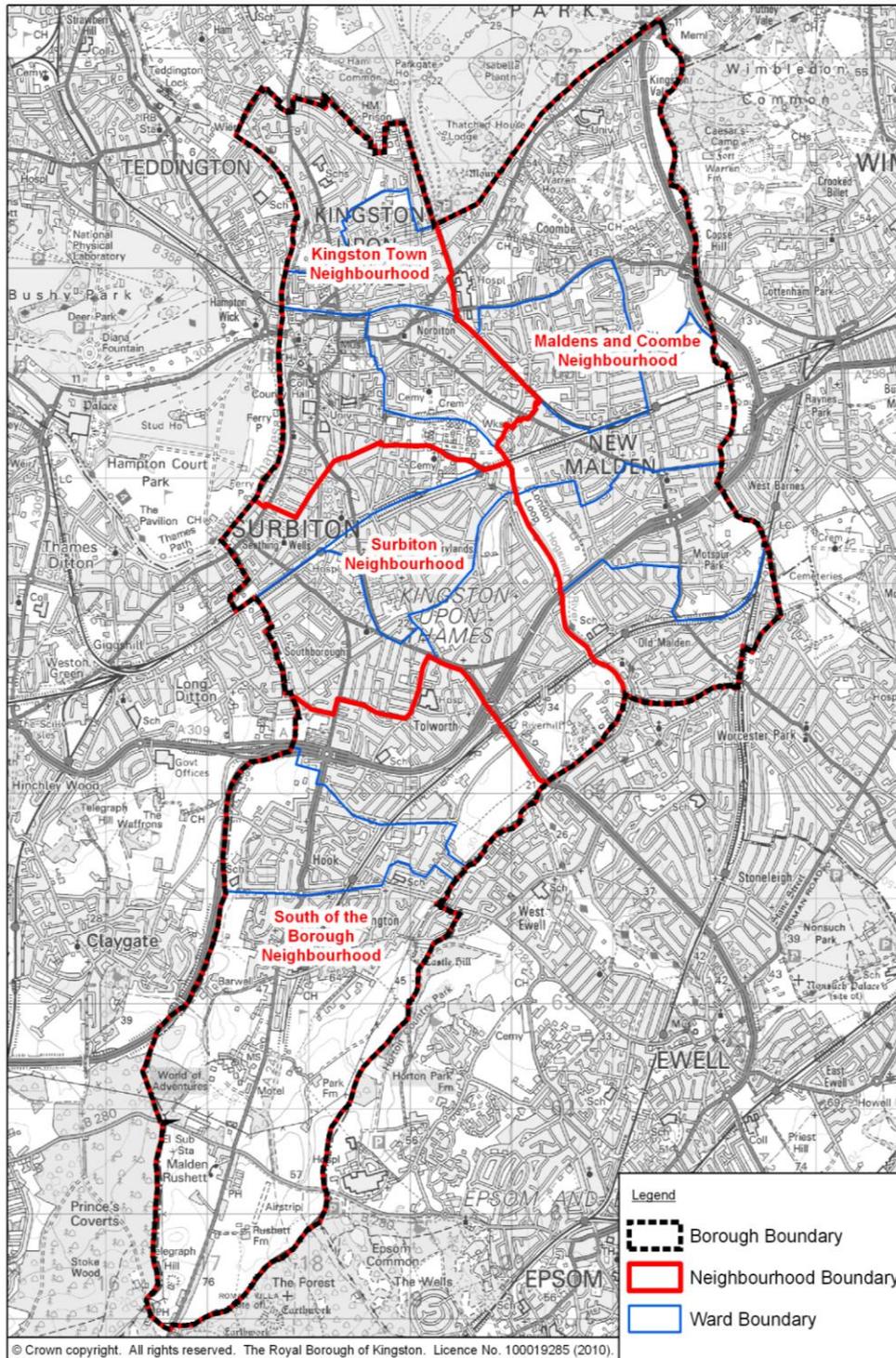
2008 mid-year estimates show that residents aged (16-64) represent 67.5% of the population and 12% of residents are aged 65 or over; 51% of RBK residents are women and 49% are men. The 2001 census showed that the ethnic composition of RBK was 84.5% white, 7.8% Asian or Asian British, 3.9% Chinese, 2.3% mixed race, and 1.6%

Black or Black British. The largest minority ethnic groups in the borough are Tamils and Koreans; the Korean population in New Malden is estimated to be the largest in Europe¹.

(1.1.3) Political Context

RBK comprises 16 wards which are combined to form 4 Neighbourhoods: Kingston Town, Maldens and Coombe, Surbiton, and South of the Borough.

Figure 5: RBK Neighbourhood and Ward Boundaries



¹ Source: Royal Borough of Kingston upon Thames – Borough Profile 2009

(1.1.4) Deprivation and Development

The vast majority of areas in the borough are ranked in the least deprived category nationally. However, one area in Norbiton Ward is ranked within the 10-20% most deprived areas, and two areas (one in Grove Ward and one in Berrylands Ward) are ranked within the 20-30% most deprived areas nationally. These rankings are based on a number of criteria which comprise the National Index of Multiple Deprivation (income, employment, health deprivation and disability, education skills and training, barriers to housing and services, crime and living environment).

The LDF does not propose any major regeneration projects in the borough, but it does identify the Hogsmill Valley and Tolworth (around the District Centre and train station) as areas for 'major change'. Most other development in the borough will be focused around KTC and the District Centres.

Figure 6: RBK National Index of Multiple Deprivation

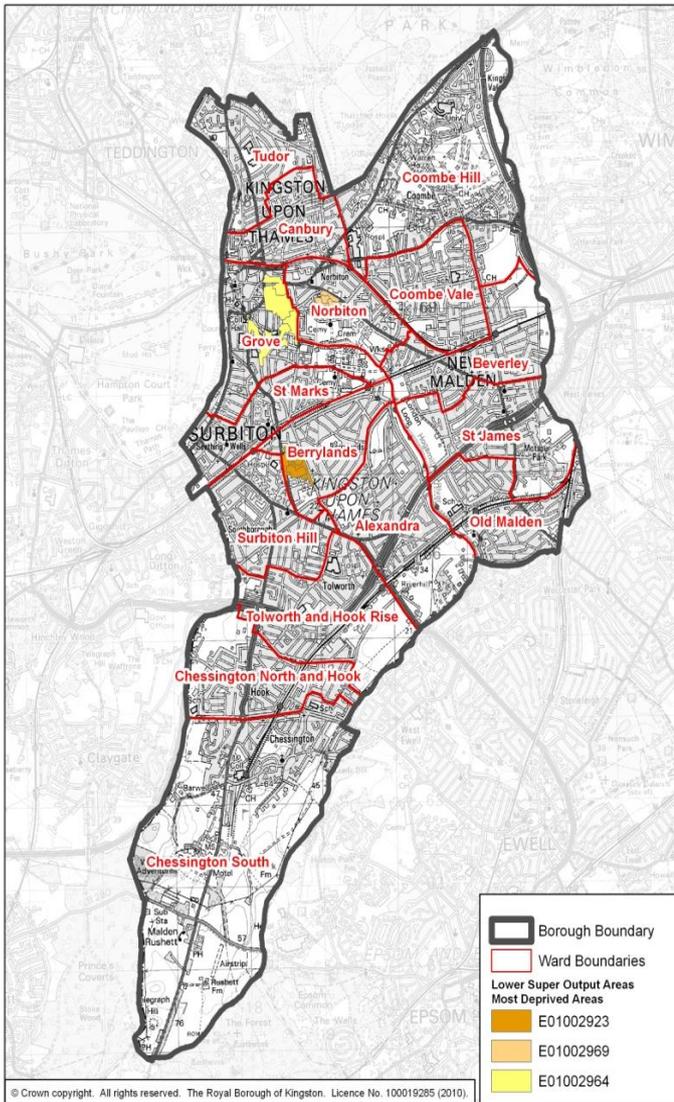
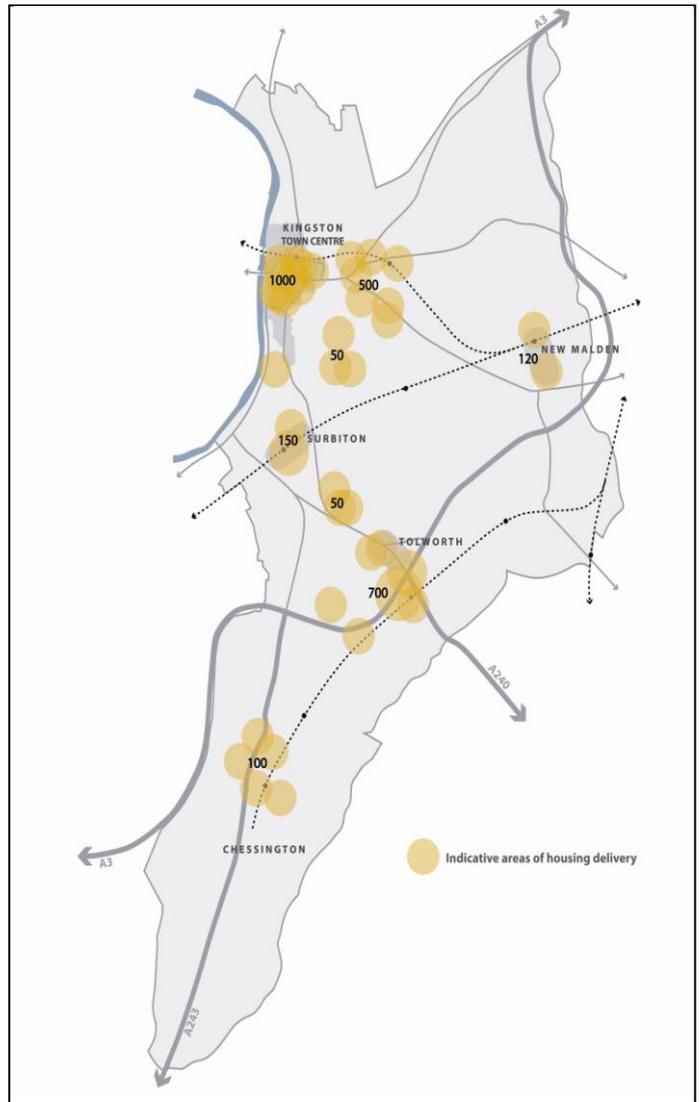


Figure 7: Core Strategy Areas of Housing Delivery



(1.1.5) Employment and Education

The local unemployment rate in Kingston (measured as Jobseekers Allowance recipients as a percentage of economically active population) was 2.6% for June 2010. This is significantly lower than the London rate of 5.6%, and has decreased from 3.3% in July 2009. The employment forecasts for the borough out to 2030 are the subject of debate with GLA Economics forecasts predicting that employment levels will fall by 2,500 between 2010-2020, and increase by 6,000 between 2020-2030. Oxford Economics predict that employment levels will increase by 11,400 between 2010-2020, and will increase by 4,900 between 2020-2030.

RBK has a wide range of schools and educational facilities, including a significant population of students attending Kingston University and Kingston College.

(1.1.6) Character and Heritage

The borough varies in character with areas of open rural character, green leafy suburbs, built up residential, retail, and office areas. The borough also has a rich distinguished history and has maintained a strong connection to its past, thus preserving its sense of place and deeply ingrained character. There are five historic cores within the borough: Kingston Town, Surbiton Town, Coombe, Old/New Malden, and Tolworth/Chessington.

The borough's character and heritage is considered in detail in the emerging Core Strategy and the Borough Character Study (January 2011). As such when considering issues of character and heritage, transport initiatives will need to give consideration to the Council's Local Development Framework (including the emerging Core Strategy Document, the Borough Character Study January 2011, and any Supplementary Planning Guidance developed), and the English Heritage at Risk Register 2010.



(1.2) TRANSPORT CONTEXT AND CHARACTERISTICS

The following outlines the transport characteristics of the borough, including its national, regional, sub-regional, and local geography.

(1.2.1) RBK's Main Trip Generators and Transport Geography

London's transport system operates at a number of levels: internationally, nationally, regionally, sub-regionally and locally. Different organisations have responsibility for assessing challenges, generating options, and identifying investment priorities for different levels of the hierarchy: the Department for Transport (DfT) for international and national networks, Transport for London (TfL) for London-wide and certain sub-regional networks, and London borough's for other sub-regional and local networks. The Council has a key role in determining and delivering infrastructure within the borough of sub-regional and local significance, and can also influence those organisations delivering international, national and London-wide networks which affect the borough.

The largest trip generators in RBK are Kingston Town Centre, the District Centres, Kingston University, Kingston College, Kingston Hospital, Chessington Industrial Estate, Barwell Business Park, and Chessington World of Adventures. All of these attractions (except the District Centres) are considered to attract a significant number of trips from the wider sub-regional catchment. The main attractions outside the borough include London Waterloo Train Station and Heathrow Airport.

Table 3 identifies the trip generators, multi-modal transport corridors, transport interchanges, and some external transport influences of relevance to RBK.

Table 3: Kingston's Transport Geography

Level	Key Origins/ Destinations (Trip Generators)	Multi-Modal Transport Corridors	Interchanges Between Networks	Key External Transport Geography Influences
International				<ul style="list-style-type: none"> • Heathrow Airport • Gatwick Airport • St Pancras International
National	<ul style="list-style-type: none"> • Chessington World of Adventures • Kingston University • Chessington Industrial Estate 	<p><i>Highway:</i></p> <ul style="list-style-type: none"> • A3 <p><i>Rail:</i></p> <ul style="list-style-type: none"> • Kingston/Surbiton to destinations in Southern England 		<ul style="list-style-type: none"> • M25 • Surrey Town Centres (e.g. Guildford, Woking and Epsom)
London-wide	<ul style="list-style-type: none"> • Barwell Industrial Estate 	<p><i>Highway:</i></p> <ul style="list-style-type: none"> • TLRN <p><i>Rail:</i></p> <ul style="list-style-type: none"> • Kingston/Surbiton/Chessington South to London Waterloo 		<ul style="list-style-type: none"> • West End • Knightsbridge • Clapham Junction Interchange • Waterloo Station Interchange • Richmond Station/Town Centre

Level	Key Origins/ Destinations (Trip Generators)	Multi-Modal Transport Corridors	Interchanges Between Networks	Key External Transport Geography Influences
South London sub-region*	<ul style="list-style-type: none"> Kingston Metropolitan Town Centre Kingston College KTC Courts Kingston Hospital 	<p><i>Highway:</i></p> <ul style="list-style-type: none"> TLRN, A308, A307, A238, A2043, A240, A243 <p><i>Rail:</i></p> <ul style="list-style-type: none"> Kingston/ Surbiton to Wimbledon/ Richmond/ Twickenham <p><i>Bus:</i></p> <ul style="list-style-type: none"> X26 express bus from Kingston to Heathrow and Kingston to Croydon via Sutton 	<p><i>Bus/ Rail Interchanges:</i></p> <ul style="list-style-type: none"> Kingston and Surbiton Stations <p><i>Car/ Bus Interchange:</i></p> <ul style="list-style-type: none"> Kingston Christmas Park & Ride 	<ul style="list-style-type: none"> Sutton Metropolitan Town Centre Wimbledon Station/Town Centre Twickenham and Teddington District Centres Richmond Park Hampton Court
Local	<ul style="list-style-type: none"> District Centres of New Malden, Surbiton & Tolworth Local Shopping Parades Athelstan Waste Centre AFC Stadium 	<ul style="list-style-type: none"> 326km of Borough roads 30km public footpaths 8km Bridleways 80km of local cycle routes 43 TfL or Surrey operated bus routes 	<p><i>Local Bus/Rail Interchanges:</i></p> <ul style="list-style-type: none"> Chessington South, Chessington North, Tolworth, Worcester Park, Malden Manor, Berrylands, New Malden, and Norbiton Stations <p><i>Bus/Bus Interchange:</i></p> <ul style="list-style-type: none"> Kingston bus stations 	<ul style="list-style-type: none"> Motspur Park Train Station in neighbouring LB Sutton

*TfL has defined 5 Sub-regions in London; Kingston sits within the South London Sub-region.

(1.2.2) RBK's Sub-regional Transport Context

TfL have recently embarked on a new collaborative way of working with boroughs on transport issues based on sub-regions, as a result London has been divided into 5 sub-regions (north, east, south, west, and central). RBK is part of the South London Sub-region along with the London Boroughs of Richmond, Sutton, Merton, Wandsworth, Bromley, and Croydon. TfL have recently developed the South London Sub-regional Transport Plan (SRTP) which outlines sub-regional transport priorities; the SRTP Challenges are outlined below. Further information on the SRTP is provided at the end of the Delivery Plan and in Appendix 1.

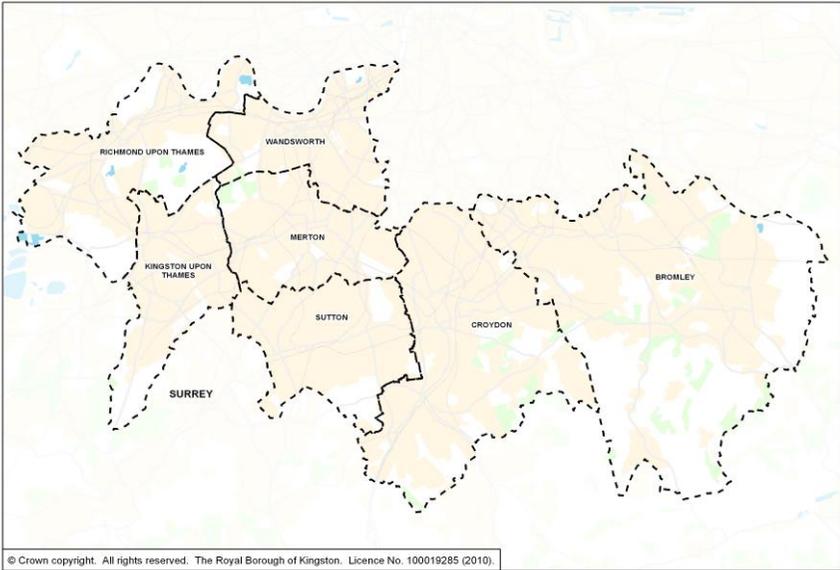
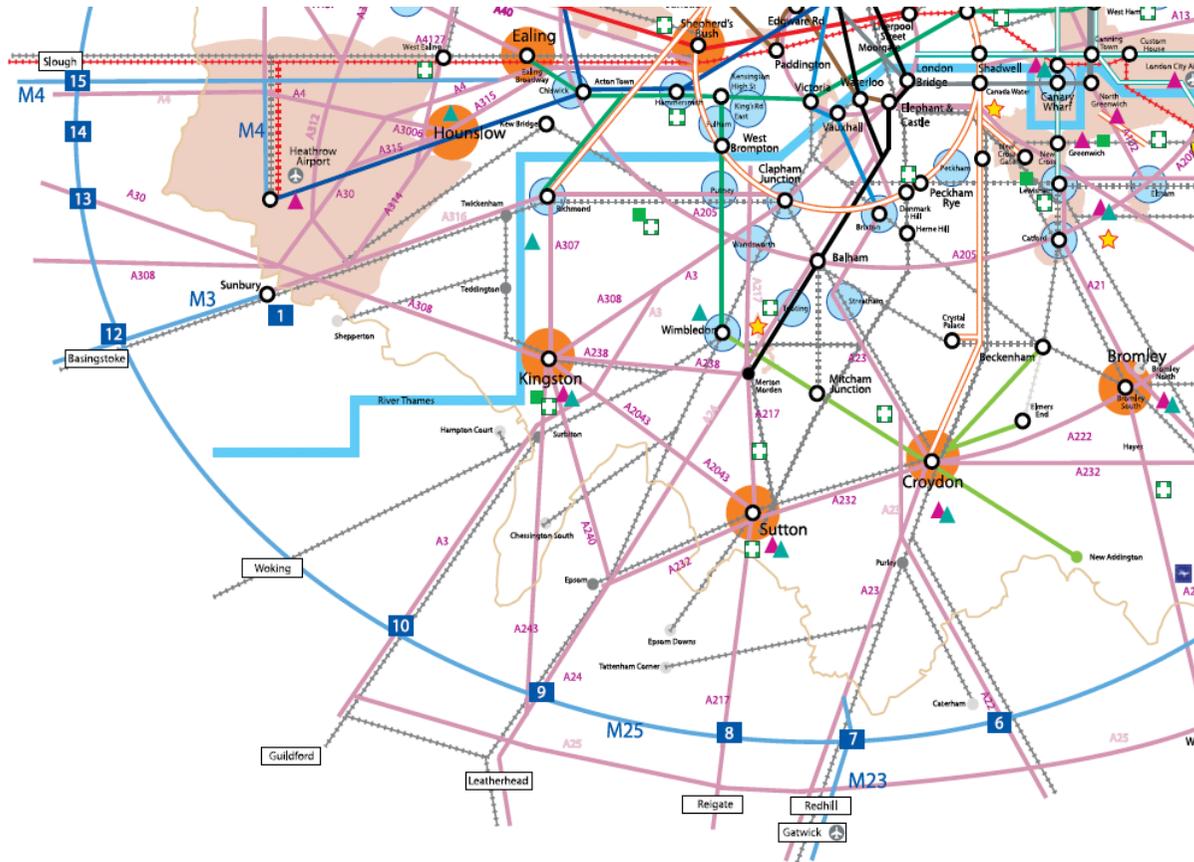
Challenge 1: Reduce public transport crowding

Challenge 2: Improve access and movement to/from and within key locations (the 'Place')

Challenge 3: Improve connectivity to/from and within the South sub-region (the 'Links')

Challenge 4: Manage highway congestion and make efficient use of the road network

Figure 8: RBK's Sub-regional Context



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- Origins and destinations**
- Metropolitan town centre
 - Major centre
 - Key places as determined by sub-regional partnerships
 - Potential metropolitan town centre
 - London Plan Opportunity Area
 - ▲ Major employment hub
 - ▲ Major shopping centre
 - ⊕ Hospital
 - University
 - Other
 - ★ Areas for intensification
- Transport infrastructure and administrative boundary**
- GLA boundary
 - Interchange
 - Jubilee line
 - Central line
 - +++++ Crossrail
 - Tramlink
 - District line
 - Strategic rail route
 - London Overground
 - Strategic road route
 - Docklands Light Railway
 - Northern line
 - Piccadilly line
 - Victoria line
 - Bakerloo line

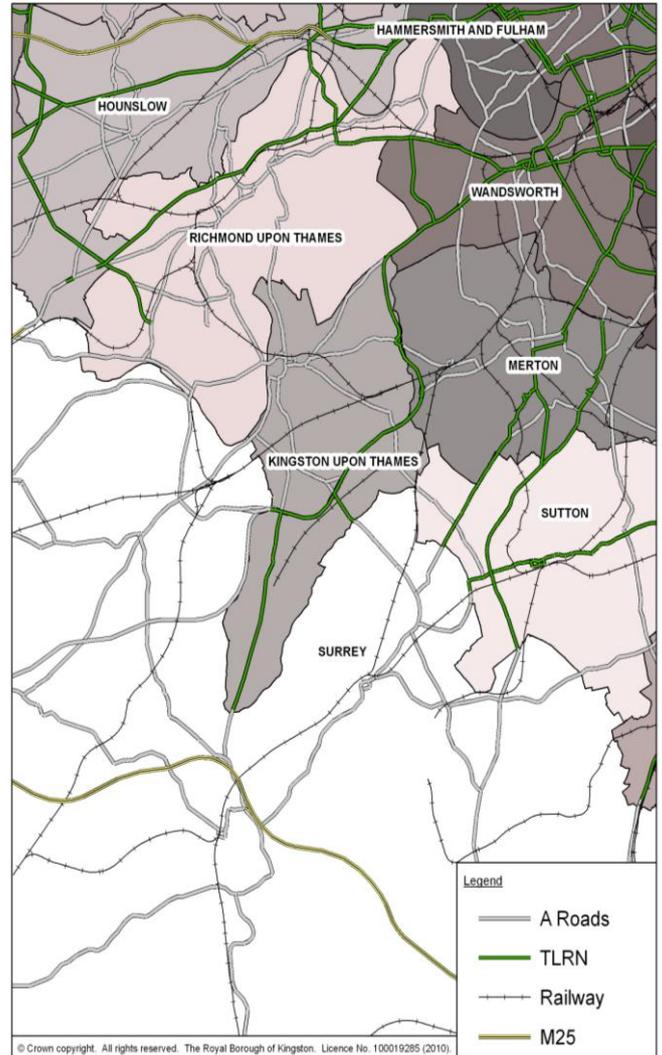
Source: Mayors Transport Strategy 2010

(1.2.3) Transport Assets and Responsibilities

Responsibility for transport assets and services in the borough are divided between the Council, TfL, Network Rail, the train operating company (currently South West Trains), and multiple bus operating companies. Details of these responsibilities are outlined below:

- The Council is the Highway Authority responsible for maintaining 326km of the borough's roads; 28.1km of which are main distributor roads ('A' Roads). We are also responsible for the 39km network of urban and rural public rights of way (30.4km footpaths and 8.2km bridleways).
- TfL is responsible for maintaining the A3 and its service roads and those sections of the A240 and A243 which lie south of the A3, totalling 16.9km. TfL also maintain A3 underpasses, footbridges, subways and flyovers. These roads are commonly referred to as the TfL Road Network (TLRN).
- TfL own and are responsible for the management and maintenance of all traffic control equipment in the borough, including traffic signals and permanent variable message signs.
- The Council is responsible for maintaining over 10,000 street light columns and 81 highways structures such as Kingston Bridge. The Council operates four multi-storey car parks and ten surface level car parks providing just over 3,000 parking spaces.
- The rail network is owned by Network Rail, while the mobile assets and operation of the train services currently lie with franchise holder South West Trains.
- The bus fleet and bus depots are owned and operated by private sector bus operators contracted by TfL.
- The Council is responsible for maintaining and operating all the borough's cycling and walking routes, except those that fall within the TfL road network.

Figure 9: RBK's Main Transport Links



(1.2.4) Road Hierarchy

RBK's official road hierarchy is made up of the following categories:

'A' Road Network (also referred to as the Principal Road Network)

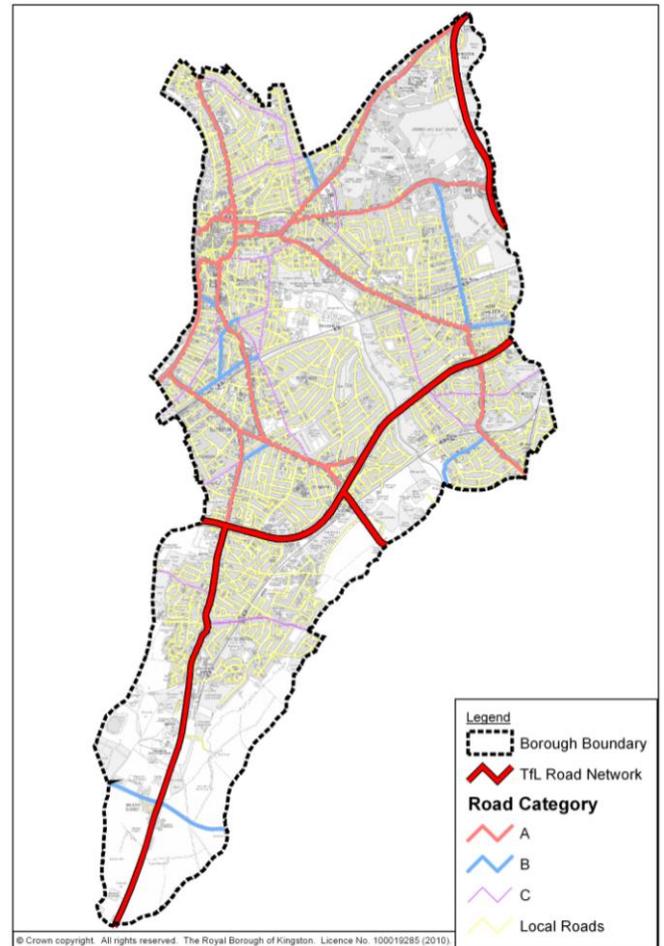
- TLRN (routes on the 'A' road network that are operated by TfL)
- 'A' Roads ('A' roads operated by the Council)

Non-Principal Road Network

- 'B' and 'C' Roads
- Local Roads
- Unclassified Roads

Please refer to Figure 10 below for a map of RBK's road hierarchy; for a list of roads under each road category please refer to Appendix 7.

Figure 10: RBK Road Hierarchy



Refer to policies: MV1

(1.2.5) Traffic Volumes

Traffic volumes in RBK have been steadily decreasing since 1999, with 46 of the Council's 57 traffic counters recording lower traffic volumes in 2010 than base year figures. TfL records confirm these counts with the borough's total vehicle kilometres in 2008 being the lowest since 1993². Despite this decrease in traffic volumes RBK still experiences high levels of car use (48% of all trips), and traffic congestion was residents' most common concern in the 2009 RBK Residents Survey. Generally congestion is worst on the TLRN, 'A' Roads, and 'B' Roads, as well as around schools, KTC, and District Centres. Appendix 8 contains visual illustrations of traffic delays in the borough during AM and PM peak traffic hours.

According to the 2001 census the borough has high levels of car ownership with 69,010 vehicles for 61,426 households; the 7th highest car ownership rate in London.

The borough's high car use and ownership can largely be explained by the following factors:

- No tube or tram network in the borough
- Poor orbital rail based links

² Source: TfL LIP Benchmarking Tool 2010

- High travel costs to Central London (London Waterloo)
- Low train frequencies from many RBK train stations
- Large areas of poor public transport accessibility
- Poor public transport links to areas of Surrey (in particular west and southwest Surrey)

Key Statistics: Car/Motorcycle Use

Mode share (main mode of transport, 7 day week) for trips originating in RBK by car/motorcycle is currently 47% compared to the London average of 38%³. The mode share of car/motorcycle has decreased slightly since 2005 and has decreased more significantly since 2001; with mode share of 48% from 2005-08⁴, and 52% in 2001⁵.

Refer to policies: GP1, GP2, GP4-GP6, RT1-RT4, PT1-PT6, IT1, C1-C4, W1-W8, ST1, SV2, MV1-MV6, P1-P3

(1.2.6) Public Transport General Overview

RBK is serviced by two modes of public transport: trains and buses. Due to the lack of underground or tram services, poor orbital rail links, and large areas with low train frequencies, RBK is heavily reliant on its extensive bus network to provide acceptable levels of public transport accessibility.

Figure 11 below illustrates public transport accessibility levels in RBK (PTALS). The areas of the borough with the highest levels of public transport accessibility are Kingston Town Centre, Surbiton Station (and surrounding area), and New Malden Train Station (and New Malden District Centre). The areas of the borough with the lowest levels of public transport accessibility are Coombe, Berrylands/Hogsmill area, and South of the Borough.

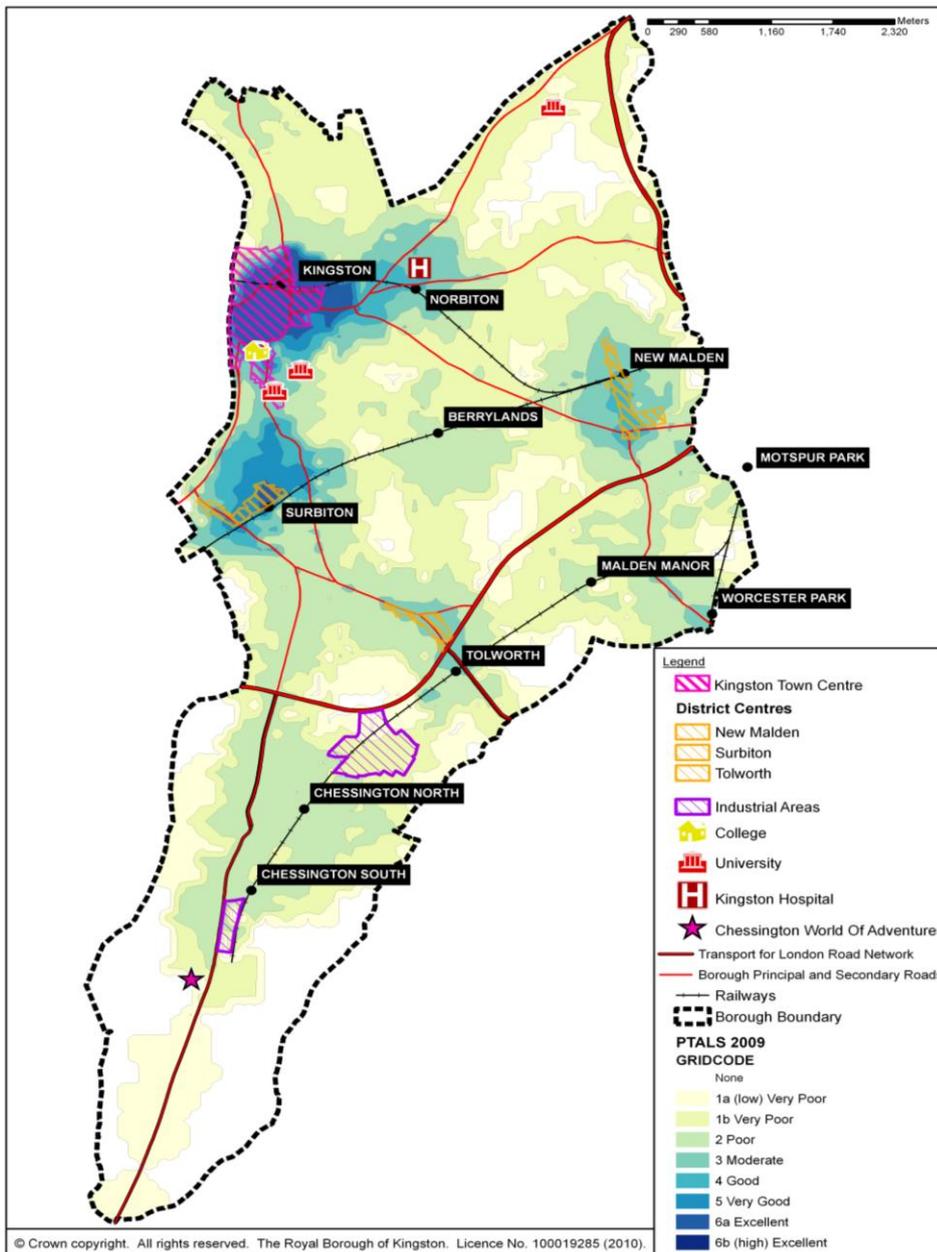


³ Source: *Transport for London, Travel in London Report 3 (2010)*

⁴ Source: *Transport for London, Travel in London Report 1 (2008)*

⁵ Source: *London Area Transport Survey 2001*

Figure 11: PTALS, Train Stations, Main Trip Generators

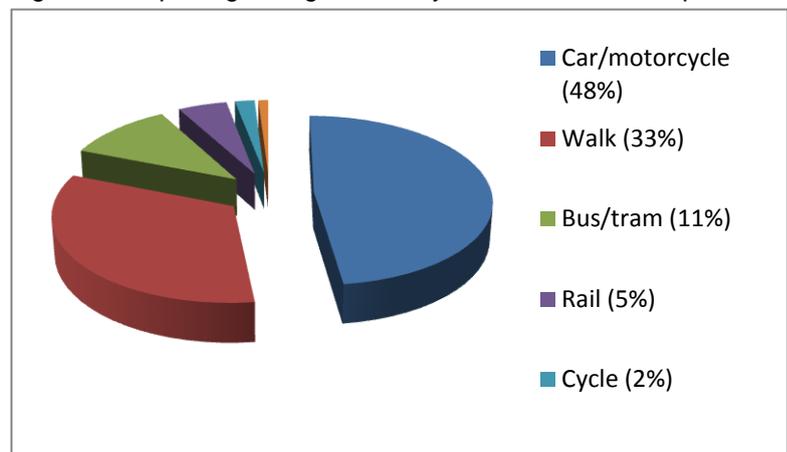


Refer to policies: GP1, GP2, GP4-GP6, RT1-RT4, PT1-PT6, IT1, ST1, P1-P3, S3, S4, CC1, CC3, CC6

(1.2.7) Mode Share

The type of transport (e.g. walk, car etc) used to make a trip is described as the 'mode' of transport, and the share of total trips accounted for by each mode type is called the 'mode share'. The mode share for trips originating in RBK by main mode of transport (e.g. the mode of transport used for the majority of a journey) is illustrated below:

Figure 12: trips originating in RBK by main mode of transport



Source: Transport for London, Travel in London Report 2 (2010)

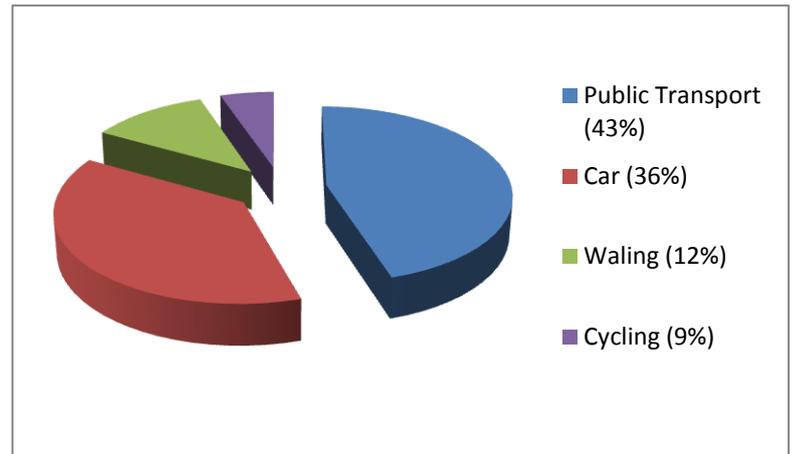
Workplace Mode Share

Data taken from a number of workplaces in Kingston Town Centre and Surbiton is shown below and indicates that around a third of trips to work are currently undertaken by car with 20% by active modes of travel i.e. cycling and walking.

School Mode Share

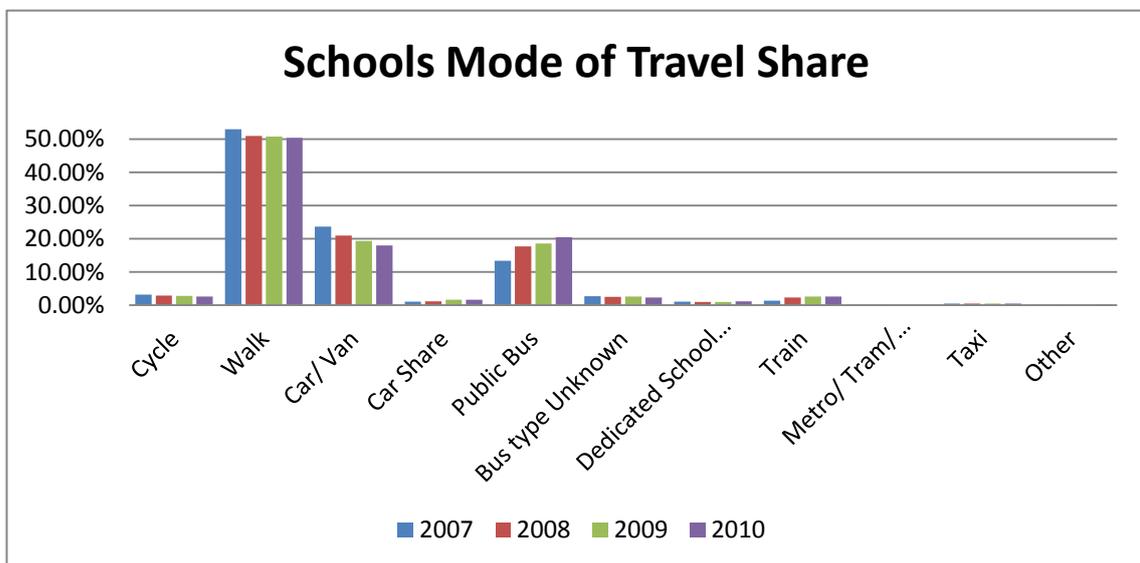
School census data for RBK shows that around half of trips to school in the borough are made by walking; while only 18% are made by car or van.

Figure 13: RBK Workplace Mode Share



Source: RBK Biking Borough Study 2010

Figure 14: RBK's School Pupil Mode Share



Source: School Census Data

(1.2.8) Rail Network

There are 10 train stations within the borough (including Worcester Park which is partly located within the London Borough of Sutton). Motspur Park train station is located approximately 50 metres from the borough boundary so will also be used by a significant number of Borough residents. Services calling at many of these stations run close to, and sometimes above, capacity during peak hours (*please refer to Figure 11 above for a map of RBK train stations*).

London Waterloo Train Station is an important destination for RBK residents as it is the 'gateway' to central London. The borough enjoys reasonable radial train links to Waterloo with travel times ranging from 19 minutes (Surbiton Station) to 35 minutes (Chessington South Station); however train frequencies and travel costs to Waterloo are an issue from many of RBK's stations. Appendix 9 contains a map illustrating travel times to Waterloo from all locations within the borough.

The borough is poorly serviced by orbital rail links and rail links to Heathrow and Gatwick Airport.

RBK's train station travel zone classifications and annual patronage numbers for 2008/09 are shown in Table 4. Surbiton and Kingston have the highest usage with over 8 million and 5 million entries and exits per annum respectively. Berrylands and Tolworth have the least number of entries and exits with around 470,000 and 375,000 entries and exits respectively.

Table 4: Station Usage 2008/09

Station and Zone	Passenger Entries and Exits 2008/09
Surbiton (zone 6)	8,385,738
Kingston (zone 6)	5,160,632
New Malden (zone 4)	3,112,980
Worcester Park (zone 4)	2,605,318
Norbiton (zone 5)	2,242,722
Malden Manor (zone 4)	585,118
Chessington North (zone 6)	525,860
Chessington South (zone 6)	509,958
Tolworth (zone 5)	472,540
Berrylands (zone 5)	375,638

Source: Office of Rail Regulation

Key Statistics: Train Use

The mode share (main mode of transport, 7 day week) for trips originating in RBK by train is 6% compared to the London Average of 4%⁶. The mode share of train has remained constant in recent times with modes share of 5% recorded between 2005-08⁷ and 6% in 2001⁸.

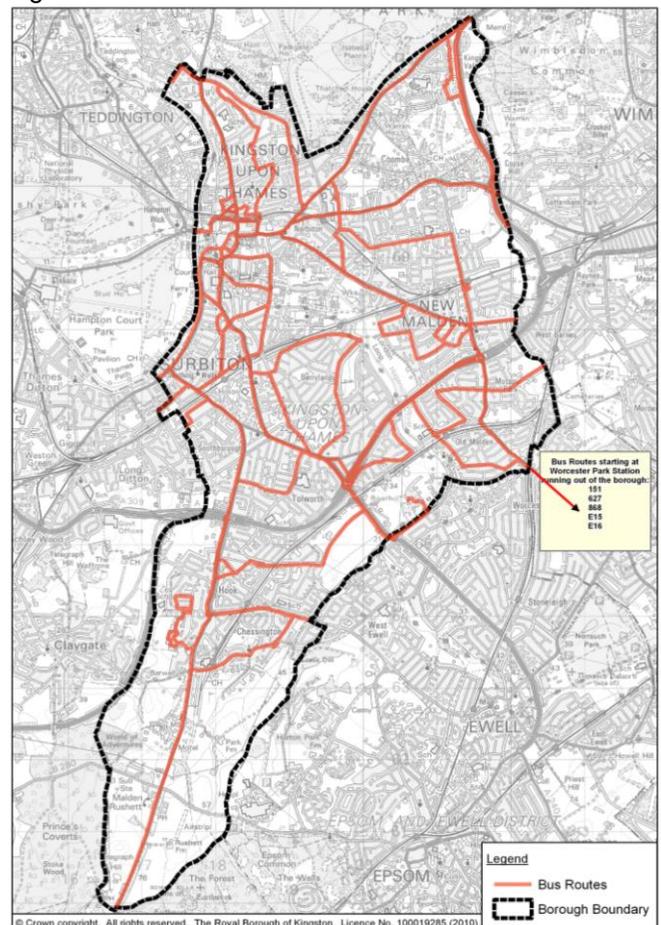
Refer to policies: GP1-GP4, RT1, RT4, PT1-PT3, IT1, C2, ST1, S3, S4, CC6, D1

(1.2.9) Bus Network

The majority of bus services in RBK are provided by TfL and operated by contracted private sector bus operators. TfL services are mostly contained within the London boundary, but there are some services that extend into Surrey. Surrey County Council also provides some bus services that enter into the borough, all of which terminate in KTC. In addition there is a seasonal park and ride service between Chessington and KTC which operates around Christmas time and a number of dedicated school and university bus services. In total there are 37 TfL or Surrey operated bus routes in the Borough, 14 of which are high-frequency services (4 or more buses per hour), and 23 are low frequency. There are also 9 night bus services operated in the borough. For a list of bus services operating in the borough please refer to Appendix 10.

Where bus services operate on Council administered roads, then the Council is

Figure 15: RBK Bus Routes



⁶ Source: Transport for London, Travel in London Report 3 (2010)

⁷ Source: Transport for London, Travel in London Report 1 (2008)

⁸ Source: London Area Transport Survey 2001 – note figures were for travel train, tube, and DLR

responsible for implementing and maintaining bus lanes and the on-road aspects of bus stops; TfL are responsible for bus shelters and associated facilities (such as signage). TfL are responsible for all bus facilities on TfL administered roads.

Key Statistics: Bus Use

The mode share (main mode of transport, 7 day week) for trips originating in RBK by bus is 11% compared to the London Average of 15%. The mode share of bus has increased slightly in recent years as mode share was 10% from 2005-2008⁹.

Refer to policies: GP1-GP6, RT1-RT4, PT4-PT6, IT1, ST1, M1, P1-P3, S3, S4, CC3, H1

(1.2.10) Cycling

RBK's relatively flat topography means it is readily accessible by bicycle. The Council has identified and substantially implemented a network of routes across the Borough (approximately 80 kilometres) linking all major centres of employment, education, leisure and railway stations. These routes form part of the wider London Cycle Network and link to the adjoining county of Surrey. The network and continuity of cycle routes serving journeys both to and through KTC has been considered an example of best practice of cycle route provision in London and the UK.

National Cycle Network Route 4 also runs through the borough alongside the River Thames and there are leisure routes in South of the Borough and the nearby Royal Parks (including Richmond Park, which is a major destination for sports cyclists). Some routes contain 'traffic free' sections, usually when crossing segregation barriers such as the Hogsmill River and the A3; these sections offer journey time savings and convenience compared with journeys made by car or public transport. RBK's existing cycle network is shown Figure 16.

Perceptions are that cycling numbers in RBK have been rising in recent years and screenline counts confirm these observations.

Figure 17: RBK Screenline Counts 2007-2009

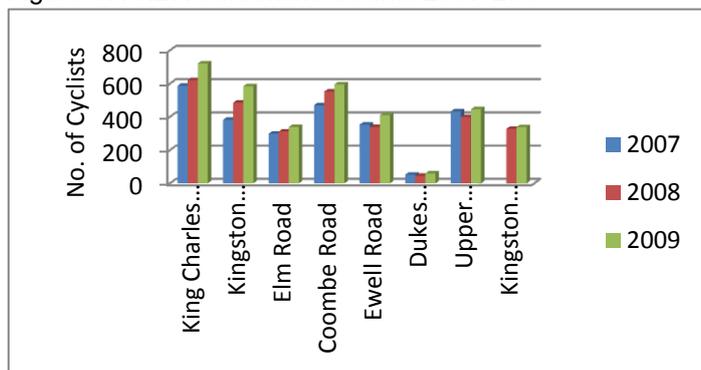
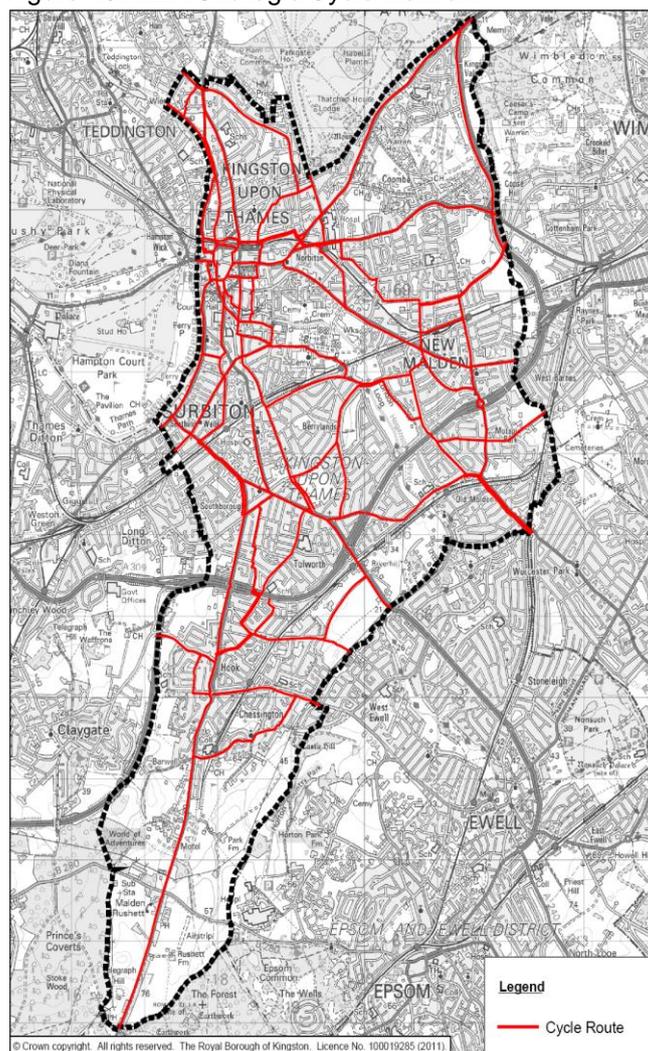


Figure 16: RBK Strategic Cycle Network



⁹ Source: Transport for London, Travel in London Report 1 & 3 (2008 & 2010)

Key Statistics: Cycling

- The mode share (main mode of transport, 7-day week) for trips originating in RBK by cycle is 1.9% which exceeds the Outer London average of 1% and is similar to the London average of 2%¹⁰.
- 24% of trips less than 1km, originating in the South London Sub-region, are made by car/motorcycle, while only 1% is made by cycle.
- 2% of trips between 1km – 5km originating in the South London Sub-region are made by cycle, while 62% are made by car/motorcycle.¹¹

As most trips less than 5km are accessible via cycle, there is potential to increase cycling mode share for these trips (i.e. replace trips made by car/motorcycle).

- Cycling potential and cycling market segmentation information provided by TfL shows that there is potential for an additional 97,078 cycling trips per year, originating in RBK and replacing trips currently made by a mechanised mode of transport.
- The greatest potential for increased cycle trips is around RBK's town centres, in particular Surbiton and KTC.

Refer to policies: GP1-GP6, RT1, PT1, IT1, C1-C4, ST1, M1, P1-P3, S1-S3

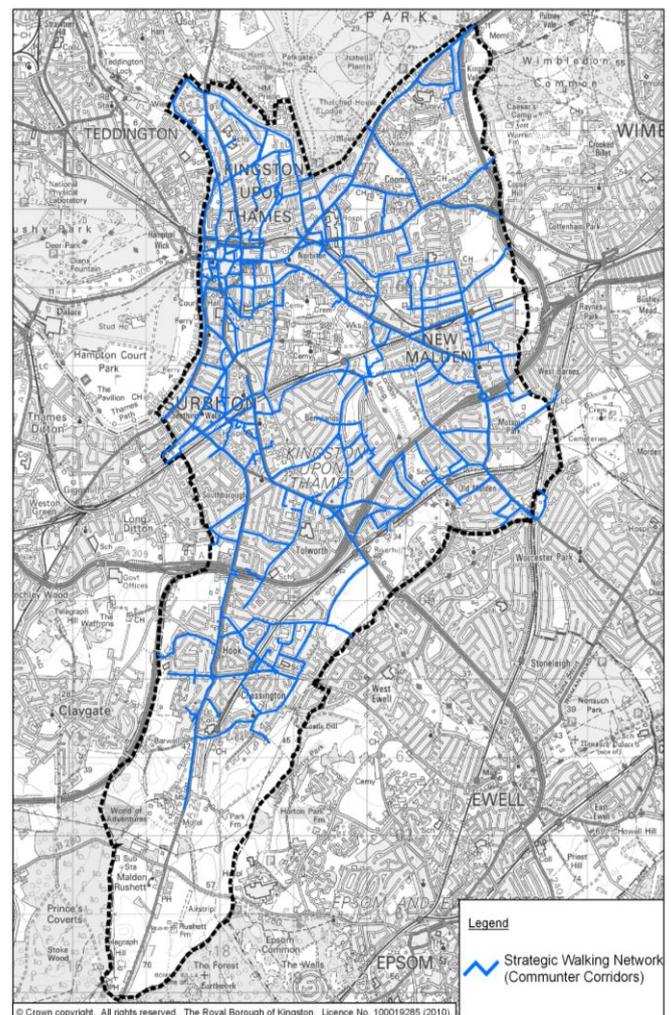
(1.2.11) Walking

RBK contains a wide-ranging walking network largely consisting of urban footways (paths within the highway corridor), Public Rights of Way, and Permissive Paths. RBK also contains a river side walk in KTC and portions of two walking routes which form part of London's Strategic Walking Network: the Thames Path and Section 8 of The London Loop (also referred to in the borough as the Hogsmill Walk). The Council has a Commuter Walking Strategy and an adopted Rights of Way Improvement Plan to help promote walking in the borough.

Despite a high quality walking network there are still opportunities to increase the number of people walking; as demonstrated in the key statistics table below.



Figure 18: Strategic Walk Network (Commuter Corridors)



¹⁰ Source: Transport for London, Travel in London Report 3 (2010)

¹¹ Source: South London SRTP – Interim Report on Challenges and Opportunities February 2010

Key Statistics: Walking

- Mode share (main mode of transport, 7 day week) for trips originating in RBK by walking is 32% compared to the London Average of 32%¹². The mode share for walking has remained reasonably constant in recent times and has increased since 2001 with modes share of 33% recorded from 2005-08¹³, and 29% in 2001¹⁴.
- 71% of trips less than 1km made in the south London Sub-region are walking trips, while 24% are made by car/motorcycle¹⁵. Trips within 1km are walkable for most residents, as such there is potential increase the mode share of walking for these trips (i.e. replace trips made by car/motorcycle).

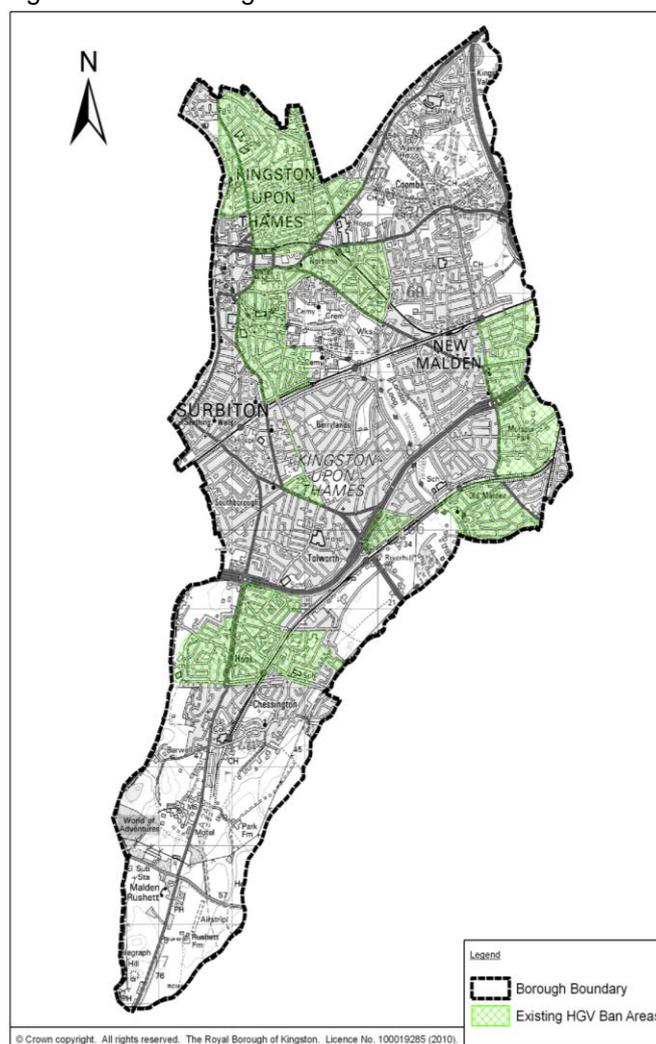
Refer to policies: GP1-GP6, RT1, IT1, W1-W8, ST1, M1, P1-P3, S1-S3, D1

(1.2.12) Freight

The main freight generators in RBK are KTC, the District Centres, industrial sites, and Athelstan Road Waste Site. Modern distribution patterns, diversity of supply and demand locations, limited rail line capacity, and unfavourable locations of key freight generators make rail freight relatively impractical in the borough. As such the vast majority of RBK's freight is road based.

In order to minimise the impact of freight on sensitive activities and enforce preferred freight routes there are several areas of the borough that are subject to freight restrictions, as illustrated in Figure 19.

Figure 19: RBK Freight Restriction Areas



Refer to policies: GP1-GP6, RT1, MV1-MV6, M1, P1-P3, S1, S2

¹² Source: *Transport for London, Travel in London Report 3 (2010)*

¹³ Source: *Transport for London, Travel in London Report 1 (2008)*

¹⁴ Source: *London Area Transport Survey 2001*

¹⁵ Source: *South London SRTP – Interim Report on Challenges and Opportunities February 2010*

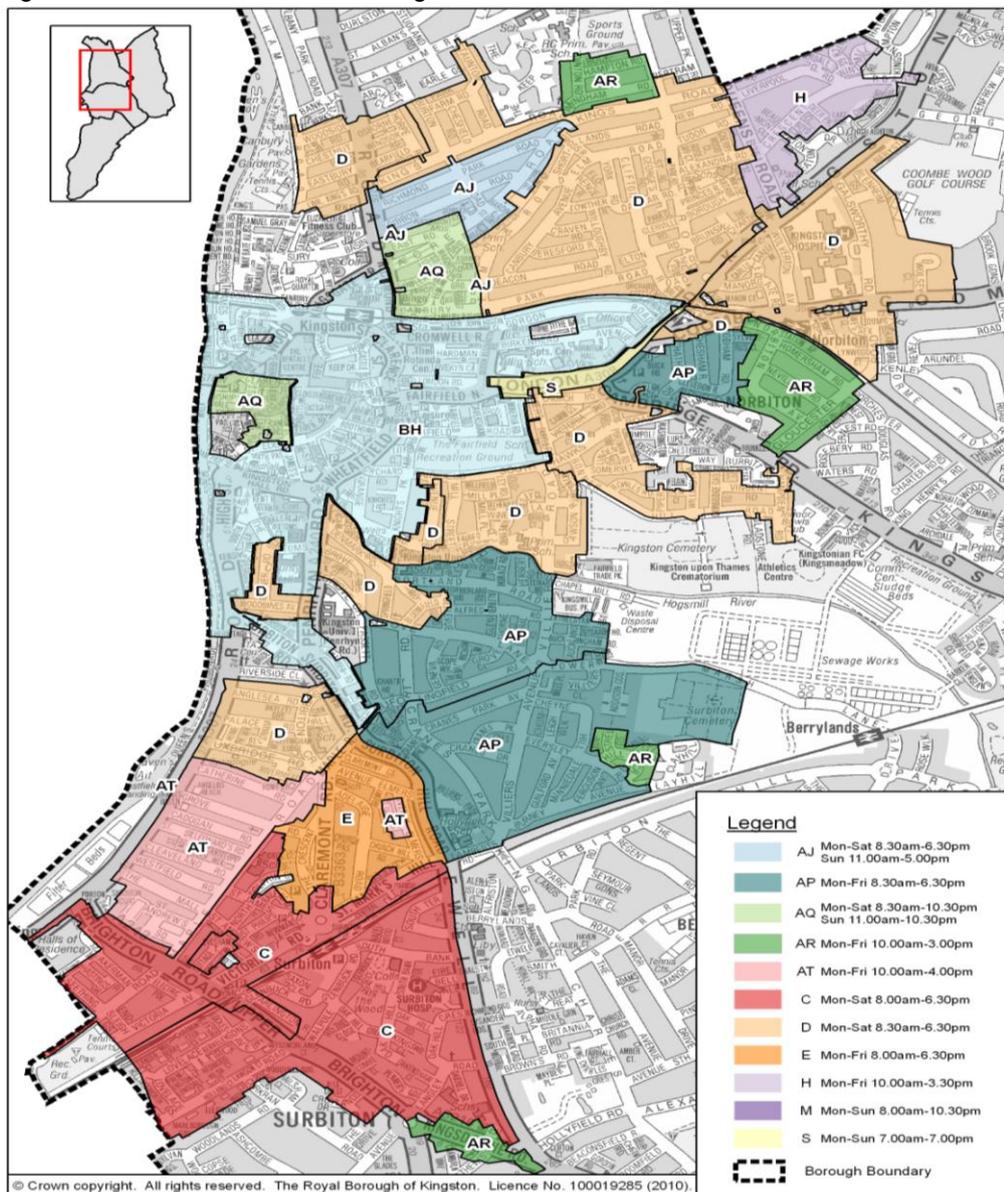
(1.2.13) Parking

There are various types of parking facilities provided throughout the borough, these can be categorised as follows:

- On-street non controlled parking
- On-street Controlled Parking Zones (CPZ) (Council controlled)
- Off-street private residential parking
- Off-street private business and workplace parking
- Private off-street car parks accessible to the public (e.g. supermarket car parks and car parking buildings)
- Council operated off-street public car parks - *the Council operates four multi-storey car parks and ten surface level car parks providing just over 3,000 parking spaces.*

CPZ's are currently in place in Kingston and Surbiton Town Centres as well as much of the surrounding areas; a map of RBK's current CPZ's is shown in Figure 20.

Figure 20: RBK's Controlled Parking Zones



Refer to policies: GP1-GP4, C2, SV1, SV2, P1-P3

(1.2.14) Air Quality

While air quality is of a reasonable standard throughout the borough, there are areas where air quality is a concern. In particular, National Air Quality Standards for Nitrogen Dioxide NO₂ (Annual Mean Limit Value) and Small Particulate PM¹⁰ are being exceeded at kerbside along parts of major roads in the borough (A3, A308, A240, A2043, A307, A238 and A243); however the borough is satisfying National Standards for Benzene, 1,3 Butadiene, Lead, and Sulphur Dioxide. Transport (exhaust emissions) has been identified as the borough's most significant source of PM¹⁰ and Nitrogen Dioxide emissions¹⁶.

As a means to help improve air quality, the whole borough has been declared an Air Quality Management Area, the Council has an Air Quality Action Plan (due to be updated), and the majority of the borough is covered by the London Low Emission Zone (LEZ). Please refer to Section 2.2.14 for detailed information on the borough's Air Quality Action Plan and the LEZ.

Figures 21 & 22 show the borough's exposure rates to PM₁₀ particles and Nitrogen Dioxide emissions. There is clearly a relationship between traffic volumes and the level of atmospheric pollution.

Figure 21: Atmospheric Pollution for PM₁₀ (2008)

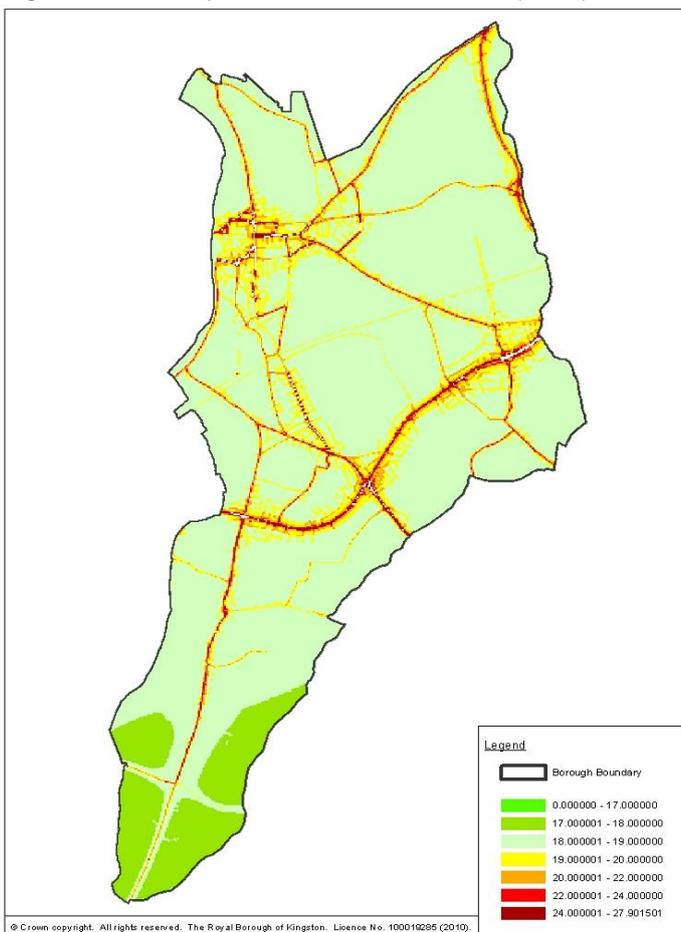
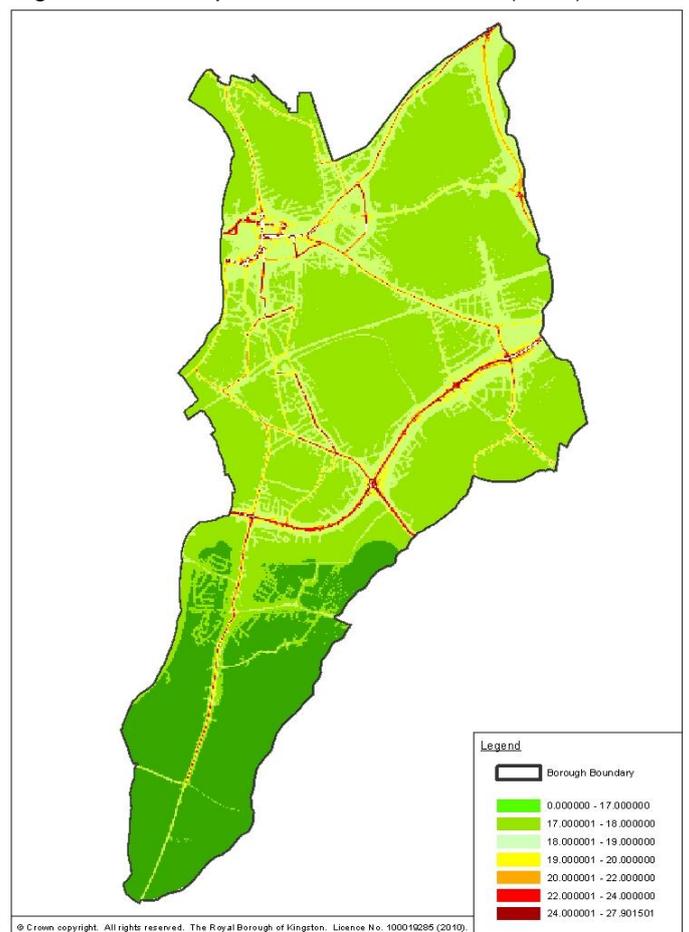


Figure 22: Atmospheric Pollution for NO₂ (2008)



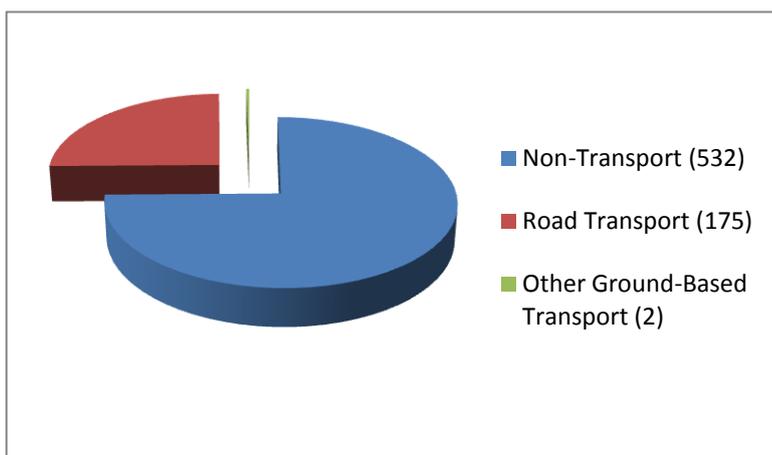
Refer to policies: ST1, SV1, SV2, CC1-CC3

¹⁶ Source: Royal Borough of Kingston upon Thames – Borough Profile 2009

(1.2.15) CO₂ Emissions

RBK's total CO₂ emissions from ground based transport has decreased by 5.3% between 2005 and 2008 to 177,000 tonnes, which is the 12th lowest borough in London. In particular there has been a significant reduction in CO₂ emissions from road transport. Although RBK's CO₂ emissions per capita is one of the highest in London this is not so relevant as CO₂ emissions recorded for the borough includes through traffic¹⁷.

Figure 23: RBK's CO₂ Emissions from all sources (2008)



Source: TfL LIP Benchmarking Tool 2010

Key Statistics: RBK CO ₂ Emissions from Ground Based Transport (Tonnes)					
	Rail/Other	Road Transport	Total	Population (000's)	Total per capita
2005	1	186	187	154	1.21
2008	2	175	177	160	1.1
% Change	+100%	-5.9%	-5.3%		

Refer to policies: ST1, SV1, SV2, CC1-CC6

(1.2.16) Road Safety

RBK has one of the best road safety records in London and as of 2009 RBK had the second lowest rate of total casualties in London (420 casualties based on a 3-year rolling average). The borough has also exceeded the London average in terms of decreases in overall, pedestrian, and cyclist casualties (KSI's); compared to the average for 1994-98. This is discussed further below:

- *Overall casualties* - At the end of 2009 RBK had recorded a 58% reduction in the number of people killed and seriously injured in the borough, compared with the average for 1994-98; this compares with the London average of a 52% decrease¹⁸.
- *Pedestrian casualties* - At the end of 2008 RBK had recorded a 48% reduction in the number of pedestrians killed and seriously injured in the borough, compared with the average for 1994-98. This compares with the London average of a 41% reduction¹⁷.
- *Cyclist casualties* - At the end of 2008 RBK had recorded a 38% decrease in the number of cyclists killed and seriously injured in the borough, compared with the average for 1994-98. RBK are well ahead of the London average which recorded a 24% reduction¹⁷.
- *Powered two-wheelers casualties* - At the end of 2008 RBK had recorded a 26% decrease in the number of motorcyclists killed and seriously injured in the borough, compared with the average for 1994-98¹⁷.

Refer to policies: GP1-GP3, C1, C4, W1-W3, ST1, MV1, M1, P1, P3, S1-S2, D1

¹⁷ Source: TfL LIP Benchmarking Tool 2010

¹⁸ Source: Transport for London, Travel in London Report 3 (2010)

(1.2.17) Crime

RBK is consistently one of the safest boroughs in London, and recorded the lowest number of crime offences in London for the 2008/2009 calendar year. Total crime continues to fall in RBK, and between 2007/08 and 2009/2010 there was a 10% reduction in offences. Grove Ward, which includes KTC in its entirety, has the highest crime levels in RBK. Outside of Grove Ward the number of offences reduces substantially with Canbury, Beverley, and Norbiton Wards having the next highest levels of reported crime¹⁹.

As part of the Reducing Crime Together Questionnaires in 2008 and 2009 respondents were asked to identify areas of the borough where crime is a concern. KTC has been raised as the area of most concern by respondents. The borough's District Centres were also raised as locations of concern (although to a much lesser degree than KTC).

The 2009 Fear of Crime Survey conducted by Kingston University shows that around 75% of respondents feel very or fairly safe using train stations, bus stops and stations within the borough. This compares to a London average of 79% (rail) and 72% (bus) who feel safe using public transport²⁰.

TfL Community Safety Plan for Transport and Travelling in London 2008/09 reported the following crime related statistics for RBK. The only areas in RBK that exceed the London average for people who feel unsafe using the bus are Grove and Coombe Vale Wards; with Coombe Vale Ward doubling the London average. Bus crime in the borough is below the London average in all areas except Chessington North and Hook Wards, which exceed the London average for rates of crime on the bus. St Mark's Ward (which includes Surbiton Station) has the highest levels of reported rail crime in the borough, doubling the London average.

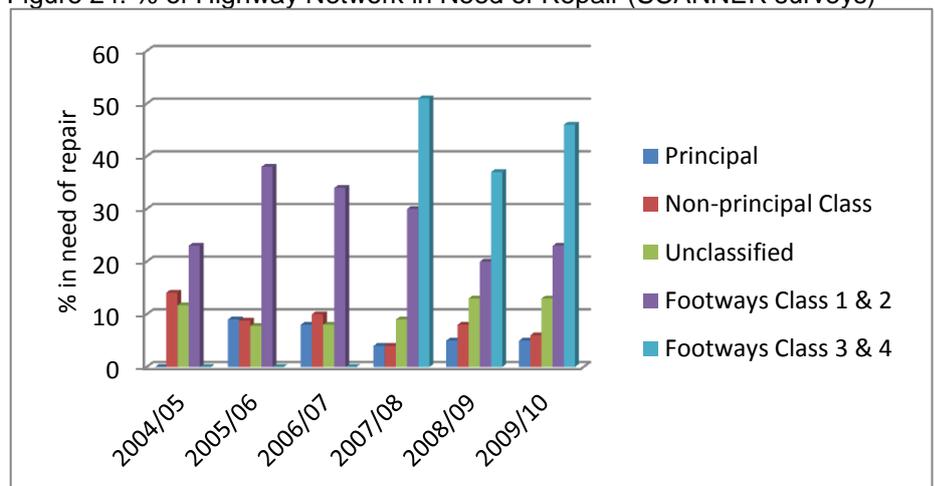
Refer to policies: GP1, GP3, C2, W5, S3, S4

(1.2.18) Maintenance

Maintenance of the borough's highway network is funded and implemented as follows:

- TfL Road Network (TLRN) – 'A' Roads funded and implemented by TfL.
- All other 'A' Roads – part funded by TfL, implemented by the Council.
- All other roads (also called non-principal roads), footways, footpaths, cycle tracks – funded and implemented by the Council

Figure 24: % of Highway Network in Need of Repair (SCANNER surveys)

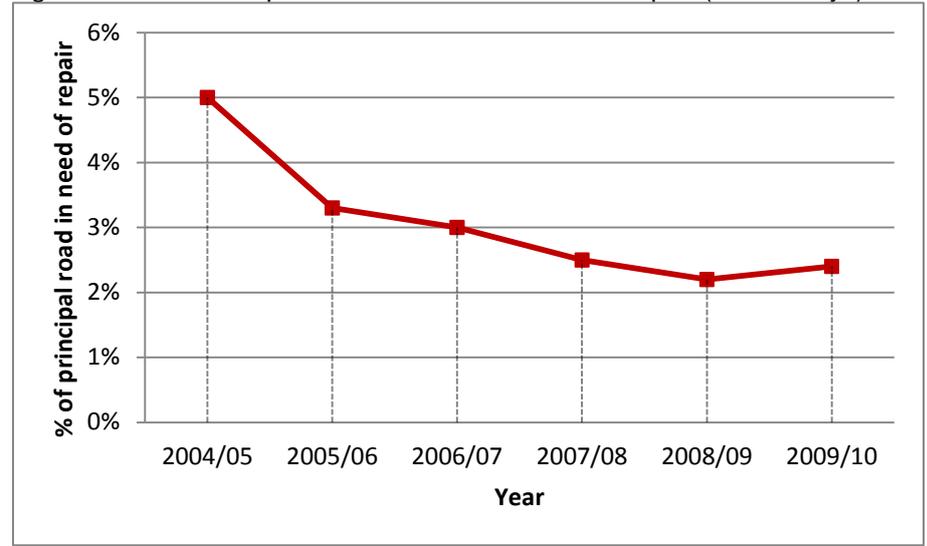


¹⁹ Source: Royal Borough of Kingston Borough Profile 2009 & Metropolitan Police

²⁰ Source: Transport for London - Travel in London Report 2

Priority areas for maintenance of the boroughs highway network are determined by considering both DVI and SCANNER surveys conducted by an independent surveyor followed by visual assessments by Street Scene Inspectors. The Council also conducts walking audits to assess maintenance requirements for footways, permission paths, and Public Rights of Way. Figures 24 & 25

Figure 25: % of Principal Road Network in Need of Repair (DVI surveys)



demonstrate the proportion of the borough’s highway and footpath network in need of repair based on SCANNER and DVI surveys.

The Council is also in the process of developing a Highway Asset Management Plan to assist the forward planning of maintenance works; this is discussed in detail in Section 2.2.11.

Refer to policies: C1, W2, MV3-MV5, M1-M4



(1.3) CONFIRMED INVESTMENT IN RBK BY OTHER ORGANISATIONS

The following provides a brief summary of potential sources of significant investment in RBK's transport infrastructure by organisations other than the Council.

- The MTS and 2009 TfL Business Plan do not propose any significant investment in transportation infrastructure in RBK.
- RBK will continue to receive its annual borough LIP allocation from TfL.
- Commitments in principle have been made by TfL to part fund the Tolworth Broadway Public Realm Major Scheme.
- TfL have a programme to improve the operation of traffic signals throughout London by installing SCOOT technology; signals proposed to be upgraded to SCOOT within RBK are outlined in Appendix 11.
- The Government's High Level Output Specification (HLOS) program proposes significant investment in RBK in the coming years with all RBK lines operating with 10-car carriage trains by 2012
- Network Rail is upgrading all RBK's train stations to 10-car carriage capacity by December 2013.

(1.4) KEY CHALLENGES FACING THE BOROUGH

The following are the key challenges and opportunities facing the borough. They have influenced the identification of the LIP Objectives, Policies, Delivery Plan Actions, Programme of Investment, and Monitoring Plan Targets.

RBK's Transport Challenges and Opportunities

The Core Strategy key development areas:

- *Housing intensification areas* - KTC, New Malden District Centre, Surbiton District Centre, Tolworth District Centre, and areas either side of Leatherhead Road in south of the Borough.
- *Major areas of change* - the Hogsmill Valley Area (Thames Water site), and around Tolworth District Centre/Train Station.
- *Strategic Industrial Locations* - Chessington Industrial Estate and Barwell Business Park.

Projected population growth is likely to increase demand for travel putting additional strain on transport network and increasing the number of car journeys and congestion.

Vehicle use in the Borough is high with around half of residents' trips currently made by car.

Congestion is experienced on several of the Boroughs strategic roads and is regularly identified as one of the top issues of concern for residents.

The A3, which acts much like an urban motorway, runs through the borough carrying large volumes of through traffic that contributes to CO₂ emissions and poor local air quality, as well as causing congestion on junction approaches at New Malden, Tolworth and Hook.

Seven main roads, including a major river crossing, converge in KTC, which combined with Kingston's status as a Metropolitan Town Centre mean that the town centre attracts high levels of visitors and through traffic which can often create congestion on the surrounding road network.

RBK has no Underground services and poor orbital and regional public transport links.

Significant investment to improve public transport infrastructure is unlikely within the life of this plan.

RBK has 10 rail stations served by several different radial train routes to central London. Service frequencies are poor from some stations, particularly those on the Chessington South Line.

Rail overcrowding is already a problem from some stations at peak times and this is projected to worsen by 2031 if no action is taken, particularly on the line through Surbiton.

Kingston and Surbiton Stations are located in travel zone 6 making train fares to London expensive. Rezoning these stations would provide an opportunity to make Kingston and Surbiton more attractive as a business and leisure destination.

KTC has relatively poor public transport links considering its important regional role as a Metropolitan Town Centre. There is a need to explore opportunities to improve transport provision to KTC to support future growth and development.

Surbiton benefits from excellent rail services and there is an opportunity to enhance access to nearby KTC by improving and promoting onwards links from Surbiton Station by foot, bicycle and bus.

The borough has a comprehensive network of frequent and reliable bus services provided by TfL London Buses. RBK has benefitted from significant bus service investment improvements including low set fares and oyster card ticketing, increased frequencies, extended routes, 24 hour services and improved bus accommodation and security.

Most residents are within 400 metres (5 minutes walk) of a bus stop but there are opportunities to improve bus accessibility in some areas particularly South of the Borough

Cross boundary bus services to Surrey Districts are generally less frequent and more expensive than TfL services and this may contribute to high levels of car use to KTC from Surrey.

A high proportion of trips in the Borough are under 5km and currently undertaken by car, so there is significant potential for mode shift to cycling and walking for local trips.

The Borough's existing network of residential roads, traffic free routes and open spaces provide attractive and convenient cycle and pedestrian routes. This combined with the Borough's small size and relatively flat topography make it particularly suitable for cycling and walking.

There are several major segregation barriers in the Borough that reduce cycle and pedestrian permeability/ accessibility, including the A3, other busy roads, railway lines, and river crossings. Where these barriers can be overcome it provides an opportunity to create traffic free cycle and pedestrian routes; such as subways under the A3 and cycle bridges across the Hogsmill River.

Improve access to and through the borough's parks and green spaces, particularly along the Hogsmill River

Opportunities to use the River Thames for commuter and freight transport are limited; however, routes beside the river provide opportunities for walking and cycling.

RBK experiences relatively high levels of cycle theft, particularly in KTC and at train stations. There are large numbers of high density flats and apartments in the Borough without adequate cycle storage and this can create a barrier to cycling.

Use of electric vehicles in the Borough is currently low, but research has identified opportunities exist for high levels of take up of electric vehicles in some parts of the Borough in future years.

(1.5) THEMES AND OBJECTIVES

(1.5.1) Themes and Objectives and Background Information

The LIP themes and objectives outline aspirations for key areas of improvement in the borough's transport network over the next 20 years (until 2031), and set the context for the policies, Delivery Plan Actions, and targets of this strategy. In essence the themes and objectives seek to improve the safety, efficiency, integration, inclusiveness, responsiveness, and sustainability of RBK's transport network.

The LIP2 themes and objectives are also strategic delivery mechanisms for achieving the aspirations of the MTS, SRTP, local documents of importance, and local communities. As such they were developed to be consistent with the MTS and the SLTP whilst realising local priorities as reflected in the Kingston Plan, Local Development Framework (Core Strategy and K+20), Local Area Agreement, Air Quality Action Plan, and Neighbourhood Community Plans. The themes and objectives were also developed in consideration of local contextual information; key challenges facing the borough; and feedback from Council officers, elected members, and key stakeholders. Further contextual information relating to each objective is provided in Section 1.5.2.

Although these objectives are grounded in contextual evidence, challenges facing the borough, key documents of importance, and stakeholder feedback; the Council's intention was to create an 'all encompassing' list of objectives which cover all key aspects of the boroughs transport network, then use more detailed contextual information, policies, and Delivery Plan Actions to determine the priority given to each objective. Section 2 'Policies' considers in more detail the challenges facing the borough, and outlines many of the borough's current transport initiatives. From this information it becomes clear which areas of the transport network require the greatest attention and policies and Delivery Plan Actions have been developed accordingly. This way the LIP Objectives correctly acknowledge that all aspects of the transport system are important, and then policies and Delivery Plan Actions address those areas requiring greatest attention. A comprehensive summary of how the LIP Policies and Actions achieve the LIP Objectives is outlined in Appendix 6.

The themes and objects are outlined in Table 5 below. Although each objective is listed beside the theme it most strongly aligns to, it is acknowledged that objectives often help achieve more than one theme. A third column has been added to the table to demonstrate these links.

The compatibility (compliance) of the LIP themes and MTS Goals is outlined in Table 6 below, and tables throughout the LIP assess the compliance of policies and actions with the MTS Goals and Challenges. A complete set of matrices (which demonstrate the compatibility of the LIP themes with all documents of importance) are contained in Appendix 2, and Appendix 1 provides a summary of these documents.

Table 5: RBK's LIP2 Themes and Objectives

THEME	OBJECTIVE	THEMES THAT OBJECTIVE SUPPORTS
THEME A – Reduce transport's contribution to climate change, and improve its resilience to the effects of climate change	1. Reduce CO2 emissions from road based transport	A, B, D
	2. Maintain and enhance the resilience of the Kingston's transport system to the effects of climate change	A, E
THEME B – Reduce congestion and traffic levels in RBK	3. Promote and enhance public transport, walking, and cycling as transport modes; particularly for people accessing employment, education, and shopping activities within RBK	A, B, D, E
	4. Reduce congestion and smooth traffic flow in congestion hotspots	A, B, D, E
	5. Reduce the need to travel during peak congestion times	A, B, E
THEME C – Create safer communities and a safer transport network	6. Reduce serious injuries and deaths on RBK's transport network	C
	7. Reduce crime and fear of crime while in the public realm and on public transport	A, B, C, E
THEME D – Improve transport opportunities and enhance the quality of life for all RBK residents	8. Improve sustainable transport links to/from/within socially deprived areas and areas with poor access to public transport	A, B, D, E
	9. Improve the physical accessibility of RBK's transport network, especially for disabled people	D
	10. Improve pedestrian and cycling permeability and connectivity throughout RBK	A, B, D, E
	11. Protect and enhance the built and natural environment	C, D, E
	12. Improve air quality and reduce impacts of noise and vibration from transport	A, D
	13. Improve transport's contribution to health and wellbeing	A, B, D
THEME E – Sustain and share economic growth and prosperity	14. Improve economic viability of the borough by improving the accessibility of key employment, retail, entertainment, education, and growth areas	A, B, D, E
	15. Improve public transport links to key attractions outside of RBK e.g. Waterloo, London's airports	A,B, E
	16. Better manage and improve freight access, particularly to key industrial and commercial areas	A, B, C,D, E
	17. Bring and maintain all transport infrastructure assets to a state of good repair	C, D, E

(1.5.2) Further Contextual Information on Objectives

OBJECTIVE 1: Reduce CO2 emissions from road based transport	
<p>Context: RBK's total CO₂ emissions from ground based transport has decreased by 5.3% between 2005 and 2008 to 177,000 tonnes, which is the 12th lowest borough in London. However, there is a need to further reduce CO₂ emissions to help achieve the Mayor's target of a 60% reduction in CO₂ emissions by 2025 and to deliver the objectives of the Kingston Plan. The need to continue to keep reducing CO₂ emissions was also a key aspiration raised by stakeholders during LIP2 consultation.</p>	
Strategy	LIP Objective Supports
MTS Goals	<ul style="list-style-type: none"> ✓ Enhancing the quality of life for all Londoners ✓ Reduce Transport's contribution to climate change and improve its resilience
MTS Challenges	<ul style="list-style-type: none"> ✓ Improve air quality ✓ Reduce CO₂ emissions
SRTP Challenges	None
Kingston Plan (SCS)	✓ Tackle climate change, reduce our ecological footprint, and 'reduce, reuse, and recycle'
Further Context and Policies	Refer to Sections 1.2.14 & 2.2.15

OBJECTIVE 2: Maintain and enhance the resilience of the Kingston's transport system to the effects of climate change	
<p>Context: The most likely effects of climate change are that we will experience hotter summers, wetter winters, more extreme events of heat and cold, and increased droughts and flooding. Changes are expected to be noticeable by the next decade and therefore new transport initiatives will need to be designed to withstand the anticipated effects of climate change.</p>	
STRATEGY	LIP OBJECTIVE SUPPORTS
MTS Goals	✓ Reduce transport's contribution to climate change and improve its resilience
MTS Challenges	✓ Adapt to climate change
SRTP Challenges	None
Kingston Plan (SCS)	✓ Tackle climate change, reduce our ecological footprint, and 'reduce, reuse, and recycle'
Further Context and Policies	Refer to Section 2.2.14

OBJECTIVE 3: Promote and enhance public transport, walking, and cycling as transport modes; particularly for people accessing employment, education, and shopping activities within RBK

Context: The promotion and enhancement of sustainable modes of transport is critical in the achievement of many of the LIP2 objectives (e.g. reduce congestion, improve air quality, improve health impacts), MTS Goals/Challenges, SRTP Challenges, and Kingston Plan Objectives. It was also a key aspiration raised by stakeholders during LIP2 consultation. In order to best support economic growth, social inclusion (etc) the Council will look to focus efforts to promote and enhance sustainable transport links to/from the borough's key trip generators. While LIP2 contains numerous policies and General Delivery Plan Actions to improve sustainable modes of transport, the Neighbourhood Delivery Plan Actions (section 3.2.4) is a key mechanisms for ensuring these improvements are focused in areas of greatest existing or potential demand (i.e. to/from the borough's key trip generators).

STRATEGY	LIP OBJECTIVE SUPPORTS
MTS Goals	<ul style="list-style-type: none"> ✓ Supporting economic development and population growth ✓ Enhancing the quality of life for all Londoners ✓ Improving transport opportunities for all Londoners ✓ Reduce transport's contribution to climate change and improve its resilience
MTS Challenges	<ul style="list-style-type: none"> ✓ Supporting sustainable population and employment growth ✓ Improving transport connectivity ✓ Delivering an efficient and effective transport system for people and goods ✓ Improve journey experience ✓ Enhance the built and natural environment ✓ Improving health impacts ✓ Improving accessibility ✓ Reducing CO₂ emissions
SRTP Challenges	<ul style="list-style-type: none"> ✓ Reducing public transport crowding ✓ Improve access and movement to/from and within key locations ✓ Improving connectivity to/from and within the south sub-region ✓ Manage highway congestion and make efficient use of the road network
Kingston Plan (SCS)	<ul style="list-style-type: none"> ✓ Tackle climate change, reduce our ecological footprint, and 'reduce, reuse, and recycle' ✓ Ensure sustainable development of our borough and the promotion of sustainable transport ✓ Protect and improve the quality of our local environment ✓ Sustain and share economic prosperity ✓ Improve overall health and reduce health inequalities ✓ Encourage people to take an active part in the social and cultural life of the community
Further Context and Policies	Refer to Sections: 1.2.6–1.2.11; 1.2.16; 2.1; 2.2.1–2.2.8; 2.2.12; 2.2.13; 2.2.18; 3.2.4 (Neighbourhood Delivery Plan Actions)

OBJECTIVE 4: Reduce congestion and smooth traffic flow in congestion hotspots

Context: Despite decreases in traffic volumes RBK still experiences high levels of car use (48% of all trips), and traffic congestion was residents' most common concern in the 2009 RBK Residents Survey. Generally congestion is worst on the TLRN, 'A' Roads, and 'B' Roads, as well as around schools, KTC, and District Centres. Reducing congestion and smoothing traffic flow is a key aspiration of LIP2 as it has many benefits such as improving accessibility, promoting economic growth, reducing CO₂ emissions, and improving local air quality. The main mechanisms adopted by LIP2 to reduce congestion can be categorised as either site specific (e.g. initiatives to smooth traffic flow at a certain location), or general (measures to promote sustainable modes of travel or to reduce the need to travel). This objective is focused on site specific initiatives to reduce congestion and smooth traffic flow e.g. phasing of traffic signals, better management of road works.

STRATEGY	LIP OBJECTIVE SUPPORTS
MTS Goals	<ul style="list-style-type: none"> ✓ Supporting economic development and population growth ✓ Enhancing the quality of life for all Londoners ✓ Reduce transport's contribution to climate change and improve its resilience
MTS Challenges	<ul style="list-style-type: none"> ✓ Improving transport connectivity ✓ Delivering an efficient and effective transport system for people and goods ✓ Improve journey experience ✓ Improving air quality ✓ Improving accessibility
SRTP Challenges	<ul style="list-style-type: none"> ✓ Improve access and movement to/from and within key locations ✓ Manage highway congestion and make efficient use of the road network
Kingston Plan (SCS)	<ul style="list-style-type: none"> ✓ Tackle climate change, reduce our ecological footprint, and 'reduce, reuse, and recycle' ✓ Protect and improve the quality of our local environment ✓ Sustain and share economic prosperity
Further Context and Policies	Refer to Sections: 1.2.5 & 2.2.10

OBJECTIVE 5: Reduce the need to travel during peak congestion times

Context: The main aspiration of this objective is to help reduce congestion on the transport network by reducing the need to travel. However it has other benefits such as improving the social inclusiveness of the work place (e.g. working from home can reduce travel costs to work and make work more accessible for those with disabilities or special needs). The achievement of this objective is reliant on smarter travel information and awareness initiatives, such as travel plans.

STRATEGY	LIP OBJECTIVE SUPPORTS
MTS Goals	<ul style="list-style-type: none"> ✓ Supporting economic development and population growth ✓ Enhancing the quality of life for all Londoners ✓ Reduce transport's contribution to climate change and improve its resilience
MTS Challenges	<ul style="list-style-type: none"> ✓ Supporting sustainable population and employment growth ✓ Improving air quality ✓ Reducing CO₂ emissions
SRTP Challenges	<ul style="list-style-type: none"> ✓ Reducing public transport crowding ✓ Manage highway congestion and make efficient use of the road network
Kingston Plan (SCS)	<ul style="list-style-type: none"> ✓ Tackle climate change, reduce our ecological footprint, and 'reduce, reuse, and recycle' ✓ Sustain and share economic prosperity
Further Context and Policies	Refer to Section: 2.2.8

OBJECTIVE 6: Reduce serious injuries and deaths on RBK's transport network.

Context: RBK has performed well in terms of road safety in recent years, with one of the lowest levels of road accidents casualties in London. Analysis of accidents over the past five years has revealed that there are no major accident 'hotspots' in the borough on Council operated roads, but a vast majority of accidents occur on the main highway corridors. Whilst the borough is performing well, the Council will continue to take a proactive approach to road safety to ensure that RBK remains one of the safest boroughs in London.

STRATEGY	LIP OBJECTIVE SUPPORTS
MTS Goals	<ul style="list-style-type: none"> ✓ Enhance the quality of life for all Londoners ✓ Improve the safety and security of all Londoners
MTS Challenges	<ul style="list-style-type: none"> ✓ Improve journey experience ✓ Improving health impacts ✓ Improving road safety
SRTP Challenges	<ul style="list-style-type: none"> ✓ Manage highway congestion and make efficient use of the road network
Kingston Plan (SCS)	<ul style="list-style-type: none"> ✓ Ensure sustainable development of our borough and the promotion of sustainable transport ✓ Make communities safer ✓ Improve overall health and reduce health inequalities
Further Context and Policies	Refer to Sections: 1.2.16; 2.2.6; 2.2.13

OBJECTIVE 7: Reduce crime and fear of crime while in the public realm and on public transport

Context: RBK is consistently one of the safest boroughs in London; however levels of crime are still a concern. Grove Ward, which includes KTC in its entirety, has the highest crime levels in RBK. Outside of Grove Ward the number of offences reduces substantially. The public's perception/fear of crime is particularly important especially around shopping centres and on public transport. Even if occurrences of crime are low, perceptions of crime can still be a major barrier to walking, cycling, and public transport use. In the Reducing Crime Together Questionnaires 2008 and 2009 respondents KTC was identified as the area of the borough where crime is of most concern. During public consultation on LIP2 initiatives to reduce crime and fear of crime were the most strongly supported of all initiatives outlined in the consultation questionnaire.

The Council recognises that ongoing crime reduction and improved perceptions of safety are particularly important for general wellbeing, to encourage uptake of sustainable modes of transport, and to promote economic growth. While there is a need to focus these efforts across the whole borough, there is also a need for a range of initiatives focused on reducing crime and fear of crime in KTC.

STRATEGY	LIP OBJECTIVE SUPPORTS
MTS Goals	<ul style="list-style-type: none"> ✓ Enhance the quality of life for all Londoners ✓ Improve the safety and security of all Londoners
MTS Challenges	<ul style="list-style-type: none"> ✓ Improve journey experience ✓ Improving health impacts ✓ Reducing crime, fear of crime, and antisocial behaviour ✓ Improving public transport safety
SRTP Challenges	<ul style="list-style-type: none"> ✓ Improve access and movement to/from and within key locations
Kingston Plan (SCS)	<ul style="list-style-type: none"> ✓ Ensure sustainable development of our borough and the promotion of sustainable transport ✓ Sustain and share economic growth ✓ Make communities safer
Further Context and Policies	Refer to Sections: 1.2.17 & 2.2.13

OBJECTIVE 8: Improve sustainable transport links to/from/within socially deprived areas and areas with poor access to public transport

Context: This objective was strongly supported in stakeholder engagement. The achievement of this objective is reliant on focusing existing initiatives to improve sustainable transport links (e.g. walking, cycling, bus, and rail) in areas suffering from social deprivation or with poor access to public transport. LIP2 outlines a range of actions to improve sustainable transport links to/from these areas in the Neighbourhood Delivery Plan Actions (Section 3.2.4).

STRATEGY	LIP OBJECTIVE SUPPORTS
MTS Goals	<ul style="list-style-type: none"> ✓ Supporting economic development and population growth ✓ Enhancing the quality of life for all Londoners ✓ Improving transport opportunities for all Londoners ✓ Reduce transport's contribution to climate change and improve its resilience
MTS Challenges	<ul style="list-style-type: none"> ✓ Supporting sustainable population and employment growth ✓ Improving transport connectivity ✓ Delivering an efficient and effective transport system for people and goods ✓ Improve journey experience ✓ Improve air quality ✓ Improving health impacts ✓ Improving accessibility ✓ Supporting regeneration and supporting deprivation ✓ Reducing CO₂ emissions
SRTP Challenges	<ul style="list-style-type: none"> ✓ Reducing public transport crowding ✓ Improve access and movement to/from and within key locations
Kingston Plan (SCS)	<ul style="list-style-type: none"> ✓ Tackle climate change, reduce our ecological footprint, and 'reduce, reuse, and recycle' ✓ Ensure sustainable development of our borough and the promotion of sustainable transport ✓ Sustain and share economic prosperity ✓ Encourage people to take an active part in the social and cultural life of the community
Further Context and Policies	Refer to Sections: 1.1.4; 1.2.6; 2.2.2-2.2.6; 3.2.4 (Neighbourhood Delivery Plan Actions)

OBJECTIVE 9: Improve the physical accessibility of RBK’s transport network, especially for disabled people

Context: It is clear from stakeholder feedback that there is still much that can be improved before an acceptable level of accessibility to the transport network is achieved for disabled users and those with special needs. It is therefore an aspiration of LIP2 that measures such as improving access for disabled users to public transport, the public realm, and community transport are continually improved.

STRATEGY	LIP OBJECTIVE SUPPORTS
MTS Goals	<ul style="list-style-type: none"> ✓ Supporting economic development and population growth ✓ Enhancing the quality of life for all Londoners ✓ Improving the safety and security of all Londoners ✓ Improving transport opportunities for all Londoners
MTS Challenges	<ul style="list-style-type: none"> ✓ Improving transport connectivity ✓ Improve journey experience ✓ Enhancing the built and natural environment ✓ Improving road safety ✓ Improving health impacts ✓ Improving accessibility
SRTP Challenges	<ul style="list-style-type: none"> ✓ Improve access and movement to/from and within key locations
Kingston Plan (SCS)	<ul style="list-style-type: none"> ✓ Protect and improve the quality of our local environment ✓ Make communities safer ✓ Improve overall health and reduce health inequalities ✓ Support people to be independent ✓ Encourage people to take and active part in the social and cultural life of the community
Further Context and Policies	Refer to Section: 2.2.17

OBJECTIVE 10: Improve pedestrian and cycling permeability and connectivity throughout RBK

Context: This objective reflects the Council's aspiration to make all roads in the borough (except the A3) safe for cycling and to improve cycling and walking access through parks and open spaces. This objective is also consider to link closely to Objective 13 which focuses on improving transport's contribution to health. It is important to note that initiatives to improve walking and cycling in the borough are largely covered by Objective 4.

STRATEGY	LIP OBJECTIVE SUPPORTS
MTS Goals	<ul style="list-style-type: none"> ✓ Supporting economic development and population growth ✓ Enhancing the quality of life for all Londoners ✓ Improving transport opportunities for all Londoners ✓ Reduce transport's contribution to climate change and improve its resilience
MTS Challenges	<ul style="list-style-type: none"> ✓ Improving transport connectivity ✓ Improve journey experience ✓ Enhance the built and natural environment ✓ Improve air quality ✓ Improving health impacts ✓ Improving road safety ✓ Improving accessibility ✓ Reducing CO₂ emissions
SRTP Challenges	<ul style="list-style-type: none"> ✓ Reducing public transport crowding ✓ Improve access and movement to/from and within key locations ✓ Manage highway congestion and make efficient use of the road network
Kingston Plan (SCS)	<ul style="list-style-type: none"> ✓ Tackle climate change, reduce our ecological footprint, and 'reduce, reuse, and recycle' ✓ Ensure sustainable development of our borough and the promotion of sustainable transport ✓ Protect and improve the quality of our local environment ✓ Sustain and share economic prosperity ✓ Make communities safer ✓ Improve overall health and reduce health inequalities
Further Context and Policies	Refer to Sections: 2.2.5 & 2.2.6

OBJECTIVE 11: Protect and enhance the built and natural environment

Context: The transport network can have a positive, negative, or neutral effect of the natural environment. Effects can arise from the existing transport network (e.g. storm water run-off polluting waterways), construction of new transport schemes (e.g. sediment run off during construction), and completion of new schemes (e.g. increase or decrease fauna and flora). This objective reflects the Council’s aspiration to manage and develop the transport network in a manner that protects and where feasible enhances the natural environment.

STRATEGY	LIP OBJECTIVE SUPPORTS
MTS Goals	<ul style="list-style-type: none"> ✓ Enhancing the quality of life for all Londoners ✓ Improve the safety and security of all Londoners ✓ Reduce transport’s contribution to climate change and improve its resilience
MTS Challenges	<ul style="list-style-type: none"> ✓ Improve journey experience ✓ Enhance the built and natural environment ✓ Improve air quality ✓ Improving health impacts ✓ Improving accessibility ✓ Reducing CO₂ emissions
SRTP Challenges	<ul style="list-style-type: none"> ✓ Improve access and movement to/from and within key locations ✓ Manage highway congestion and make efficient use of the road network
Kingston Plan (SCS)	<ul style="list-style-type: none"> ✓ Tackle climate change, reduce our ecological footprint, and ‘reduce, reuse, and recycle’ ✓ Ensure sustainable development of our borough and the promotion of sustainable transport ✓ Protect and improve the quality of our local environment ✓ Make communities safer ✓ Improve overall health and reduce health inequalities ✓ Encourage people to take an active part in the social and cultural life of the community
Further Context and Policies	Refer to Sections: 2.2.6 & 2.2.15

OBJECTIVE 12: Improve air quality and reduce impacts of noise and vibration from transport

Context: Regular exposure to poor air quality can reduce life expectancy and exacerbate heart and lung conditions such as asthma, particularly in children, older people, and those with poor health. While air quality is of a reasonable standard throughout the borough National Air Quality Standards for Nitrogen Dioxide are being exceeded along parts of the Borough’s major roads; transport has been identified as the borough’s most significant source of Nitrogen Dioxide emissions.

Noise and vibration can adversely affect sensitive activities in close proximity to the transport network (e.g. residential and educational activities). While is not considered a significant issue for the borough as a whole, it could be considered a significant issue by those affected.

STRATEGY	LIP OBJECTIVE SUPPORTS
MTS Goals	<ul style="list-style-type: none"> ✓ Enhancing the quality of life for all Londoners ✓ Reduce transport’s contribution to climate change and improve its resilience
MTS Challenges	<ul style="list-style-type: none"> ✓ Improve air quality ✓ Improving noise impacts ✓ Reducing CO₂ emissions
SRTP Challenges	<ul style="list-style-type: none"> ✓ Manage highway congestion and make efficient use of the road network
Kingston Plan (SCS)	<ul style="list-style-type: none"> ✓ Tackle climate change, reduce our ecological footprint, and ‘reduce, reuse, and recycle’ ✓ Protect and improve the quality of our local environment ✓ Improve overall health and reduce health inequalities
Further Context and Policies	Refer to Sections: 1.2.14; 2.2.14; 2.2.16

OBJECTIVE 13: Improve transport's contribution to health and wellbeing

Context: This object is focused on two key initiatives:

- 1) Increasing the uptake of physically active modes of transport to contribute to health and wellbeing e.g. helping to reduce obesity.
- 2) Improving access by sustainable modes of transport to healthcare facilities.

STRATEGY	LIP OBJECTIVE SUPPORTS
MTS Goals	<ul style="list-style-type: none"> ✓ Enhancing the quality of life for all Londoners ✓ Improve transport opportunities for all Londoners ✓ Reduce transport's contribution to climate change and improve its resilience
MTS Challenges	<ul style="list-style-type: none"> ✓ Improve journey experience ✓ Enhance the built and natural environment ✓ Improve air quality ✓ Improving noise impacts ✓ Improving health impacts ✓ Improving accessibility ✓ Reducing CO₂ emissions
S RTP Challenges	<ul style="list-style-type: none"> ✓ Improve access and movement to/from and within key locations ✓ Manage highway congestion and make efficient use of the road network
Kingston Plan (SCS)	<ul style="list-style-type: none"> ✓ Improve overall health and reduce health inequalities ✓ Support people to be independent ✓ Encourage people to take and active part in the social and cultural life of the community
Further Context and Policies	Refer to Section: 2.2.18

OBJECTIVE 14: Improve economic viability of the borough by improving the accessibility of key employment, retail, entertainment, education, and growth areas

Context: Whereas Objective 3 focuses solely on improving access to key areas of the borough by sustainable modes of transport, this objective considers all measures to improve access to the key areas of the borough. As such this objective is considered to link closely to Objectives 3 as well as Objectives 4, 8, 15, and 16; which focus on improving/promoting sustainable modes of transport and smoothing traffic flow.

While LIP2 contains numerous policies and General Delivery Plan Actions to improve sustainable modes of transport and smooth traffic flow, the Neighbourhood Delivery Plan Actions (section 3.2.4) is a key mechanism for ensuring these improvements are focused in the areas of greatest existing or potential demand (i.e. to/from the borough's key trip generators).

STRATEGY	LIP OBJECTIVE SUPPORTS
MTS Goals	<ul style="list-style-type: none"> ✓ Supporting economic development and population growth ✓ Enhancing the quality of life for all Londoners ✓ Improving transport opportunities for all Londoners ✓ Reduce transport's contribution to climate change and improve its resilience
MTS Challenges	<ul style="list-style-type: none"> ✓ Supporting sustainable population and employment growth ✓ Improving transport connectivity ✓ Delivering an efficient and effective transport system for people and goods ✓ Improve journey experience ✓ Improve air quality ✓ Improving health impacts ✓ Improving accessibility ✓ Supporting regeneration and supporting deprivation ✓ Reducing CO₂ emissions
SRTP Challenges	<ul style="list-style-type: none"> ✓ Reducing public transport crowding ✓ Improve access and movement to/from and within key locations ✓ Improving connectivity to/from and within the south sub-region ✓ Manage highway congestion and make efficient use of the road network
Kingston Plan (SCS)	<ul style="list-style-type: none"> ✓ Tackle climate change, reduce our ecological footprint, and 'reduce, reuse, and recycle' ✓ Ensure sustainable development of our borough and the promotion of sustainable transport ✓ Sustain and share economic prosperity
Further Context and Policies	Refer to Sections: 1.2.6–1.2.11; 1.2.16; 2.1; 2.2.1–2.2.8; 2.2.10; 2.2.12; 2.2.13; 2.2.18; 3.2.4 (Neighbourhood Delivery Plan Actions)

OBJECTIVE 15: Improve public transport links to key attractions outside of RBK e.g. Waterloo, London's airports

Context: This objective is focused on improving access to interregional and sub-regional attractions outside of the borough. Improving access to locations such as Central London and London's airports is essential if the borough is to attract businesses, shoppers, tourists, and residents. The SRTP (Figure 8, page 22) shows that 65% of trips to work from the borough are within the South London Sub-region, and 25% are to central London; as such improvement to orbital sustainable transport links from RBK to key destinations in the South London Sub-region and improved links to central London are particularly important to facilitate travel by sustainable transport modes.

STRATEGY	LIP OBJECTIVE SUPPORTS
MTS Goals	<ul style="list-style-type: none"> ✓ Supporting economic development and population growth ✓ Enhancing the quality of life for all Londoners ✓ Improving transport opportunities for all Londoners ✓ Reduce transport's contribution to climate change and improve its resilience
MTS Challenges	<ul style="list-style-type: none"> ✓ Supporting sustainable population and employment growth ✓ Improving transport connectivity ✓ Delivering an efficient and effective transport system for people and goods ✓ Improve journey experience ✓ Improve air quality ✓ Improving accessibility ✓ Supporting regeneration and supporting deprivation ✓ Reducing CO₂ emissions
SRTP Challenges	<ul style="list-style-type: none"> ✓ Reducing public transport crowding ✓ Improve access and movement to/from and within key locations ✓ Improving connectivity to/from and within the south sub-region ✓ Manage highway congestion and make efficient use of the road network
Kingston Plan (SCS)	<ul style="list-style-type: none"> ✓ Tackle climate change, reduce our ecological footprint, and 'reduce, reuse, and recycle' ✓ Ensure sustainable development of our borough and the promotion of sustainable transport ✓ Sustain and share economic prosperity
Further Context and Policies	Refer to Sections: 1.2.6; 1.2.8; 1.2.9; 2.2.1; 2.2.2; 2.2.3; 2.2.4

OBJECTIVE 16: Better manage and improve freight access, particularly to key industrial and commercial areas

Context: Sustainable and efficient freight access is an essential element in ensuring the economic vitality of the borough. However, freight access has to be managed in a way that minimises its disruption to sensitive activities (such as residential areas), and its contribution to congestion and emissions. LIP2 considers a range of initiatives to better manage freight access including provision/restrictions on loading bays, lorry access restrictions, and delivery servicing plans.

STRATEGY	LIP OBJECTIVE SUPPORTS
MTS Goals	<ul style="list-style-type: none"> ✓ Supporting economic development and population growth ✓ Enhancing the quality of life for all Londoners ✓ Reduce transport's contribution to climate change and improve its resilience
MTS Challenges	<ul style="list-style-type: none"> ✓ Improving transport connectivity ✓ Delivering an efficient and effective transport system for people and goods ✓ Improve journey experience ✓ Improve air quality ✓ Improving noise impacts ✓ Reducing CO₂ emissions
SRTP Challenges	<ul style="list-style-type: none"> ✓ Improve access and movement to/from and within key locations ✓ Improving connectivity to/from and within the south sub-region ✓ Manage highway congestion and make efficient use of the road network
Kingston Plan (SCS)	<ul style="list-style-type: none"> ✓ Tackle climate change, reduce our ecological footprint, and 'reduce, reuse, and recycle' ✓ Sustain and share economic prosperity
Further Context and Policies	Refer to Sections: 1.2.12 & 2.2.10

OBJECTIVE 17: Bring and maintain all transport infrastructure assets to a state of good repair

Context: A well maintained transport network contributes to several of the LIP2 Objectives, MTS Goals/Challenges, SRTP Challenges, and SCS Objectives. RBK's transport network is generally maintained to a high standard and in 2009/10 the borough had the lowest equal percentage of principal road network in need of repair in London. Despite this good record, better maintenance of the transport network (in particular potholes, and flooding mitigation) was raised several times by stakeholders in the LIP2 public consultation. Maintaining and where feasible improving the condition of the transport network continues to be a key aspiration for the Council.

STRATEGY	LIP OBJECTIVE SUPPORTS
MTS Goals	<ul style="list-style-type: none"> ✓ Supporting economic development and population growth ✓ Enhancing the quality of life for all Londoners ✓ Improve safety and security of all Londoners ✓ Reduce transport's contribution to climate change and improve its resilience
MTS Challenges	<ul style="list-style-type: none"> ✓ Delivering an efficient and effective transport system for people and goods ✓ Improve journey experience ✓ Enhance the built and natural environment ✓ Improving noise impacts ✓ Improving road safety ✓ Adapting to climate change
SRTP Challenges	<ul style="list-style-type: none"> ✓ Manage highway congestion and make efficient use of the road network
Kingston Plan (SCS)	<ul style="list-style-type: none"> ✓ Protect and improve the quality of our local environment ✓ Sustain and share economic prosperity
Further Context and Policies	Refer to Sections: 1.2.18; 2.2.10; 2.2.11

(1.6) COMPLIANCE CHECK 1 – LIP2 OBJECTIVES COMPATIBILITY WITH MTS GOALS, SRTP CHALLENGES, KINGSTON PLAN OBJECTIVES

The compatibility of the LIP2 Objectives with the MTS Goals, SRTP Challenges, and Sustainable Communities Strategies (Kingston Plan) are demonstrated in Tables 6, 7, and 8 below; also a summary of all interventions/initiatives being promoted in LIP2 that will deliver the LIP2 Objectives are outlined in Section 3.2.2, and those that will deliver the MTS Goals and Challenges are outlined in Table 14 (p152).

Table 6: RBK's LIP2 Objectives and MTS Goals

LIP2 Objectives		MTS Goals	Supporting economic development and population growth	Enhancing the quality of life for all Londoners	Improve the safety and security of all Londoners	Improving Transport Opportunities for all Londoners	Reduce transport's contribution to climate change and improve its resilience
1	Reduce CO2 emissions from road based transport			✓			✓✓
2	Maintain and enhance the resilience of the Kingston's transport system to the effects of climate change						✓✓
3	Promote and enhance public transport, walking, and cycling as transport modes; particularly for people accessing employment, education, and shopping activities within RBK	✓✓		✓✓		✓	✓
4	Reduce congestion and smooth traffic flow in congestion hotspots	✓✓		✓			✓
5	Reduce the need to travel during peak congestion times	✓		✓			✓
6	Reduce serious injuries and deaths on RBK's transport network			✓	✓✓		
7	Reduce crime and fear of crime while in the public realm and on public transport			✓	✓✓		
8	Improve sustainable transport links to/from/within socially deprived areas and areas with poor access to public transport	✓		✓		✓✓	✓
9	Improve the physical accessibility of RBK's transport network, especially for disabled people	✓		✓	✓	✓✓	
10	Improve pedestrian and cycling permeability and connectivity throughout RBK	✓		✓✓		✓	✓
11	Protect and enhance the built and natural environment			✓✓	✓		✓
12	Improve air quality and reduce impacts of noise and vibration from transport			✓✓			✓
13	Improve transport's contribution to health and wellbeing			✓✓		✓	✓
14	Improve economic viability of the borough by improving the accessibility of key employment, retail, entertainment, education, and growth areas	✓✓		✓		✓✓	✓
15	Improve public transport links to key attractions outside of RBK e.g. Waterloo, London's airports	✓✓		✓		✓	✓
16	Better manage and improve freight access, particularly to key industrial and commercial areas	✓✓		✓			✓
17	Bring and maintain all transport infrastructure assets to a state of good repair	✓✓		✓	✓		✓

Table 7: RBK's LIP2 Objectives and SRTP Challenges

SRTP Challenges		Challenge 1 – Reducing public transport crowding	Challenge 2 – Improve access and movement to/from and within key locations	Challenge 3 – Improving connectivity to/from and within the south sub-region	Challenge 4 - Manage highway congestion and make efficient use of the road network
LIP2 Objectives					
1	Reduce CO2 emissions from road based transport				
2	Maintain and enhance the resilience of the Kingston's transport system to the effects of climate change				
3	Promote and enhance public transport, walking, and cycling as transport modes; particularly for people accessing employment, education, and shopping activities within RBK	✓✓	✓✓	✓✓	✓✓
4	Reduce congestion and smooth traffic flow in congestion hotspots		✓		✓✓
5	Reduce the need to travel during peak congestion times	✓✓			✓✓
6	Reduce serious injuries and deaths on RBK's transport network				✓
7	Reduce crime and fear of crime while in the public realm and on public transport		✓		
8	Improve sustainable transport links to/from/within socially deprived areas and areas with poor access to public transport	✓	✓✓		
9	Improve the physical accessibility of RBK's transport network, especially for disabled people		✓		
10	Improve pedestrian and cycling permeability and connectivity throughout RBK	✓✓	✓		✓✓
11	Protect and enhance the built and natural environment		✓		✓
12	Improve air quality and reduce impacts of noise and vibration from transport				✓
13	Improve transport's contribution to health and wellbeing		✓		✓
14	Improve economic viability of the borough by improving the accessibility of key employment, retail, entertainment, education, and growth areas	✓	✓✓	✓✓	✓✓
15	Improve public transport links to key attractions outside of RBK e.g. Waterloo, London's airports	✓✓	✓	✓✓	✓✓
16	Better manage and improve freight access, particularly to key industrial and commercial areas		✓✓	✓	✓✓
17	Bring and maintain all transport infrastructure assets to a state of good repair				✓

Table 8: RBK's LIP2 Objectives and Kingston Plan Objectives

Kingston Plan Objectives		Tackle climate change, reduce our ecological footprint, and 'reduce, reuse, and recycle'	Ensure sustainable development of borough and promotion of sustainable transport	Protect and improve the quality of our local environment	Sustain and share economic prosperity	Make Communities Safer	Improve overall health and reduce health inequalities	Support people to be independent	Encourage people to take an active part in the social and cultural life of the community
LIP2 Objectives									
1	Reduce CO2 emissions from road based transport	✓✓							
2	Maintain and enhance the resilience of the Kingston's transport system to the effects of climate change	✓✓							
3	Promote and enhance public transport, walking, and cycling as transport modes; particularly for people accessing employment, education, and shopping activities within RBK	✓	✓✓	✓	✓		✓		✓
4	Reduce congestion and smooth traffic flow in congestion hotspots	✓		✓	✓				
5	Reduce the need to travel during peak congestion times	✓			✓				
6	Reduce serious injuries and deaths on RBK's transport network		✓			✓✓	✓		
7	Reduce crime and fear of crime while in the public realm and on public transport		✓		✓	✓✓			
8	Improve sustainable transport links to/from/within socially deprived areas and areas with poor access to public transport	✓	✓		✓				✓
9	Improve the physical accessibility of RBK's transport network, especially for disabled people			✓		✓	✓	✓✓	✓
10	Improve pedestrian and cycling permeability and connectivity throughout RBK	✓	✓✓	✓	✓	✓	✓		
11	Protect and enhance the built and natural environment	✓	✓	✓✓		✓	✓		✓
12	Improve air quality and reduce impacts of noise and vibration from transport	✓		✓✓			✓		
13	Improve transport's contribution to health and wellbeing						✓✓	✓	✓
14	Improve economic viability of the borough by improving the accessibility of key employment, retail, entertainment, education, and growth areas	✓	✓		✓✓				✓
15	Improve public transport links to key attractions outside of RBK e.g. Waterloo, London's airports	✓	✓✓		✓✓				
16	Better manage and improve freight access, particularly to key industrial and commercial areas	✓			✓✓				
17	Bring and maintain all transport infrastructure assets to a state of good repair			✓	✓				

(1.7) CONSULTATION WITH STAKEHOLDERS

The Council wanted to ensure that the development of LIP2 was an inclusive process where the views of key stakeholders were considered throughout. During the development of LIP, 2 main consultation exercises were carried out with stakeholders:

1. Stakeholder workshop (February 2010)
2. Public consultation on the draft LIP2 (February 2011)

Those statutory consultees required by the GLA 1999 to be consulted in the development of LIP2 were all invited to the stakeholder workshop, and were directly notified of the LIP2 consultation. The results of these consultations are summarised below:

Stakeholder Workshop

This workshop was carried out during the development of LIP2 to test the quality of the LIP2 objectives, identify local transport issues and opportunities, and to gain input as to desired policies, actions, and investment priorities. A detailed summary of the workshop results is contained in Appendix 25.

Objectives:

The workshop did not flag up any significant concerns with the LIP2 objectives, however attendees were asked to vote for what they viewed to be the most important objective under each LIP2 theme. The objectives that received the most votes are outlined below:

Theme	Objective Viewed as Most Important & RBK Comments
Theme A: <i>Reduce transport's contribution to climate change, and improve its resilience to the effects of climate change</i> (Objectives 1 & 2)	Objective 1: Reduce CO ₂ emissions from road based transport <i>RBK Comments:</i> RBK's LIP2 contains many policies and actions to reduce CO ₂ emissions for transport. Those initiatives which are considered to have the greatest impact are the promotion of sustainable transport, smarter travel initiatives, and promotion of electric vehicles.
Theme B: <i>Reduce congestion and traffic levels in RBK</i> (Objectives 3, 4, 5)	Objective 3: Promote and enhance public transport, walking, and cycling as transport modes; particularly for people accessing employment, education, and shopping activities within RBK. <i>RBK Comments:</i> Significantly more participants' were in support of promoting sustainable transport to reduce congestion; as opposed to smoothing traffic congestion, or reducing the need for travel. This has been reflected throughout the LIP2 document, which while identifying some measures to smooth traffic flow, has a strong focus on promoting sustainable modes of transport to reduce congestion. This approach also has many other benefits such as improving air quality and the health impacts of transport.
Theme C: <i>Create safer communities and a safer transport network</i> (Objectives 6 & 7)	Objective 6: Reduce crime and fear of crime while in the public realm and on public transport. <i>RBK Comments:</i> These 2 objectives received similar amounts of votes. LIP2 has taken an approach where both road safety and safety from crime are given high levels of consideration. However, special consideration of reducing crime and fear of crime has been given to Grove Ward (which includes KTC in its entirety), as it easily has the highest crime rates in the borough and is often raised as a location of concern by residents.

Theme	Objective Viewed as Most Important & RBK Comments
<p>Theme D:</p> <p><i>Improve transport opportunities and enhance the quality of life for all RBK residents.</i></p> <p>(Objectives 8-13)</p>	<p>Objective 8: Improve sustainable transport links to/from/within socially deprived areas and areas with poor access to public transport.</p> <p><u>RBK Comments:</u> Objective 8 was clearly the preferred objective, while Objectives 9 (physical accessibility) and 10 (pedestrian and cycling permeability) also received higher levels of support. It would be fair to say that LIP2 identifies a range of policies and actions that will help deliver all these objectives, and there is a particularly strong focus on improving walking and cycling, which should also benefit deprived areas and areas with poor access to public transport.</p> <p>To further reflect the importance of Objective 8, in the Neighbourhood Delivery Plan Actions the Council outlines those actions which will be implement over the life of LIP2 that are specifically aimed at improving sustainable transport links to socially deprived areas and areas with poor access to public transport.</p>
<p>Theme E:</p> <p><i>Sustain and share economic growth and prosperity</i></p> <p>(Objectives 14–17)</p>	<p>Objective 14: Improve economic viability of the borough by improving the accessibility of key employment, retail, entertainment, education, and growth areas.</p> <p><u>RBK Comments:</u> There was also high support for Objective 17 (maintenance). LIP2 contains an extensive range of policies and actions to improve the accessibility of key trip generators (origins/destinations) in the borough. To acknowledge the importance of adopting a spatial approach to improving the boroughs transport network, the section titled 'Neighbourhood Delivery Plan Actions' was included in LIP2, this identifies those actions the Council will carry out over the life of LIP2 to improve transport access to the borough's main trip generators.</p>

Actions:

Attendees were asked to identify those actions that will best achieve the LIP2 objectives. The most popular actions are identified below; please note these actions, where feasible, have been included in the LIP2 document as either policies, general actions, or neighbourhood actions.

- Create safe conditions for cycling e.g. more and continuous cycle routes to key to employment, education, and shopping destinations; segregated cycle routes; interconnected cycle routes.
- More school buses and buses at school times
- Cycle facilities and storage at key locations
- Target bus routes and increase number, frequency, and reliability
- Cut down on street furniture/unclutter footways
- Encourage confidence of older people to use public transport
- Improve tx facilities, and textured surfaces at dropped kerbs for visually impaired
- Introduce area wide delivery servicing plans/get businesses to work together to combine deliveries
- Prioritise improvements to footpaths
- Year round 24/7 park and ride service
- Make sure that connections between transport modes work effectively
- encourage mode shift to lower emission transport modes
- Promote car sharing and car clubs
- Make better provisions for snow and flood on the roads better drains more grit
- Continue to fund night time initiative, safer transport scheme, street pastors etc
- more visible public transport staff
- 20 mph zones on all residential roads

Map Exercise:

Attendees were given a map of the borough and asked to identify those locations where transport improvements were required. In total 68 recommendations were received; where feasible they have been integrated into the LIP2 Delivery Plan.

Public Consultation

The public consultation on the LIP2 document resulted in feedback being provided either as general comments, or through the 'tick box' question results of the consultation questionnaire.

General Comments:

The borough received a wide range of comments on the LIP2 document. All comments were arranged into a schedule and Council officers responded to each individual point made by respondents. Where appropriate changes were made to LIP2 in response to the comments received.

Tick Box Questionnaire Results:

A total of 49 respondents completed the questionnaire; and the average response rate for each tick box question was about 92%. As outlined in the quick facts box below the questionnaire results were very supportive of the content of LIP2. For every transport initiative outlined in the questionnaire the majority of respondents either strongly agreed or agreed with initiatives inclusion in LIP2. As all initiatives outlined in the questionnaire are already contained in LIP2, the survey 'tick box' results have not lead to any changes to the LIP2 document. However, the results should be considered when prioritising investment priorities in future years.

Quick Facts from Questionnaire Results:

- Car was the most regularly used mode of transport by respondents; closely followed by walking, cycling, bus, and train.
- Buses (1st), cycling (2nd), walking (3rd=), and rail (3rd=), and tube (5th) were rated as the most important modes of transport to invest funding in.
- 95.8% of respondents rated the LIP2 Themes as either 'Somewhat Important', 'Important', or 'Very Important'. Theme (d) "Improve transport opportunities and enhance the quality of life for all RBK residents" was the most supported theme. Theme (e) "Sustain and share economic growth and prosperity" was the least supported theme.
- For every transport initiative outlined in the questionnaire the majority of respondents either strongly agreed or agreed with the initiatives inclusion in LIP2:
 - Considering all the questions, the range of respondents that either strongly agreed or agreed with suggested initiatives were 45.5% - 97.8%; with the vast majority of 'agrees' being above 70%, and many scores above 80% and 90%.
 - Considering all the questions, the range of respondents that either disagreed or strongly disagreed with suggested initiatives were 0% - 33.4%; with the vast majority of 'disagrees' being below 10%.
 - *Please note: there was also a 'neither agree or disagree' option for respondents to select.*

- Respondents overall ratings of the LIP2 document were as follows:
 - Objectives: 85.3% (*Very Good/Good*) – 5.9% (*Poor*)
 - Addresses transport issues relevant to RBK: 80.6% (*Very Good/Good*) - 5.6% (*Poor*)
 - Transport policies and actions proposed will achieve the LIP2 objectives: 64.7% (*Very Good/Good*) – 2.9% (*Poor*)
 - Presentation: 85.8% (*Very Good/Good*) – 2.9% (*Poor*)
 - Easy to understand: 82.9% (*Very Good/Good*) – 5.8% (*Poor/Very Poor*)
 - *Please note: there was also a 'no opinion' option for respondents to select.*

The following is a list of the 15 most supported LIP2 initiatives (e.g. Strongly Agree or Agree):

Most Supported Initiatives

Rank	Initiative	Strongly Agreed or Agreed
1	Reduce crime and fear of crime at public transport stations/stops and on vehicles	97.8%
2	Improve safety from crime (to promote walking)	97.8%
3	Improve highway drainage in locations where flooding is a risk	95.7%
4	Design out crime in the public realm e.g. improved lighting	95.7%
5	Continue to improve planning, coordination, and awareness of road works	95.7%
6	Continue to work with partners to implement crime prevention initiatives	95.4%
7	Fair pricing and easy to use ticketing (to improve bus services)	93.6%
8	Increase the number of street trees	93.6%
9	Improve pedestrian and cycling facilities e.g. crossings, cycle lanes (safety)	93.6%
10	Improve the public realm e.g. trees, aesthetically pleasing scenery, wide/uncluttered footways	93.4%
11	Secure cycle parking stores e.g. at train stations	93.4%
12	Improved access to and through parks and open spaces (walking)	93.4%
13	Encourage shift towards sustainable transport modes (to reduce car use)	91.5%
14	Increase bus capacities and frequencies	90.9%
15	Cycle training – primary school children (basic)	90.9%

Section 2: Policies

This section provides further contextual information on RBK's transport network, considers in more detail the challenges facing the borough, and outlines many of the borough's current transport initiatives; then in light of this information outlines policies to deliver the MTS Goals and LIP Objectives. This section covers the following topics:

- (2.1) *Guiding Policies* – Strategic overarching policies
- (2.2) *Policies by Topic* – Policies structured around transport themes
- (2.3) *Compliance Check 2 (LIP2 Policies and MTS Goals/Challenges)* – Demonstrates which LIP Policies are helping to deliver the MTS Goals and Challenges

Please Note:

- The policies are more targeted than the LIP Objectives and are a mixture of 'actions' (e.g. the Council will develop a 20mph implementation plan), and 'position statements' (e.g. the Council will manage and maintain the transport network in a manner that favours fauna and flora).
- 'Position Statements' have been included in the strategy as they are important aspects of managing and developing the transport network and will significantly contribute to achieving MTS Goals and LIP Objectives.
- This section also contains 'Focus on RBK's Network Management Duty' (Section 2.2.10), which outlines the Council's duties under the Traffic Management Act 2004 and how we are fulfilling these requirements.
- A summary of all the policies outlined in this section (and the MTS Goals they help deliver) is provided in Appendix 12.

(2.1) GUIDING POLICIES

Although traffic levels have generally been decreasing in the borough since 1999, high levels of car use is still a concern. Reliance on cars can contribute to congestion, poor air quality, CO₂ emissions, road safety issues, and can hinder economic growth. A reduction in the mode share of cars is essential if the Council is to achieve its LIP Objectives. For these reasons it is a priority of the Council to reduce the overall mode share of the car.

The following 'high level' policies will act as guiding principles as the Council strives to achieve its LIP2 themes and objectives, and reflect the importance of reducing car use in the borough.

Policy (GP1) – To maintain and enhance the efficiency and sustainability of the borough's transport network the Council will:

- a) Implement and support initiatives that reduce the need for travel, particularly in peak periods.
- b) Make walking, cycling, and public transport use more attractive.
- c) Improve accessibility to, through, and within the borough's main trip generators and other important facilities for non-car users; and manage access by car and freight to these locations.
- d) Manage vehicle use.
- e) Work with TfL, sub-regional partners, and Surrey County Council to address local transport issues of sub-regional importance, improve cross boundary transport routes and services, and improve cross boundary communication.

Policy (GP2) – The Council will promote and prioritise the interests of transport network users based on the user hierarchy outline below:

- 1) Pedestrians, including those with disabilities
- 2) Cyclists
- 3) Public transport users
- 4) Public and community transport vehicles, emergency vehicles, Blue Badge vehicles, car club vehicles, and taxis
- 5) Powered two wheelers
- 6) Freight vehicles
- 7) Alternatively fuelled vehicles
- 8) Private cars

Policy (GP3) – Safety, social inclusion, and equality considerations will be central to all transport policies and initiatives.

Policy (GP4) – The Council will ensure that new development promotes sustainable transport and manages vehicle use (including encouragement of car free developments), and will develop Planning Policy Guidance on sustainable transport.

Focus on a Holistic Approach to Highway Corridor Upgrades

There are many benefits to taking a comprehensive approach to upgrading major highway corridors. A holistic approach is where improvements to facilities for all modes of transport are considered across the entire width of the highway corridor; if works proceed upgrades to facilities for various modes of transport are integrated into one project (where practical and affordable). For example, the upgrade of a corridor based on a holistic approach could include all or some of the following: widening and/or relaying footpaths, planting street trees, improved lighting, improved pedestrian accessibility (e.g. de-cluttering, location of pedestrian crossings, dropped kerbs), improvements to the bus stop waiting environment, improved cycle facilities, bus priority measures, delivery and servicing facilities, and congestion relief measures.

This holistic approach creates the following advantages:

- ✓ there is a noticeable improvement in the corridor making it more attractive for all users
- ✓ it is more cost effective to carry out all works at once
- ✓ it prevents future projects damaging previous works (e.g. prevents new patches of seal)
- ✓ it saves staff time as we can set a more definitive forward works program.

Policy (GP5) – The Council will take a comprehensive approach to upgrading highway corridors, implementing projects that improve multiple modes.

Focus on RBK's Transport Hierarchy

To clearly identify transport corridors/infrastructure based on its strategic importance to the borough, and to ensure that schemes to improve access and facilities on the strategic transport network are given priority for funding, RBK's transport network has been divided into a 4 level transport hierarchy:

- Strategic Transport Network (1st priority)
- Secondary Transport Network (2nd priority)
- Neighbourhood Bus Network (3rd priority)
- Neighbourhood Transport Network (4rd priority)

A brief explanation of the boroughs '*strategic transport network*' is provided below; for a full explanation of the borough's transport hierarchy please refer to Appendix 13.

Strategic Transport Network

RBK's strategic transport network consists of those routes and supporting infrastructure of highest importance on a borough wide and neighbourhood level (and may also be of sub-regional importance). Generally it consists of those routes that carry the greatest number of users and serve key destinations in the borough. The strategic transport network is divided into the following categories:

TLRN: All roads within the borough operated by TfL.

Strategic Highway Network: The Council has identified 13 Council operated strategic highway corridors across the borough; these 'corridors' cover multiple modes of transport. The '*strategic highway network*' does not correspond exactly with RBK's official '*road hierarchy*' as the current '*road hierarchy*' is not necessarily the best reflection of role of all the borough's roads and as such the Council is planning a review (of the road hierarchy). The ranking of

roads in the '*RBK transport hierarchy*' is a more accurate reflection of the role of the borough's roads and will form the basis of any review of the road hierarchy.

Strategic Walking Network: The Council has developed a borough-wide Commuter Walking Strategy which identifies the borough's strategic walking routes. The Strategy categorises all RBK's walking routes as either 'commuter corridors' (strategic walking network), 'common commuter routes', or all other routes. Commuter Corridors have then been prioritised and form the basis of the boroughs walking audit programme. *Please refer to Appendix 14 for a prioritised list of 'commuter corridors', Commuter Walking Strategy maps, and the Commuter Walking matrix.*

Strategic Cycling Network: The Council has identified a strategic cycling network for the borough (refer to Figure 16, Section 1.2.10). The 16 most important routes of the borough's strategic cycle network have then been ranked based on existing cycle flows, potential to attract new trips, destinations served by the route, and the type of route; these 'rankings' are used to determine priority routes for improvements. *Please refer to Appendix 15 for a full copy of the prioritised list of strategic cycling routes.*

Supporting infrastructure: Infrastructure of strategic importance to the borough e.g. cycle parking facilities in District Centres.

Policy (GP6) – The Council will use the RBK Transport Hierarchy to help determine priority locations for improvements to the boroughs transport network.

(2.2) POLICIES BY TOPIC

This section sets out policies based on transport modes and issues e.g. walking, cycling, road safety, climate change.

(2.2.1) REGIONAL & INTERREGIONAL TRANSPORT POLICIES

Many trips are not contained solely within the Borough and often span several Boroughs; for this reasons it is important to consider transport in a sub-regional context. TfL has designated London into 5 transport sub-regions and is producing a transport plan for each area. RBK is part of the South London sub-region along with the London Boroughs of Richmond, Sutton, Merton, Wandsworth, Bromley, and Croydon. The Council is committed to working with these Boroughs, TfL, and other partners to improve transport on a sub-regional basis. Key sub-regional issues that the SRTP addresses include; tackling high levels of vehicle use and road congestion, the need for better orbital public transport services; addressing future capacity problems on radial rail routes into central London; building on the success of the Smarter Travel Sutton and Richmond programmes to encourage modal shift; and improving transport links out of London (e.g. to Surrey).

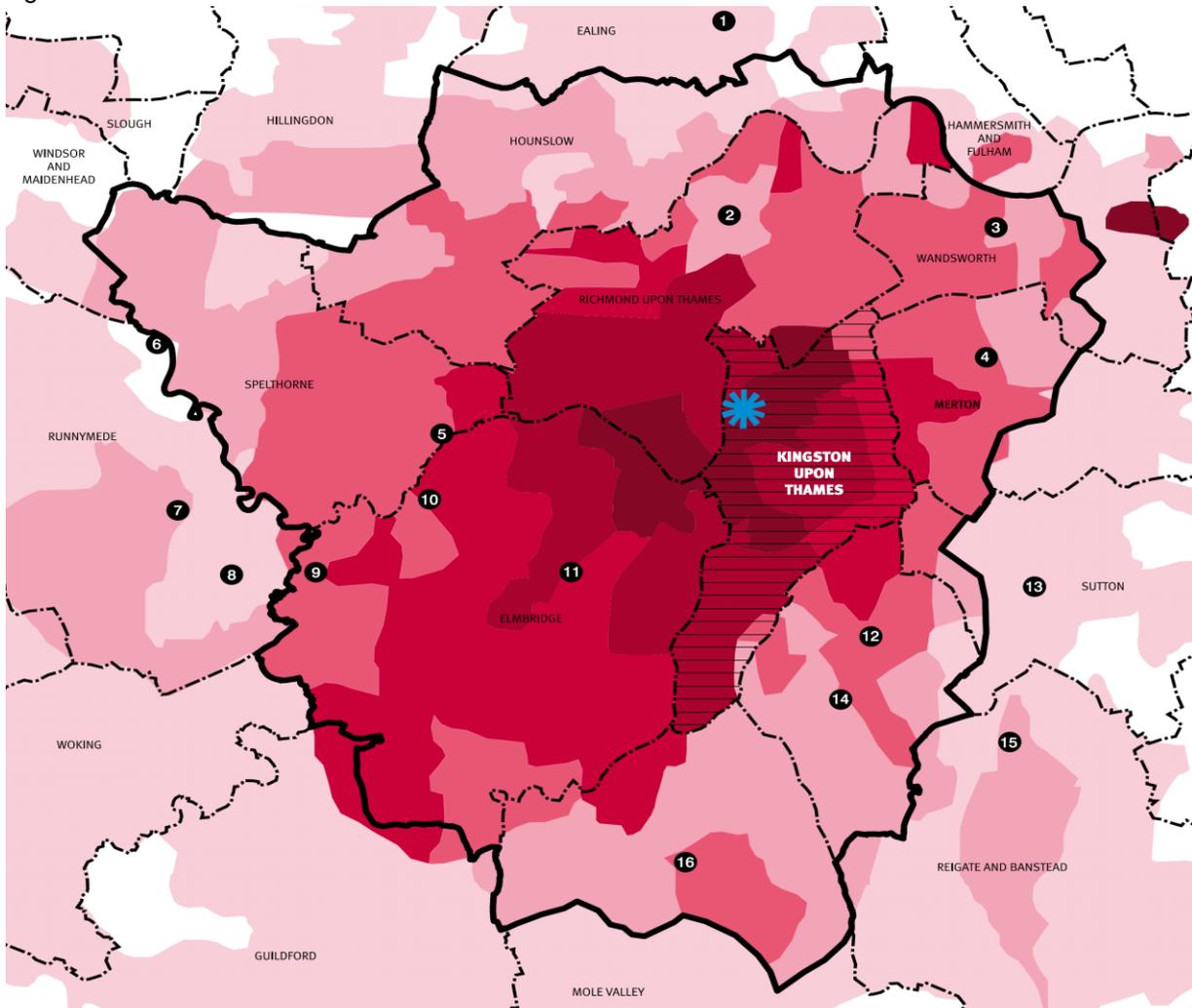
RBK also shares a boundary with Surrey and there are a large number of cross boundary trips between these areas, particularly from west Surrey to KTC. As Surrey is not part of the TfL transport authority, coordinating cross boundary transport is more challenging particularly in regards to bus service provision.

RBK contains several activities that are likely to attract trips from outside the Borough (sub-regional destinations). The most significant of these is KTC which is classed as a

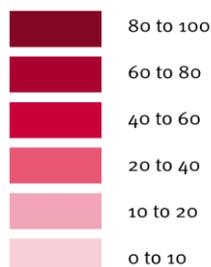
Metropolitan Town Centre, is one of London’s largest retail areas, and contains key facilities including Kingston University. Despite this, sub-regional transport provision to KTC is relatively poor and further investment in transport infrastructure is required to support its important role in the sub-region and to allow for planned future growth as set out in the K+20 development plan.

Chessington Industrial Estate is classed as one of London’s Strategic Industrial Locations and generates large numbers of freight and employee trips. Kingston College and University both attract large student populations from across the sub-region (and beyond) as does Kingston Hospital. Chessington World of Adventures, located in the far South of the Borough, attracts large volumes of sub-regional and even national trips and can experience associated traffic problems.

Figure 26: KTC Retail Catchment



Kingston Town Centre Penetration Rate (%)
Based on Postcode Sector.



Kingston Town Centre

- | | |
|--------------|---------------------|
| 1 Ealing | 9 Weybridge |
| 2 Richmond | 10 Walton on Thames |
| 3 Wandsworth | 11 Esher |
| 4 Wimbledon | 12 Ewell |
| 5 Sunbury | 13 Sutton |
| 6 Staines | 14 Epsom |
| 7 Chertsey | 15 Banstead |

Source: Kingston Town Centre Area Action Plan

Policy (RT1) –The Council recognises the regional importance of transport and will work with neighbouring authorities and other partners to:

- a) Seek increased transport investment to improve access to Kingston Town Centre in order to support its important sub-regional role as a Metropolitan Town Centre and enable sustainable future growth (in accordance with MTS Policy 8)
- b) Improve transport links (particularly orbital) between neighbouring centres and the Boroughs major trip attractors (in accordance with MTS Policy 7)
- c) Investigate ways to reduce car trips to Kingston Town Centre from Surrey particularly by improving cross boundary bus services, frequencies, and pricing
- d) Seek investigations into the feasibility of extensions to the Tramlink network to improve orbital transport links in the South London sub-regional and to the borough (in accordance with MTS Proposal 16)



Focus on Park and Ride to KTC

The Council (in partnership with Kingston First) currently provides an annual Christmas park and ride service (K50) between KTC and Chessington World of Adventures. This service has been of some success but requires a significant annual subsidy to keep it operating.

The establishment of a permanent park and ride service to KTC to reduce vehicle trips into Kingston has been a long held aspiration for RBK. A study was completed in 2002 which investigated the viability of potential park and ride sites. The most effective locations for park and ride facilities would necessarily be located outside of the Borough in order to intercept car trips, particularly from parts of Surrey to the West and Southwest which currently generate high volumes of car trips to KTC. Therefore the Council recognises that progressing a park and ride site would require sub-regional partnership working with neighbouring Boroughs and transport authorities, particularly Surrey. The study also estimated significant set up and operational costs of the schemes which cannot be accommodated by the Council alone.

Therefore the Council will seek further investigations to establish the regional benefits of a park and ride service and if appropriate will seek funding and support for a park and ride facility as a sub-regional transport priority.

Policy (RT2) –The Council will promote a permanent park and ride facility to serve Kingston Town Centre as a sub-regional priority and will seek sub-regional support and funding to further investigate the feasibility of park and ride sites.

Policy (RT3) – The Council will work with Kingston First and other partners to operate the seasonal park and ride service to Kingston Town Centre, subject to funding availability

Focus on access to Heathrow and Gatwick Airports

RBK's closest and most accessible airports are Heathrow and Gatwick. To attract tourism and businesses to RBK it is important to have good public transport access to these airports.

Heathrow Airport

RBK benefits from having a direct bus service (X26) to Heathrow from Worcester Park, New Malden and Kingston, and from most other points in the Borough with one change. This allows Heathrow to be reached for a standard bus fare but the route can be prone to traffic congestion which can adversely affect journey time reliability. Access to Heathrow by rail currently requires several interchanges so RBK would benefit from improved rail based links to Heathrow Airport.

Airtrack would have provided a direct rail based service from London Waterloo to Heathrow: with two trains per hour stopping at Clapham Junction, Richmond, Twickenham, Feltham and Staines. It would have improved rail links from RBK to Heathrow with only 1 interchange between trains (at Twickenham or Clapham junction), and overall rail based journey times would have improved. Airtrack has been 'shelved' as a project, however it is possible that other rail based schemes with similar benefits to RBK could be developed in coming years.

Gatwick

Rail access is relatively good to Gatwick airport, requiring only one interchange at Clapham Junction from all RBK stations, but is relatively expensive. There are currently no alternative bus or coach services to Gatwick.

Policy (RT4) – In order to improve access to Heathrow and Gatwick Airports the Council will:

- a) Support projects to improve rail based access to Heathrow Airport**
- b) Work with TfL and neighbouring authorities to improve bus journey times, reliability, and frequencies to Heathrow Airport**
- c) Work with partners to investigate the feasibility of a bus link to Gatwick Airport**

(2.2.2) RAIL

RBK's rail infrastructure and operations are controlled by Network Rail and the rail operating company (currently South West Trains), and as such the Council has little influence over the provision of train services in the Borough.

Train Services

RBK's services are provided via several radial routes that all terminate at London Waterloo. Orbital rail services are limited and orbital trips normally require interchanges to be made (e.g. at Raynes Park) so can be inconvenient and long.

Surbiton Station is on the main line to the South Coast so benefits from high frequency services including an express services to Waterloo, and consequently attracts a large number of commuter trips to London. Kingston Station is served by 2 branch lines that together provide 4-6 trains per hour which, whilst normally a reasonable frequency, is relatively poor considering KTC's sub-regional importance as a Metropolitan Town Centre and the number of trips it attracts. Worcester Park and New Malden Stations both benefit from relatively frequent services and are located in the cheaper fare zone 4, so attract

reasonably high numbers of passengers. Malden Manor, Tolworth, Chessington North and South Stations are all served by the Chessington South line that has low frequency services (2 per hour) and these stations generally have the lowest passenger numbers in the Borough. Most stations in the Borough, particularly Kingston, would benefit from increased train frequencies if there was capacity on the network to accommodate this; increased capacity could be achieved by utilising the 4 ex-international platforms at Waterloo Station.

Generally, off peak and late night train services to RBK are infrequent and services from central London end relatively early (mostly around midnight) with services to stations on the Chessington South Line being particularly poor. It would be of benefit to improve off peak and late night train services on all RBK lines. However, this would be particularly beneficial to support the night time economy of KTC which is currently largely reliant on late night bus services.

Passenger crowding on RBK rail services is of some concern, particularly on lines from Surbiton, Kingston, Worcester Park and New Malden Stations which are approaching and exceeding capacity during peak times. To alleviate capacity concerns the Government's High Level Output Specification (HLOS) program proposes significant investment in RBK in the coming years with all RBK lines operating with 10-car carriage trains by 2012, and all train station platforms being upgraded to 10-car carriage capacity by December 2013 (all lines currently have 8-car carriage capacity). Despite HLOS proposals, the MTS has identified that rail crowding is still expected to be a significant future issue on south west routes into London in the medium to long-term, particularly on lines from Surbiton. The Council strongly supports the Mayor's proposal to prioritise this rail corridor for further schemes to increase capacity.

Kingston and Surbiton Stations are both located in travel zone 6 which is a higher zoning than some other comparable outer London stations of a similar distance from London. It is considered that this puts RBK at an unfair disadvantage as it increases the price for RBK residents travelling to London and for those travelling to KTC and Surbiton for work, study, or leisure. Reclassifying the travel zone of these stations would reduce travel costs, enhance the social inclusiveness of transport, and encourage economic growth by making Kingston more attractive as a business location. The Council will continue to lobby to have Kingston and Surbiton Stations reclassified to make pricing fairer.

All of RBK's train stations are staffed, however many are only staffed for a couple of hours each day. Adequate staffing of train stations is important for customer service (e.g. assistance to purchase train tickets), mobility assistance, and safety from crime. Customer care standards, including politeness of staff and cleanliness of trains is also important in encouraging train use, and the Council supports the MTS proposal to work with train operators to introduce common service standards across all London's train services.

Policy (PT1) – The Council will work with and lobby partners including TfL and Train Operators to seek:

- a) Delivery of improvements and capacity increases on the Borough' train services as set out the DFT's High Level Output Specification for the period 2009 to 2014**
- b) Prioritisation of RBK routes for further medium term rail capacity increases to address projected over-crowding (as set out in MTS proposal 8)**
- c) Increased peak hour train frequencies**
- d) Improved late night service and increased off peak train frequencies**

- e) **Fairer pricing of services in particular the reclassification of Kingston and Surbiton Stations**
- f) **High service standards including the availability of staff and the cleanliness and comfort of services**
- g) **Improved facilities and arrangements for accommodating bicycles on train services**

Train Stations

The accessibility, attractiveness, and safety of train station entrances are an important aspect in promoting train use and ensuring access for disabled users; all of RBK's train stations would benefit from improvements. Where stations have multiple entrances and through routes it is important that these are kept open in order to make the station as accessible as possible from surrounding areas. There have been some concerns over the closure of entrances to some stations, particularly at New Malden Station, and the Council will continue to work with train operators to ensure entrances remain open.

Kingston and Surbiton are RBK's only stations with fully accessible platforms for disabled users. Norbiton stations platforms are accessible from street level, however there is a large gap between the train and platform edge. Worcester Park Station (which is located on RBK's boundary) is partly accessible via the west platform (within RBK) but the east platform is not accessible to disabled users (within the London Borough of Sutton). All other stations are not fully accessible by disabled users. The Council's priorities for station upgrades and accessibility improvements for disabled users are detailed in Appendix 16.

Also please refer to Section 2.2.5 'Cycle Parking' for background on cycle parking at train stations.

Policy (PT2) – The Council will work with Network Rail and train operating companies to ensure all train stations and platforms in RBK are accessible by disabled users.

Policy (PT3) – The Council will work with Network Rail and train operating Companies to ensure that train stations are attractive, safe, and comfortable and will seek to improve entrance points/areas to make stations inviting and accessible.

(2.2.3) BUSES

Bus Services

Due to the lack of underground services in the borough, and large areas with low train frequencies, RBK is reliant on its extensive bus network to provide acceptable levels of access to public transport. Although the borough is reasonably well served by buses there are still pockets of the borough where residents are not within reasonable walking distance (400m) of a bus stop (*as shown in Figure 27 below*), and there are large areas with poor access to public transport (e.g. Coombe, Berrylands, South of the Borough).

The majority of bus services in RBK are operated under the regulated TfL framework which has seen considerable investment and improvement over recent years. As a result RBK has benefited from bus service improvements including low set fares and oyster card ticketing, increased frequencies, extended routes, 24 hour services and improved bus

accommodation and security. However the Council will continue to work with TfL to protect existing services and seek improvements to bus service provision in the Borough where required. The Council would particularly like to investigate improvements to bus services in South of the Borough, other areas of low public transport accessibility, and areas that are farther than 400m from a bus stop. Also according to the SRTP bus demand in KTC is scheduled to increase by 10-20% by 2026; as such ongoing improvements to bus services to/from KTC are also important.

The Borough is also served by some bus services operated by Surrey County Council that mainly link KTC with catchments in Surrey to the South and West. These bus services are generally less frequent and more expensive than TfL services and this may contribute to high levels of car use to KTC from Surrey. To address this it is an aspiration of the Council to work with Surrey CC and other partners to explore options to improve cross boundary bus services from Surrey, including the possibility of transferring further Surrey operated bus services to TfL.

Policy (PT4) – The Council will work with partners including TFL and Surrey to provide a network of local bus services that meets the needs of RBK residents, commuters, and visitors including:

- a) New or improved services in areas with low transport accessibility**
- b) Improved service provision to key local trip generators including District Centres, Schools and Healthcare facilities.**
- c) Explore opportunities to improve cross boundary bus service routes, frequencies, and pricing from Surrey**
- d) Increased bus capacities and frequencies on busy routes**
- e) Ensure that night bus services are maintained at current levels, and where appropriate provide new/increased services to accommodate increasing demand.**
- f) Consistent fair pricing and easy to use ticketing (e.g. Oyster Card); including lobbying TfL for introduction of a one hour bus ticket**

Bus Priority Measures

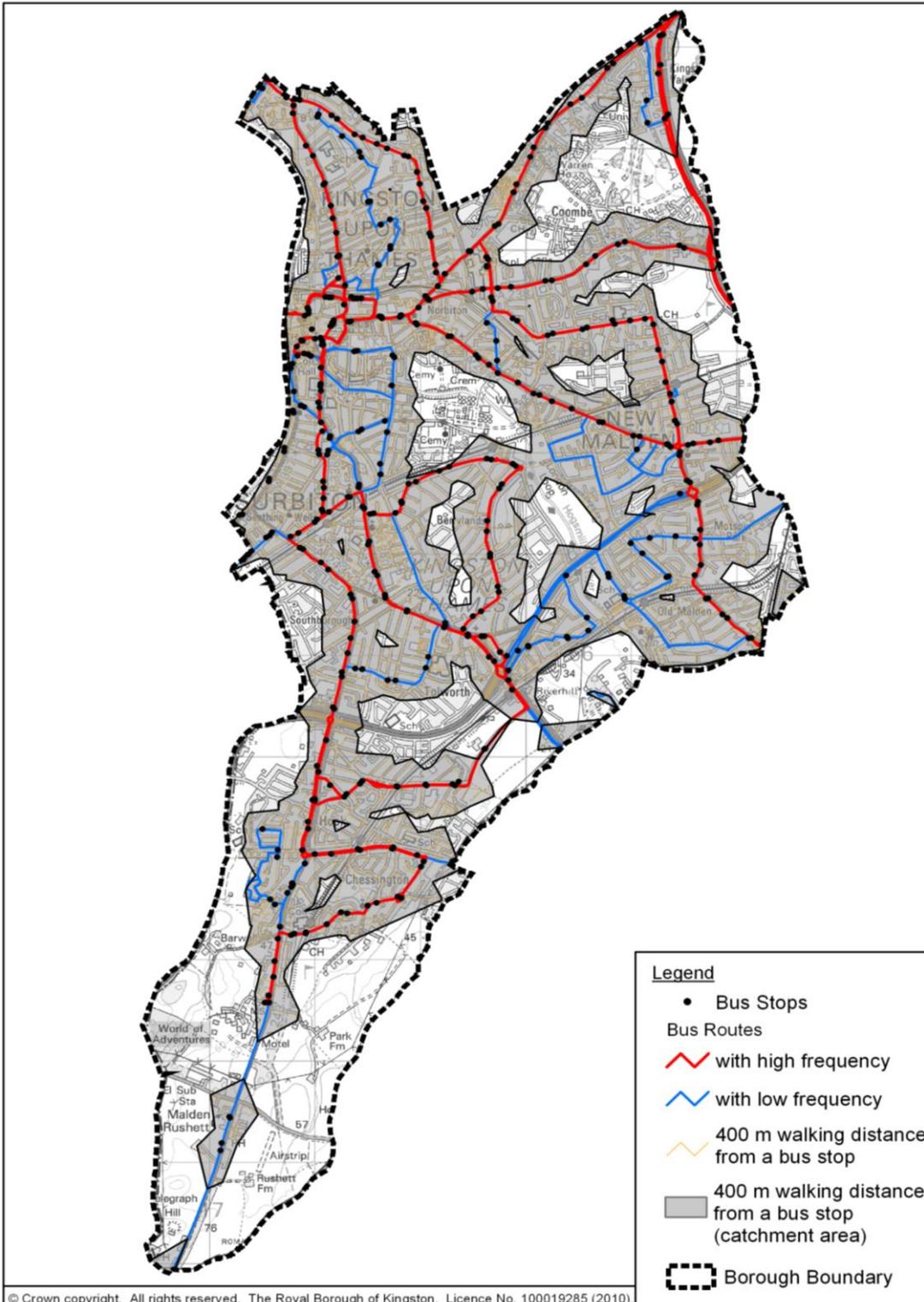
Delays to bus services can reduce the attractiveness of bus use as a mode of transport. In recent years the Council has invested significantly in measures to improve bus efficiency and reliability, including the introduction of bus lanes, the extension of bus lane operational hours, and parking restrictions on bus routes. These initiatives have supported RBK bus services to operate at a high level of reliability and efficiency (when compared to bus time tables).

Despite this overall high level of performance most bus routes are subject to delays due to congestion on the road network, and some routes regularly suffer from excess waiting times (i.e. when a bus arrives later than scheduled). TfL quarterly reports on bus reliability ('Route Results for the London Borough's – 2nd, 3rd, and 4th quarter 2009/10') show that the high frequency routes that suffer the worst excess waiting times are the 65 (to Richmond), 57 (Micham via Coombe Lane West), and 131(Wimbledon via New Malden). The low frequency routes that suffer from excess waiting times are (in order), the K1, K5, X26, K3, 467 and 465. These routes align closely with roads in the borough that suffer from the greatest levels of vehicle delay (congestion). Maps illustrating journey time delays in the borough are provided in Appendix 8.

Policy (PT5) – In order to improve bus journeys times and reliability the Council will:

- a) Implement schemes that give priority to buses over other vehicles on the road network, including bus lanes and parking restrictions
- b) Operate all bus lanes in peak traffic periods and periods where congestion is likely to affect bus reliability; also take enforcement action against unauthorised vehicles using or parking in bus lanes
- c) Ensure that bus movements are not adversely affected when implementing other transport schemes
- d) Work with neighbouring authorities to address any delays on cross border routes

Figure 27: Bus Route Frequencies and Accessibility



Bus Stop Accessibility and Waiting Environment

In recent years, the Council has been implementing a programme to upgrade all bus stops to a standard that is fully compliant with the Disabilities Discrimination Act 2005 (DDA); this ensures disabled users can easily access bus stops and buses (*please note the DDA is being progressively consolidated with other equalities legislation in the Equalities Act 2010*). TfL has informed that as a result of this programme RBK has more DDA compliant bus stops than any other borough in London with 85.06% compliant on Council operated roads and 83.2% compliant in total.

An important aspect of encouraging bus use is the provision of physically accessible bus stops and pleasant/safe waiting environments. Also the provision of accurate travel information, promotion of bus services, and signage of bus facilities and services are effective means of improving perceptions of bus use and helping users to make informed decisions.

Focus on 'Real-Time' Bus Information at Bus Stops

An important aspect of bus travel information is real-time bus information at bus stops (currently called 'countdown'), this is particularly useful on low frequency bus routes. TfL have provided real time bus information at 65 of RBK's bus stops and plan to roll out a more advanced system during 2011/12. The new system will reallocate the location of some facilities but will not increase the overall coverage in RBK. The Council has strong concerns that although TfL plan to increase the amount of real time bus information facilities throughout London there are no planned increases in RBK, especially given the lack of tube network and reliance on bus services. Further real time bus information facilities are required to provide the level of coverage envisaged by the Council. *Appendix 17 comprises a list of bus stops that will have real time bus information by the end of summer 2012, and a priority list of bus stops for which RBK want additional real time bus information facilities installed.*

Policy (PT6) – To make bus use more attractive by ensuring bus waiting facilities are of a good standard, the Council will work with TfL and other partners to:

- a) Ensure bus stops are conveniently located and easily accessible by pedestrians**
- b) Upgrade all bus stops in the borough to satisfy Disability Discrimination Act 2005 (or Equalities Act 2010) requirements by 2013/14**
- c) Provide safe, pleasant, covered and well lit bus waiting facilities**
- d) Review existing hail and ride sections of bus routes and consider providing formal bus stops/waiting facilities or accessible boarding points on these routes**
- e) Provide real time bus information at priority bus stops**

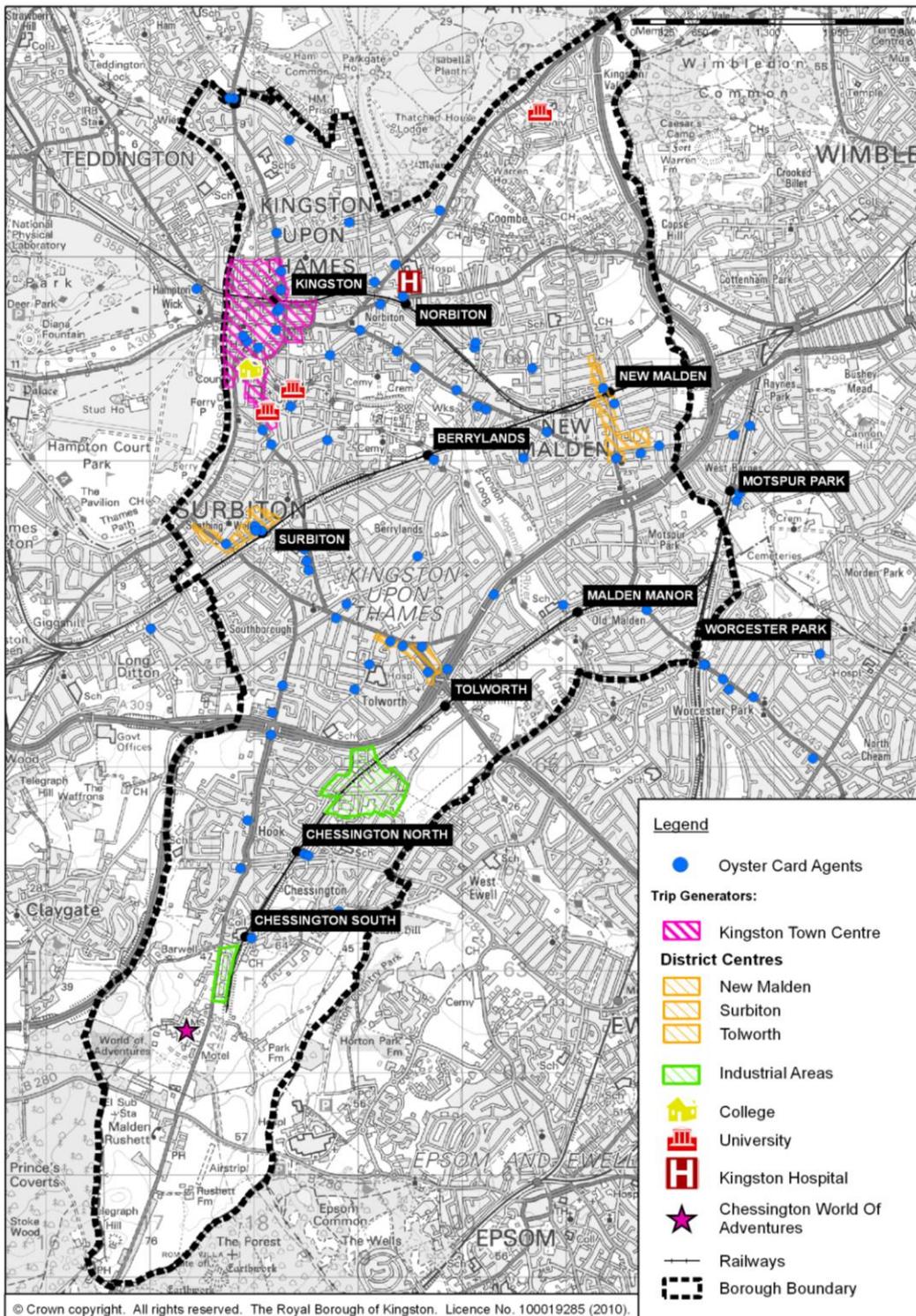
(2.2.4) TRANSPORT INTEGRATION

Integration is the process of transferring from one route or mode of transport to another. Most public transport routes do not provide a direct link between start and end destinations and changes of route or use of several transport modes are required. Therefore, good integration is essential to achieve an efficient sustainable transport network that provides an attractive alternative to "door to door" car journeys. The most significant forms of integration within RBK tend to be; transferring between bus routes and journeys to train stations from the surrounding residential areas. Measures to enhance integration include

physical infrastructure such as good walking and cycling routes to train stations, as well as ensuring integrated timetabling and ticketing (e.g. oyster cards).

To connect RBK to London wide and sub-regional destinations, integration onto the wider transport network is required. RBK has no direct access to underground network and is only served by radial South West Trains services so is reliant on stations outside of the Borough to provide vital interchange opportunities particularly Richmond Station and stations on the South West Trains lines to Waterloo including Wimbledon, Clapham Junction, Vauxhall and Waterloo. The Council will lobby for improvements to strategic interchanges that enhance regional and orbital access to RBK (in accordance with MTS proposal 46).

Figure 28: Oyster Card Top-up Locations



Policy (IT1) – To ensure efficient integration between transport modes the Council will work with partners including TfL and transport operators to:

- a) Improve bus links from rail stations to key destinations and surrounding residential areas**
- b) Ensure that bus timetables integrate efficiently with train timetables particularly on infrequent train and bus routes**
- c) Improve signage between public transport stations/stops and onward destinations e.g. shopping areas, Kingston Hospital etc.**
- d) Ensure Oyster Card top-up facilities are provided at convenient locations throughout the borough, including all train stations.**
- e) Provide safe and attractive pedestrian and cycle routes leading to public transport stations/stops.**
- f) Provide travel information including ‘real-time’ travel displays at interchanges and key destinations e.g. public transport stations/stops, Kingston Hospital, KTC, and District Centres.**
- g) Ensure adequate and convenient provision of taxi ranks.**

(2.2.5) CYCLING

Cycling is an integral part of an efficient, integrated, and sustainable transport network and has many benefits as a mode of transport, including: reduced traffic congestion, reduced CO₂ emissions, improved air quality, and improved health/fitness.

The Council’s cycle count information indicates that levels of cycling have been increasing in the borough; this confirms the success of the Council’s investment in cycling in recent years. Despite a positive trend in cycling numbers, the South London Sub-region Transport Plan (Issues and Opportunities) outlined significant potential to increase cycle trips within the south sub-region for journeys under 5km; currently a 62% of these journeys are undertaken by car.

The Borough’s small size, relatively flat topography and existing network of quiet residential roads, traffic free routes, and open spaces make it particularly suitable and attractive for cycling. The Council will aim to capitalise on these attributes to increase the number of cycle trips and foster a strong local culture of cycling. As one of London’s Biking Boroughs, the Council will give a high priority to schemes that support cycling by improving physical infrastructure (such as cycle lanes and cycle parking) and providing supporting measures such as cycle training and information.

Cycle Network

The Council has identified a network of strategic cycle routes (the strategic cycle network) that link key destinations both inside and outside of the Borough, carry the highest volume of existing cycle trips, and have the most potential to attract new cycle trips. The strategic cycle network is considered part of the borough’s strategic transport network and therefore will receive a high level of priority for funding. The Cycle Super Highways as currently proposed by the Mayor do not extend into the borough, but the Council would like to explore potential further provision of cycle superhighways into Kingston.

Ideally the Council wants to ensure the entire road network is suitable and safe for cyclists (except the A3); however there are some busier roads where safety can be of concern and so the Council promotes alternatives to these routes. Where there is no convenient

alternative to cycling on busy main roads or unavoidable barriers exist (such as road junctions, rivers, or rail crossings), improved infrastructure is required to encourage cycling including dedicated crossings and segregated cycle routes.

Sustrans have identified a network of Greenway cycle routes that focus on providing access to green spaces across London, including Richmond Park and the large areas of open land in the South of the Borough. The Council will aim to implement the proposed Greenway routes as part of the borough cycle network, although these won't be a priority for funding where they are primarily for leisure purposes.

Signage along the cycle network is an integral part of making cycling attractive and convenient. Signage of RBK's strategic cycling network requires reviewing with a focus to improve signage to key destinations.

The condition of the road and cycle network is of key importance to cyclists, as they are likely to suffer significant inconvenience and possibly even danger when using routes in poor condition (particularly where there are obstructions such as potholes and glass on the cycle route). These obstructions can be minimised by providing a greater level of priority to the strategic cycling network in the Council's planned maintenance program. An additional issue for cyclists is the design of some older drains and gullies on the road network which create hazards by trapping tyres.

The coloured surfacing that is currently used to differentiate cycle lanes can wear and fade badly, is expensive to maintain, provides a poor riding surface, and looks unattractive. Therefore, a review will be conducted to investigate the best way to surface and demarcate cycle facilities (including methods to improve segregation from traffic), with agreed outcomes being implemented into new schemes and maintenance works.

Policy (C1) – To provide a comprehensive cycle network that enables safe and convenient cycle trips throughout the Borough the Council will:

- a) Support the use of the whole highway network by cyclists (with the exception of the A3) and give a high priority to cyclists on the road network**
- b) Protect and improve the boroughs on and off road cycle routes and facilities and give priority to schemes on the strategic cycle network**
- c) Provide infrastructure including continuous cycle lanes, advanced stop lines and crossing facilities to overcome specific barriers to the safety and convenience of cycling, such as the A3, busy roads and junctions, rail and river crossings**
- d) Enhance and promote the Borough's quiet residential roads, traffic free routes and routes through parks as attractive, safe, and convenient routes for cyclists**
- e) Work with partners to implement the "greenway" cycle network to provide better routes to and within parks and green spaces**
- f) Provide segregated cyclist and pedestrian facilities where possible, but if not provide shared use pedestrian/ cycle routes; and give a high priority to facilities that segregate cyclists from traffic on busy roads**
- g) Work with neighbouring authorities to provide continuous cross boundary cycle routes**
- h) Work with partners to investigate, provide, and promote major cycle routes that link RBK to neighbouring authorities and sub-regional destinations, including consideration of cycle superhighways.**
- i) Review and improve signage of cycle routes including provision of "time to destination" information and road surface signage**

- j) Ensure that cycle routes and road surfaces are maintained to a good standard with priority given to the strategic cycle network, and replace non cycle friendly drains and gullies across the cycle network**
- k) Review and implement improvements to methods for surfacing, marking and segregating cycling lanes and facilities**

Cycle Parking and Security

An important factor in enabling cycling trips is the availability of cycle parking at the start and end destinations of a journey e.g. home, workplace, school, shops etc. A lack of convenient, sheltered, and secure cycle parking can act as a significant barrier to cycling, particularly in areas with a high risk of cycle theft.

In recent years the Council has invested significantly in the provision of public on- street cycle parking facilities and there is now generally good provision of cycle parking in KTC, the District Centres, and at the Borough's train stations. However, there is still a particular requirement for fully secure cycle storage facilities in locations where all day parking is required by commuters and employees. Following the provision of secure cycle parking at Surbiton Station as detailed below, it is the Council's aspiration to work with South West Trains to provide secure cycle facilities at all of the Borough's train stations, prioritising New Malden, Worcester Park, Norbiton and Tolworth. The Council would also like to seek to provide a fully secure public facility in KTC and will require this be provided as part of future major redevelopment proposals. Appendix 18 provides further details of requirements and priorities for public cycle parking provision in shopping areas and train stations.

The Council has worked with TfL over recent years to install secure and covered cycle parking at almost all schools in the Borough. Assistance has also been provided to many workplaces to install cycle parking, but further support is required to increase workplace cycle parking provision and encourage more cycling to work. For the many residents in the borough living in flats or apartments the lack of secure and sheltered bicycle storage can present a significant barrier to cycling. To help overcome this the borough will support and encourage the provision of secure communal cycle parking in private residential developments and aim to provide cycle parking at all of the Council's own housing estates.

The risk of cycle theft is acknowledged to be significant barrier to cycling with research showing that one in four cyclists who have experienced a cycle theft stop cycling (TfL Draft Cycle Security Plan 2010). RBK experiences relatively high levels of pedal cycle theft particularly in Kingston Town Centre. Norbiton and Surbiton Stations were listed in the top ten London stations for cycle theft between 2008 and 2010 (TfL Draft Cycle Security Plan 2010). Some progress has been made in reducing cycle theft in recent years which may be due to joint initiatives by the Council and Police, including bike security marking, advice on locking up bikes securely, and operations to catch cycle thieves. The Council supports recent proposals by TfL to tackle cycle theft set out in the Draft Cycle Security Plan (2010) including proposals to set up a London wide Met Police Cycle Task Force. The Council will seek to work with them and Kingston Met Police to further tackle bike theft in RBK. The Council will also ensure that good procedures are in place for removing abandoned and damaged bicycles from public cycle parking facilities as they use up parking capacity and can present a poor image of cycling.

Focus on Cycle Parking at Train Stations: Surbiton Station

With its fast and frequent services, Surbiton Station attracts commuters from a wide catchment area and cycling is an increasingly popular way to travel to the station and part of an integrated journey. Of London's 50 busiest train stations, Surbiton Station has the second best level of cycle parking provision. In recent years the station installed an innovative 2 tier josta cycle parking system at the front rear of the station to maximise the number of cycles that could be stored in the space available.

In late 2009 this was complemented by the addition of a fully secured compound for the existing 122 cycle spaces bikes at the rear of the station, which provides peace of mind for commuters against the risk of cycle theft. Entry to the compound can only be gained using a swipe card, which is issued to customers signing up to the scheme and paying a returnable deposit. It appears that demand for use of the store has significantly outstripped the number of swipe cards made available to customers. Yet observations indicate that the store is often significantly under capacity, causing frustration for cyclists that missed out and indicating that the operation of the store is not working in an effective way. This highlights the important role of good operational management of a secure compound in order to ensure the facility is efficiently utilised to maximise capacity. The Council hope to work with the scheme operators South West Trains to resolve these initial teething problems at Surbiton store and develop a more effective management system that can then be used at other stations as secure facilities are made available.

Policy (C2) – To enable the secure and convenient storage of bicycles the Council will:

- a) Provide adequate and conveniently located on street cycle parking in town centres and near all key shopping, leisure and other facilities**
- b) Provide secure and sheltered public cycle parking facilities in Kingston Town Centre**
- c) Work with train operators to provide fully secure and sheltered cycle parking facilities at all train stations in the Borough and support the reallocation of space in station car parks for cycle parking**
- d) Provide cycle parking at all Council buildings and residential properties and work with other public organisations, including schools, to provide cycle parking at their sites**
- e) Support and encourage workplace, residential, leisure, retail, and other sites to provide cycle parking facilities**
- f) Require all new development in the Borough to provide cycle parking facilities in accordance with minimum standards**
- g) Ensure that planning policies and requirements provide encouragement and supportive for proposals to install cycle parking and storage facilities**
- h) Work with the Metropolitan Police to implement initiatives to tackle cycle theft**
- i) Work with partners to manage cycle parking facilities to ensure they are well maintained and used efficiently to maximise capacity, including through the removal of abandoned bicycles**



Cycle Hire Schemes

In 2010 the Mayor of London launched the central London cycle hire scheme that allows the public to hire bicycles for short periods picking up and dropping the bicycles at docking stations located around the city. The Council will lobby for the scheme to be extended to Outer London to provide links between RBK and neighbouring boroughs. There are also opportunities to provide other types of cycle hire scheme including a scheme being trialled (2010) by South West Trains which allows bikes to be hired from nearby Richmond Station and this could potentially be expanded to RBK stations. South West Trains have also been running a scheme which allows season ticket holders to hire Brompton folding bicycles on a long term basis. Particular areas where cycle hire schemes would be beneficial in RBK are to provide links between university campuses, from Surbiton Station to KTC, from KTC to Richmond, and for tourist trips along the river and to Hampton Court. The Council will explore possible options for cycle hire schemes as they develop, particularly in relation to cost and will seek to implement appropriate schemes as soon as possible.

Policy (C3) – The Council will work with partners including TfL, South West Trains, and neighbouring authorities to the introduce cycle hire schemes in the Borough, including investigating the feasibility of expanding the Mayor’s Central London cycle hire scheme to the borough.

Cycle Training and Promotion

Cycle training is a key means of promoting cycling, improving the safety and confidence of cyclists, and undoing perceptions that cycling is unsafe.

The Council currently offers basic on road cycle training (Bikeability levels 1 and 2) to all Primary School students in the Borough, training around 1200 students per year. The provision of basic cycle training for school children is primarily aimed at ensuring their safety as vulnerable roads users. However, this provision is not particularly effective at achieving modal shift as only a small proportion of those trained are likely to cycle to school.

It is considered that advanced cycle training aimed at secondary school children (Bikeability level 3) and adults is likely to be more effective in achieving modal shift with a much higher proportion of participants likely to continue to cycle on a regular basis. This advanced training is generally conducted on an individual basis and focuses on improving confidence and techniques for cycling in busy road conditions and can help overcome safety concerns which are a major barrier to the uptake of cycling. Therefore, the Council will focus efforts on increasing the uptake of cycle training for secondary school children and adults.

The Cycle Training Team also provides other complimentary services to promote cycling that are implemented as part of school and workplace travel plans. These include Dr Bike sessions, bike maintenance courses, after school clubs, and led cycle rides.

Policy (C4) – To increase cycling uptake and ensure road safety the Council will:

- a) Give a high priority to providing advanced cycle training to secondary school children**
- b) Encourage and support the increased take up of adult cycle training, including through workplace travel plan initiatives**

- c) Continue to work with schools to deliver basic cycle training to primary school children
- d) Implement a range of measures to support and encourage cycling, such as Dr Bike sessions, bicycle maintenance courses, bicycle recycling schemes.
- e) Implement campaigns and training that promote safe and responsible cycling and reduce perceptions that cycling is unsafe.

(2.2.6) WALKING

Walking Network and Commuter Walking Strategy

Due to its low environmental impact, cost effectiveness, health benefits, and accessibility to all, walking is an extremely important and popular mode of transport. Despite its popularity, the SRTP identifies significant potential in South London to increase walking for short distance trips (which are often completed by car). The Council has recognised the importance of increasing walking numbers by: placing it at the top of the transport user hierarchy, weighting it highly in the Transport Initiative Scoring System, and developing a Commuter Walking Strategy.

The Council's Commuter Walking Strategy categorises and prioritises walking routes based on their importance to the borough. The prioritised routes have then been used to set an annual walking audit program for the borough. Walking audits using the Pedestrian Environment Review System (PERS2) will identify issues and where appropriate improvement initiatives will be developed for inclusion in the LIP POI. *'Focus on RBK's Transport Hierarchy'* and Appendix 14 provides further details on RBK's Commuter Walking Strategy and walking audit program. *Please note: walking audits are also carried out as part of investigation and design work for transport improvement initiatives for other modes of transport.*

Policy (W1) – To maintain and enhance the borough's network of pedestrian routes the Council will:

- a) Prioritise improvements to the strategic walking network and give high priority to improving pedestrian connectivity across barriers such as major junctions, busy roads, rivers, and rail lines.
- b) Ensure all highway improvement and maintenance schemes are designed to protect and, if opportunities exist, enhance pedestrian facilities.
- c) Retain and improve existing public rights of way and seek to establish new public rights of way to enhance pedestrian accessibility.

Policy (W2) – The Council will implement and continue an annual walking audit program based on the Commuter Walking Strategy prioritised list of walking routes.

Formal Pedestrian Crossings

RBK has good coverage of formal pedestrian crossings (*as illustrated in Appendix 19*); however the pedestrian crossings are not all DDA compliant and may not be located in the most convenient location for pedestrians or other modes of transport.

The MTS promotes the introduction of pedestrian countdown facilities at formal light controlled pedestrian crossings; countdown facilities will be funded and implemented by TfL.

Policy (W3) – The Council will retain and where appropriate enhance pedestrian crossing facilities (e.g. upgrade, relocate, or install new facilities). However, where it does not compromise pedestrian safety or accessibility, the Council will consider the appropriateness of replacing traffic signal controlled stand along crossings with zebra crossings or other facilities.

Policy (W4) – The Council supports the implementation of pedestrian countdown facilities, and will seek the installation of facilities in suitable locations.

Please note: pedestrian crossings and access for disabled users is discussed further in Section 2.2.17 (Access for Disabled Users and those with Special Needs).

Public Realm Improvements

Public realm improvements (including street de-cluttering and planting of street trees) are a way of making the urban environment more attractive for all users and encouraging sustainable modes of transport. Public realm improvements can reduce actual and perceived road safety hazards and increase liveability for residents through interventions such as pedestrianisation, or where appropriate by reducing segregation between modes of travel through the creation of shared spaces.

The Council are developing major public realm improvement schemes for Tolworth District Centre, Kingston Train Station, Surbiton District Centre, and the Ancient Market Place (in KTC). The KTC Area Action Plan (K+20) also identifies a range of public realm improvement schemes to be implemented in KTC over the next 20 years. The LIP Delivery Plan (Section 3) provides further details of RBK's major schemes, and Appendix 20 contains a summary of improvements identified in K+20.

Policy (W5) – The Council is supportive of public realm improvements (including pedestrianisation, area based schemes, and shared space schemes), will pursue such projects where appropriate (particularly in shopping centres), will implement the principles of public realm improvements into all projects, and where possible will protect and enhance the historic character of the public realm.

Way Finding

One aspect of walking that has been overlooked in many parts of the borough is way finding systems (maps and signs) to assist walkers to navigate the urban environment. Way finding systems can also illustrate walking times between key destinations, which often results in a journey being taken on foot as opposed to other less sustainable modes.

Legible London is the exemplar way finding system in London. It focuses on providing way finding maps/stands at key locations, such as train stations. As Legible London focuses on maps/stands, it enables the removal of directional finger signs which often clutter the urban environment.

Policy (W6) – The Council will improve way finding for pedestrians throughout the borough, and will implement the Legible London way finding system within KTC and the District Centres.

Access to parks/open spaces/greenspaces

RBK is a green leafy borough containing many parks, open land, and green spaces; South of the Borough in particular contains large areas of green spaces and open land. Access to these areas is often provided by Public Rights of Way.

The portions of the Thames Path and London Loop within the borough are generally in good condition, and the Council and Walk London are on target to ensure that all significant issues along these paths are resolved by 2012.

Policy (W7) – To maintain and enhance access to parks, open spaces, and green spaces the Council will:

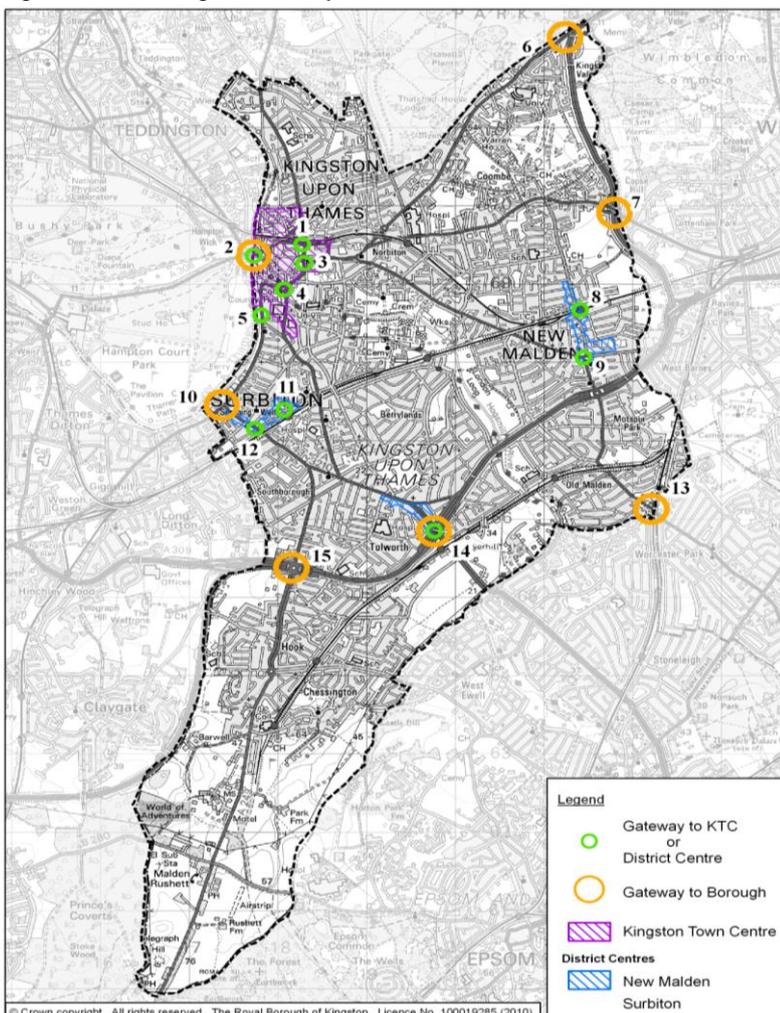
- a) Improve walking and cycling access to/through/within these areas.
- b) Strive to implement the recommendations of the Rights of Way Improvement Plan and where appropriate secure access routes as Public Rights of Way.
- c) Work with Walk London to promote and improve the Thames Path and London Loop, and ensure all significant issues along these routes are resolved by 2012.

Gateways

Gateways are key entrance points to the borough, KTC, and the District Centres. RBK's key gateways are illustrated in Figure 29 below:

Policy (W8) – The Council will improve the borough's key gateways, with priority given to schemes that promote sustainable transport modes.

Figure 29: Borough Gateways



(2.2.7) RIVER TRANSPORT

Two river buses operate between Richmond, RBK, and Hampton Court Palace from Easter to October, with daily services operating July-September. These river buses are utilised as a tourist attraction and journey times are unlikely to compete with other modes of transport.

Westminster Passenger Services operates a service from Westminster to Hampton Court Palace, but this service does not stop within RBK. Even so the long distance to Central London prohibits the use of the river bus as a reliable commuter service. Factors such as tidal flows and navigating the locks further exasperate journey times with a typical journey from RBK to Central London likely to take 2-4hours. Such long unpredictable journey times are not suitable for commuter transport.

Please note: RBK's Core Strategy and Kingston Town Centre Area Action Plan outline support for the use of the River Thames for passenger services, and identify existing and potential wharf and pier locations along the River Thames. There is spare capacity at these locations to support increased use by river based passenger or tourist services.

Use of the River Thames for freight is likely to encounter similar problems (to commuter transport) due to journey time variability; however, options for river based freight should be investigated in the future. For further information on the use of the River Thames for freight please refer to the 'Freight' heading in Section 2.2.10.

(2.2.8) SMARTER TRAVEL INFORMATION AND AWARENESS

One of the Council's key ambitions is to support a switch to more sustainable modes of travel. The approach promoted by the Mayor is to achieve modal shift through "persuasion not persecution" which focuses on supporting and encouraging sustainable modes of travel, rather than just punishing car use.

A key element of this approach is the implementation of smarter travel initiatives which focus on raising awareness of travel options and providing information and measures to support sustainable travel choices. Smarter travel initiatives have been shown to be a cost effective way of achieving modal shift, particularly when used in conjunction with 'physical measures' such as cycle lanes and improved public transport services. In recognition of this the Council has implemented a successful programme of smarter travel initiatives, including school and workplace travel plans.

School Travel Plans address transport issues of particular concern for schools including: parking problems and congestion caused by the "school run", road safety concerns for pupils travelling to school, and the need to promote student health by increasing "active travel" modes. Travel plans have now been developed for all schools in the borough. However, it is important that schools receive continued support and assistance to implement their travel plans on an ongoing basis. Schools will be prioritised for support depending on the existing transport problems they face and the potential to achieve modal shift.

To reduce the impact of work related trips it is important that workplaces are actively engaged in managing employee, freight, and visitor travel through workplace travel planning and delivery servicing plans. The Council has worked with many large employers to develop travel plans and will continue to develop area based travel plan networks in

areas of concentrated economic activity, including KTC and Chessington Industrial Estate. The Council will focus limited staff resources on providing ongoing support to implement and improve existing school, workplace, and area travel plans to ensure they are effective in reducing vehicle use.

It is important to engage with residents and the wider public to raise awareness of sustainable travel options and particularly to provide accurate accessible local travel information (e.g. cycle route maps, bus information). There are also opportunities to work with housing and residents associations (primarily high density housing developments) to develop and implement residential travel plans.

Policy (ST1) – To encourage more efficient and sustainable transport choices the Council will:

- a) Implement a range of initiatives and campaigns to promote sustainable travel and provide accurate and easily accessible transport information**
- b) Support schools to better implement their travel plans to promote road safety and sustainable travel, prioritising schools for support that have the most significant transport problems and the greatest potential for modal shift**
- c) Work with large workplaces and other organisations to manage travel to their sites through the development and implementation of travel plans**
- d) Develop travel plan networks in areas that generate significant amounts of trips and experience transport problems including town centres and industrial estates.**
- e) Work with housing estates and residents associations to develop residential travel plans and implement measures to encourage sustainable travel such as communal cycle parking and local travel information**

(2.2.9) SMARTER VEHICLE USE

Alternatively Fuelled Vehicles

There are numerous alternative fuels and vehicle technologies that have the potential to reduce the environmental impact of vehicle use including biofuels, hydrogen, electric vehicles (EVs) and hybrid versions of these. Whilst some of these have not found market success, electric and hybrid electric vehicles are now being developed by almost every major car manufacturer and supported by Government subsidies. The ownership of EVs and plug-in hybrid vehicles is anticipated to grow over the coming years, once mass market vehicles are available and when national government incentives come into effect.

The current ownership of EVs in RBK, like the rest of the country, is low. However recent research by TfL has identified some areas of the borough (generally north Kingston, KTC, and Surbiton) as areas for potential high uptake of EVs (Draft London's Electric Vehicle Infrastructure Strategy- December 2009).

The requirement for charging EVs would be expected to be met mainly in the home or workplace. However, the provision of publicly available EV Charging Points (EVCP's) is important to encourage the uptake of EVs because it helps to overcome concerns about running out of power mid journey, which can act as a key barrier to EV purchase. There are currently 13 publicly available EVCPs in RBK; mainly located in Council operated car parks in KTC (Rose, Bittoms, and Cattle Market car parks) and New Malden (Blagdon Road car park). Figure 30 illustrates EVCP locations in the borough.

The Council would like to increase the amount of publicly available EVCPs to increase EV uptake. However due to the high cost of EVCP infrastructure it is not considered cost effective for the Council to fund significant numbers of public EVCP's. Instead the Council will focus on working with organisations such as supermarkets, leisure facilities, and train stations to provide publicly available facilities within their car parks. It is hoped and expected that TfL will provide direct incentives to support and encourage businesses to install EVCPs. The Council will also work with workplaces to provide EVCPs in private car parks for employees as part of their travel plans and will secure EVCP provision as part of new commercial and residential developments through the planning process. Sourcing electricity from renewable sources to supply EVCP's will also be a consideration for the Council and partners.

An additional incentive to encourage the take up of EVs and low emission vehicles is to introduce emissions based parking charges in Council operated car parks and CPZs (this will be considered as part of the proposed parking charges review), and encourage fuel efficient vehicles through the travel planning process.

Policy (SV1) – To support and encourage the uptake of low emissions vehicles the Council will work with partners to:

- a) Provide appropriate infrastructure including electric vehicle charging points on street and in public car parks**
- b) Secure appropriate low emission vehicle infrastructure for new developments in accordance with minimum standards using planning obligations and contributions**
- c) Support organisations to provide low emission vehicle infrastructure in publicly accessible car parks including supermarkets, train stations, and leisure centres, as well as private car parks**
- d) Encourage businesses and other organisations to adopt low emissions vehicles for freight and fleet use through the travel planning process**
- e) Consider introducing a system of emissions based parking charges**
- f) Promote the benefits of low emission vehicles to residents and businesses and increase awareness of the availability of infrastructure including through the provision of signage**

Car Clubs

Focus on Car Clubs

A car club is a service that allows its members to hire a car for short-term use enabling members to have the option of using a car from time to time without having to own one. It is primarily aimed at residents who can use an alternative travel mode for most of their regular journeys (e.g. commuting, school run) but want the use of a car for occasional trips (such as to the supermarket).

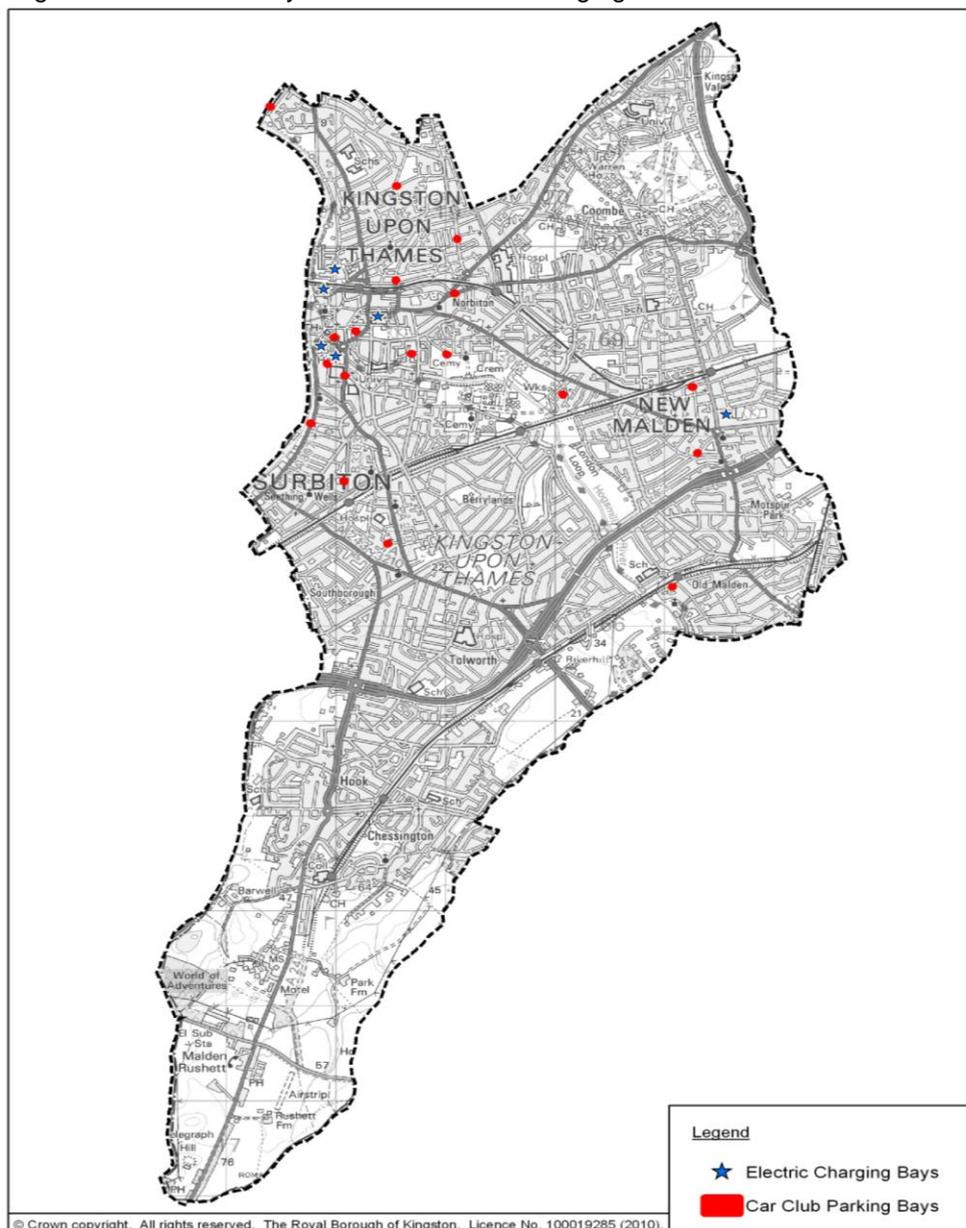
Research among car club members has shown that people who give up owning a car and join a car club will on average reduce their annual car mileage by over 3000 miles. In addition around a third of members had sold or scrapped a vehicle upon joining the car club and a further third had deferred purchase of a car; in RBK this amounts to over 500 vehicles taken off the road. Therefore, car clubs can help achieve the Borough's transport objectives of reducing overall levels of car use and addressing on street parking problems.

Car clubs were first introduced into RBK in 2007 and are rapidly increasing in popularity. There are now approximately over 1000 members and cars in 20 locations across the borough, concentrated in KTC, the north of the Borough, Surbiton, and New Malden (*please refer to Figure 30 below for car club bay locations*). However, it is considered that there is sufficient demand to significantly increase the number of car club cars in coming years; this is supported by experience in the neighbouring Borough of Richmond who has recently introduced close to 100 on-street club cars throughout the borough. Car clubs are run by private operators with no financial support from the Council (except for the provision of the car club bay) so car clubs provide a popular service for residents at minimal cost to the Council.

Policy (SV2) – To promote and support the use of car clubs the Council will work with partners to:

- a) Retain existing and provide additional on-street car club bays to provide a borough wide car club network
- b) Promote car club services to residents and to businesses through travel planning
- c) Secure car club provision for new developments through planning obligations and contributions

Figure 30: Car Club Bays/ Electric Vehicle Charging Points



(2.2.10) ROADS AND MANAGING VEHICLE USE

Road Hierarchy

RBK's current road hierarchy is outlined in Figure 10. However there are concerns that the road hierarchy does not accurately reflect the role of all roads in the borough.

Policy (MV1) – The Council will review RBK's road hierarchy. If the review recommends changes that will be beneficial from a network management or maintenance perspective, then the Council will work with DfT and TfL reclassify the road hierarchy.

Smoothing Traffic Flow

General:

Traffic congestion is a concern in RBK, particularly on the TLRN, 'A' Roads, 'B' Roads, and around schools, Kingston Town Centre, and the District Centres. Malden Road (south of the A3) suffers from high levels of congestion and has been identified in the South London Sub-regional Transport Plan as a sub-regional priority for congestion relief. *Appendix 8 contains visual illustrations of traffic delays in the borough during AM and PM peak traffic hours.*

Due to limited road space options to relieve congestion are often limited. Methods being considered to smooth traffic flow include: improved road/junction layout, converting in-lane bus bays to recessed bus bays, improvements to private vehicle entrances, and improved traffic signal performance (TfL). TfL have a programme to improve the operation of traffic signals throughout London by installing SCOOT technology; signals proposed to be upgraded to SCOOT within RBK are outlined in Appendix 11.

Policy (MV2) – To reduce congestion and smooth traffic flow throughout the borough, the Council will:

- a) Review the borough's strategic highway network for opportunities to reduce traffic congestion. The priority corridor for improvement is Malden Road (south of the A3), and the Council will work with TfL and the London Borough of Sutton to improve journey times along this route; particularly bus journey times. The results of the review so far are outlined in Appendix 21.
- b) Where it does not adversely affect sustainable modes of transport; support TfL to upgrade traffic signals to SCOOT technology.
- c) Ensure that, where practical, transport initiatives avoid adverse effects on traffic flow and assist the smooth flow of traffic.
- d) Convert in-lane bus bays to recessed bus bays; where evidence shows this will significantly smooth traffic flow and will have a negligible effect on the efficiency and reliability of bus services.
- e) Work with stakeholders to upgrade private vehicle entrances with direct access to congested road corridors; where there is deemed to be a significant benefit to traffic flow and it does not adversely affect the safety of other users; particularly pedestrians and cyclists.

Maintenance and Traffic Flow:

The coordination, duration, and management of maintenance/road works can have a significant effect on the smooth flow of traffic. The Council undergo many activities to ensure the impact of road works on congestion are minimised, including: utilisation of the

“Londonworks” system to identify and publish forthcoming works across borough boundaries, works bulletins that are emailed to stakeholders (such as radio stations and TfL), and approval processes to ensure works by third parties are planned and managed efficiently.

Policy (MV3) – The Council will implement a range of measures to plan, coordinate, and raise awareness of road works; including utilisation of the Londonworks system, email bulletins, working with neighbouring boroughs, and working with third parties who are carrying out works.

Policy (MV4) – The Council will investigate the following options to further reduce the impact of road works on traffic flow:

- a) More variable message signs - to advise users of scheduled road works, road works further up the road, and large events that may disrupt traffic flow.
- b) Purchase/hire mobile CCTV to set up at road works – to monitor the layout of works, traffic queues, signal timings etc from the office.
- c) Upgrade Street Works Register IT package – to improve information for the coordination of works.
- d) Provide RBK highway contractors with IT facility to submit works notices directly to the Street Works register.

Policy (MV5) – The Council will work with partners to ensure that during road works, where possible, safe convenient access routes are also provided for pedestrians, cyclists, and public transport users; particularly on strategic routes.

Focus on RBK’s Network Management Duty

The Traffic Management Act 2004 places a statutory duty (Network Management Duty) on RBK as the highway authority to ‘secure the expeditious movement of traffic’ on the borough’s road network and the road network of neighbouring authorities; it also requires traffic flow information to be recorded across the main traffic network. The Act defines the term traffic to include pedestrians and cyclists, as well as motorised modes of transport. Section 18(2) of the Act requires the highway authority to indicate in their LIP the arrangements they have established to ensure compliance with the Network Management Duty and to demonstrate how they have taken it into account when preparing their Delivery Plans.

The Council is fulfilling the requirements of the Traffic Management Act 2004 as follows:

- a) The Council has appointed a Traffic Manager who co-ordinates the Council’s efforts to minimise congestion and improve the Kingston Town Traffic Response Plan. The Council also plans to extend its contingency planning to ensure that accidents or other incidents that have a severe impact on traffic flows are managed to minimise disruption.
- b) LIP Objectives 3, 4, 10, 16, and 17 focus on ensuring the swift movement of traffic (including pedestrians and cyclists). These and other LIP Objectives set the context for identifying policies, Delivery Plan Actions, and transport initiatives included the Programme of Investment and Annual Spending Submission (part of the Delivery Plan).
- c) Policies throughout LIP2 seek to ensure the swift movement of traffic; policies of particular relevance are: GP5, RT1, PT5, C1, W1-W4, MV1-MV6, M1-M3, P1, and P2. These policies form the basis of Delivery Plan Actions and transport initiatives included the Programme of Investment and Annual Spending Submission.

- d) The Council is updating its camera network to enable camera sharing and continued access to TfL cameras; the updated cameras will allow the Council to better fulfil its Network Management Duties.
- e) The Council is progressively installing solar ATC recording devices (permanent traffic counters) across RBK's highway network. A prioritised list of locations for the installation of permanent traffic counters is provided in Appendix 22. Increased traffic count data will also have many other benefits; such as improved modelling and analysis capabilities, factual data to combat arguments of relying on perceptions, support scheme bids, and a robust defence against the TMA Intervention Criteria published by DfT.

Freight

The main freight generators in RBK are KTC, the District Centres, industrial sites, and Athelstan Road Waste Site. Freight generated from these areas can create adverse effects on the surrounding environment, including: congestion, utilisation of unsuitable roads and junctions, loading/servicing arrangements, safety concerns, residential intrusion and other amenity issues.

Unfortunately due to limitations in rail line capacity and unfavourable locations of key freight generators, there are limited opportunities to increase rail bound freight to/from the borough. However, there are two locations in the borough where rail bound freight is a possible option: Tolworth Freight Railhead and Chessington South. Tolworth already accommodates freight and is operating near capacity, as such it is not viable to increase rail bound freight from this location. Chessington South presents some opportunities for rail bound freight; however there are significant issues for lorry access to the site, such as residential amenity and the suitability of the roads for lorry use.

The use of the River Thames for freight to/from the borough is not seen as a practical option due to variable journey times (refer to section 2.2.7), and a lack of suitable wharf locations. Changes in land use along the river have eliminated potential wharf sites that have suitable access to supporting transport links. However, the Council would be willing to work with organisations that come forward with an innovative means of utilising the River Thames for waterborne freight to/from the borough.

Other options to reduce the impact of freight on the transport network range from site specific physical measures (e.g. improve loading arrangements), to more strategic measures (e.g. Delivery Servicing Plans). The following highlights the Council's main initiatives to improve freight access within the borough:

- The Council is a member of the South London Freight Quality Partnership.
- The Council (with help from the South London Freight Quality Partnership) has been carrying out ongoing investigations to improve freight access and servicing at Chessington Industrial Estate.
- Freight loading and access is being improved as part of the Tolworth Broadway Public Realm Improvement Scheme.
- The construction of an alternative access road to service Athelstan Road Waste site is being considered as part of the proposed redevelopment of the Hogsmill River area (as outlined in the LDF).

Policy (MV6) – To improve freight access, and reduce the impact of freight on the transport network and sensitive activities the Council will:

- a) Improve freight access, loading, and servicing arrangements at key locations in the borough; including the development of freight management plans and delivery servicing plans.
- b) Investigate measures such as freight restriction areas, increased night time deliveries, increased rail bound freight, and consolidation servicing centres.
- c) Continue to be an active member of the South London Freight Quality Partnership; or any other successor organisation.
- d) Work with organisations that wish to use the River Thames for freight transport.
- e) Safeguard Strategic Freight Sites and ensure that any development on these sites makes effective use of sustainable freight opportunities.

(2.2.11) MAINTENANCE

Performance

The borough's maintenance performance is outlined in Figures 24 & 25. Generally the percentage of transport routes in need of repair has decreased since 2004/05; in particular the percentage of principal road network in need of repair has consistently improved and now stands at 2.4% (according to DVI Surveys), which is the equal lowest in London.

Funding and Maintenance

Principal Road Network ('A' Roads) – Annual funding for works on Council operated 'A' roads is limited. Measures to reduce the percentage of roads in need of repair are therefore restricted by available funding. As such the Council needs to ensure funding is fully allocated each year and is allocated to the roads in most need of repair.

All Other Roads, Footways, and Cycle Tracks – Annual funding for works on Council operated 'other routes' is limited. As such the Council needs to ensure available funding is fully allocated each year and is allocated to the routes in most need of repair.

Highways Asset Management Plan – The Council are in the advanced stages of developing the tools and gathering the information necessary to populate a Highway Asset Management Plan for the borough. The content and purpose of a Highway Asset Management Plan can be summarised as follows:

- Identifies those highway infrastructure assets the Council has responsibility for managing/maintaining
- Identifies the existing condition of these assets
- Estimates when each asset will need maintaining/replacing
- Identifies the works that will be required when the assets are maintained/replaced
- Estimates the cost of maintaining/replacing the asset
- Identifies funding sources for the works

A Highway Asset Management Plan also considers the 'whole life costs' of various highway assets to determine the best materials/units to be used during maintenance activities; for example, is it better value for money to replace the streetlight column with a stainless steel column (costs more but has a longer useful life) or a normal steel column (cheaper but has a reduced useful life).

Additionally:

- The Council has several maintenance programmes including roads, footways, road marking, and vehicle crossing maintenance.
- RBK's extensive bus network extends beyond the principal/'A' road network, creating issues of excessive wear and tear on non-principal roads. Maintenance of bus routes on non-principal roads are not funded by TfL (although they are included in the Mayor's own performance target), creating increased maintenance requirements/costs for the Council. Due to this situation the Council is facing ongoing budget pressure for maintenance of non-principal roads.
- The London Technical Advisory Group (LoTAG) and the South Sector Consortium is developing an Asset Management Plan to be used by the eight South London Borough's.

Policy (M1) – The Council will carry out the following with regards to the maintenance of the borough's transport network:

- a) Maintain transport assets at an appropriate level of repair.**
- b) Continue to allocate annual maintenance funding to those parts of the transport network highway in greatest need of repair, and will utilise the Asset Management Plan being developed by LoTAG.**
- c) Develop and utilise a Highway Asset Management Plan for the borough**
- d) Lobby TfL to extend maintenance funding to non-principal roads which form part of the TfL bus network.**

Other Maintenance Initiatives

DfT have recently authorised a 'common' London Permits Scheme for all road and street works. The benefits of such a scheme are currently unproven and have yet to be quantified; also there are considerable costs associated with operating a permit scheme. Lane rental charges for the occupation of the highway are another initiative that, if enacted, offers a different solution to minimise the quantity and duration of road and street works.

Policy (M2) – The Council will not join the London Permit Scheme unless conclusive evidence as to its impact on traffic congestion and value for money is produced.

Policy (M3) – If the lane rental charges scheme is enacted, the Council will await conclusive evidence as to its impact on traffic congestion and its value for money before a decision is made whether to adopt the scheme.

Please note: current and proposed measures to reduce the impact of maintenance works on traffic congestion are discussed in Section 2.2.10 (Smoothing Traffic Flow).

Street Nameplates

Street nameplates are an important "way finding" tool for all modes of transport. If provided in a consistent manner (e.g. style and location) they can also improve road safety and, with the addition of integrated traffic signage (e.g. no through road), can reduce street clutter. Consistency also improves the street scene and contributes to a 'sense of place'. Although RBK's streets are generally well signed, street name plates are of various specifications and lack consistency, to address this the Council introduced a 'Street

Nameplate Specification' (style guideline) in 2002 which must be followed for new and replacement street nameplates.

Policy (M4) – The Council will continue to replace street nameplates where missing or damaged, will take opportunities to replace dated street nameplates (i.e. nameplates that do not conform to the Council's 'Street Nameplate Specification'), and where appropriate will rationalise existing street signage through the integration of traffic signage.

(2.2.12) PARKING

The provision of adequate parking is important to residents and businesses and can support the economic vitality of shopping areas. However, in some areas of the borough the high demand for parking causes inconvenience for residents, congestion, and road safety problems. Generous provision of parking can also encourage car use over more sustainable modes of transport. Therefore, parking has to be managed to balance the needs of all road users and meet the Council's other transport objectives.

In areas where there is high demand for on-street parking it may be necessary to introduce controlled parking zones which allocate parking permits to residents and businesses but prevent unauthorised parking through enforcement. Existing controlled parking zones in KTC, Surbiton District Centre, and around Kingston Hospital have been successful in reducing unnecessary car trips by workers, students, and commuters using the train stations.

The public parking supply (off-street) in KTC and the District Centres generally consists of Council controlled car parks, privately operated car parks (e.g. NCP), train station parking, and retail/ leisure parking. A study was recently conducted to assess parking supply in the District Centres and concluded that parking levels in the District Centres are broadly adequate and should be retained to support economic vitality. The K+20 Area Action Plan states that public off-street car parking supply in KTC will be retained at current levels of 7000 spaces.

The Council currently controls the pricing of all on-street parking as well as Council controlled off-street car parks. Parking pricing policies can influence transport choice by affecting the attractiveness of car use. For example, an annual season ticket priced at a significant discount compared to a daily fee could encourage regular car use over more sustainable modes of transport; which is contrary to LIP Objectives to reduce vehicle trips. Similarly the Council could encourage the uptake of low emission vehicles by offering discounted parking permits, as has been trialled in Richmond. It is therefore important that pricing policies balance the need to support the economic vitality of shopping areas while still encouraging sustainable modes of transport. Of note is that in many areas Council operated parking must compete with private parking supply; the Council's pricing structure must reflect this competition.

Policy (P1) – The Council will manage car parking in the borough, including controlling the supply and pricing of parking, in a manner that will contribute to and balance the following objectives:

- **Ensure road safety particularly for cyclists, pedestrians, and children.**
- **Achieve modal shift and reducing the attractiveness of car travel.**
- **Reduce traffic congestion, with a priority to reduce delays to buses.**

- Improve safety and amenity of residential and shopping streets.
- Ensure access at all times for emergency vehicles.
- Provide suitable and adequate parking facilities for residents, most importantly for disabled people (blue badge holders).
- Retain the economic vitality of the town centres and shopping parades and making adequate provision for the servicing and delivery needs of business.

Policy (P2) – The Council will manage the provision of parking in accordance with the following hierarchy of needs:

- 1 Road space allocated for schemes that enhance access for pedestrians, cyclists and buses, and reduce congestion.
- 2= Business delivery and servicing parking (within Kingston Town Centre and the District Centres).
- 2= Disabled (blue badge) parking.
- 4 Cycle and Motorcycle parking.
- 5 Car club and Electric Vehicle Parking.
- 6 Short stay “shoppers” parking.
- 7 Taxi Ranks.
- 8 Residents Parking.
- 9 Business delivery and servicing parking (not located within Kingston Town Centre and the District Centres; however special consideration will be given to parking at local shopping parades).
- 10 Commuter, employee and all other parking.

Policy (P3) – To manage the supply of on and off-street parking in the Borough in accordance with the objectives in Policy P1 the Council will:

- a) Control on-street parking where it compromises the safety and amenity of residents and other road users
- b) Continue to use enforcement measures to discourage unauthorised parking
- c) Regularly review parking charges and implement changes where necessary
- d) Consider the feasibility of introducing emissions based parking charges as a way to support the take up of low emissions vehicles
- e) Manage the existing provision of town centre and shoppers parking more efficiently in order to support economic vitality; including better provision/management of time limited short-stay parking bays.
- f) Encourage workplaces and organisations to better manage their private car parking provision including through parking charges
- g) Require businesses that are allocated parking permits to also develop travel plans to encourage employees to use sustainable travel modes
- h) Consider the introduction of parking levies in line with national and regional guidance
- i) Support the Local Development Framework’s position on car-free developments and the issuing of parking permits to new developments in Controlled Parking Zones.

(2.2.13) ROAD SAFETY AND SAFETY FROM CRIME

Road Safety

RBK has performed well in terms of road safety in recent years, with one of the lowest levels of road accidents casualties in London. Analysis of accidents over the past 5 years has revealed that there are no major accident 'hotspots' in the borough on Council operated roads, but a vast majority of accidents occur on the main highway corridors.

Whilst the borough is performing well, the Council will continue to take a proactive approach to road safety to ensure that RBK remains one of the safest boroughs in London. The strategic road network is currently being reviewed and will consider potential safety improvements. In addition a schedule of recommended safety improvements has been developed for the strategic cycling network, and the ongoing walking audit program will assess the safety of the pedestrian environment.

The Council recognises the importance of speed restrictions (appropriate to the road conditions) in ensuring road safety; traffic speeds can be reduced through speed restrictions or through design interventions. The use of 20mph restrictions in residential roads and around schools and shopping areas can be one of the most effective ways to reduce frequency and severity of road collision as well as making road conditions more attractive for cycling and walking. Therefore the Council, in general, supports the use of 20mph restrictions borough wide (with the exception of some strategic traffic routes) and will develop a 20mph implementation plan to set out immediate priorities. However, it is important to note that options to expand the coverage of existing 20mph zones and limits is restricted due to current national legislation and requirements for physical traffic calming. The borough's current coverage of 20mph zones is shown in Figure 31.

Perceptions of road safety also have an impact on travel and social behaviour in public spaces, particularly for more vulnerable users. Design interventions (i.e. traffic calming, shared spaces) can make streets and roads feel safer for all users, increasing mobility and independence.

Road safety education involves campaigns and initiatives to raise awareness of road safety issues and change road user behaviour. A key focus in RBK is addressing safety concerns created by car drivers, such as speeding, drunk driving, mobile phone use, and lack of awareness of vulnerable road users. Other campaigns predominately focus on road safety education for vulnerable road users e.g. Green Cross Code training and promotion of safety equipment/ high visibility clothing.

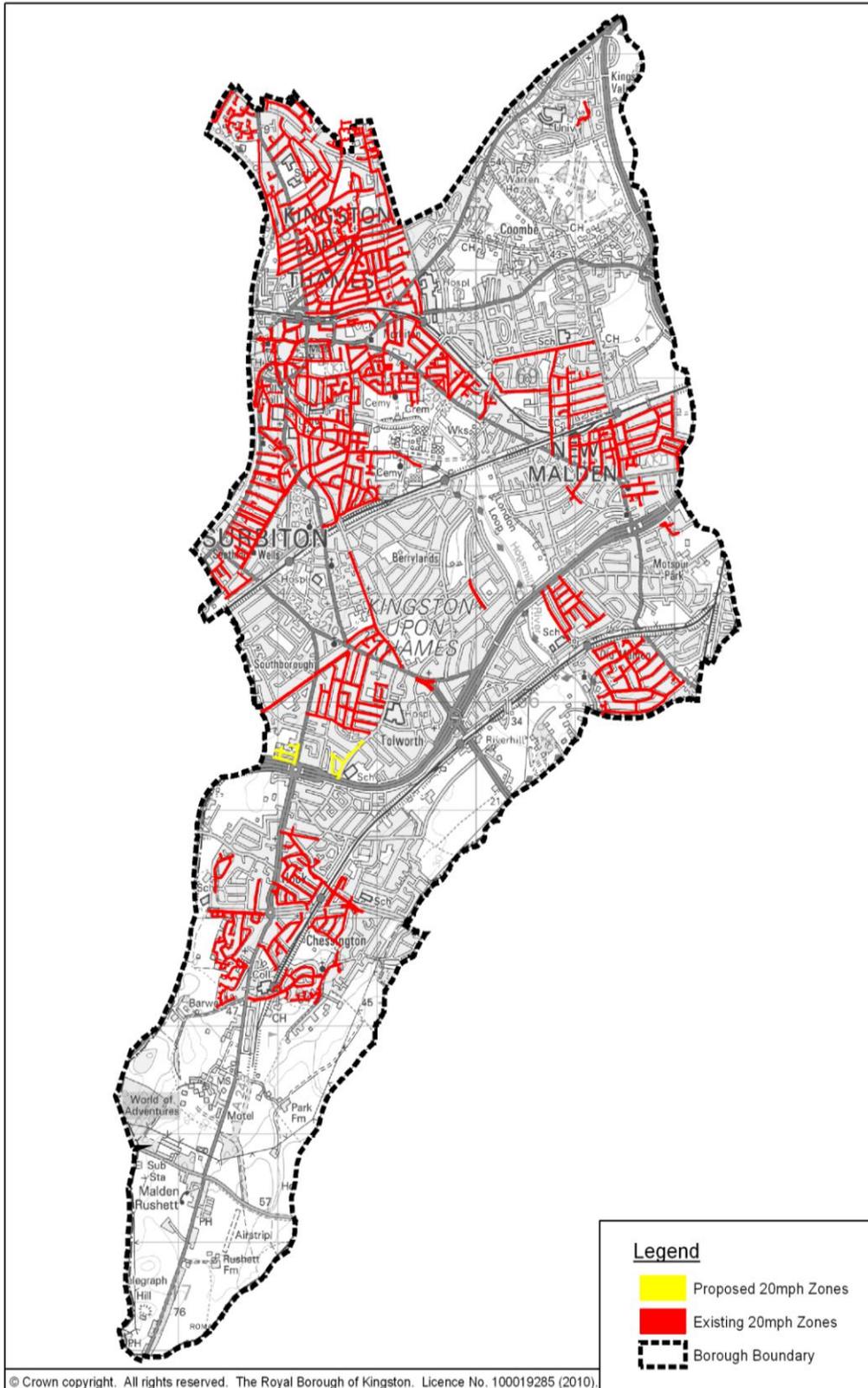
Policy (S1) – The Council will strive to reduce the number of road accident casualties in the Borough and achieve any new national or mayoral road safety targets that are set.

Policy (S2) – To improve road safety and reduce road casualties the Council will:

- a) Implement engineering and design measures including junction realignments, crossing facilities, traffic calming, and public realm improvements.**
- b) Prioritise schemes aimed at improving safety for vulnerable road users including school children, pedestrians, cyclists, and power 2 wheeler users**
- c) Implement speed restrictions appropriate to the road environment and develop a Borough wide 20mph implementation plan**

- d) Conduct campaigns to raise awareness of road safety issues and improve road user behaviour
- e) Work with the Metropolitan Police, emergency services, and residents to address localised safety issues, traffic offences and poor road user behaviour including speeding, drink/drug driving and dangerous parking
- f) Work with employers (including through travel plans) to improve work related road safety and to reduce casualties involving work related vehicles and activities

Figure 31: RBK 20mph Zones



Safety from Crime

Focus on Safety From Crime

Existing Crime

RBK is consistently one of the safest boroughs in London, and recorded the lowest number of offences in London for the 2008/2009 calendar year. Grove Ward, which includes KTC in its entirety, has the highest crime levels in RBK, outside of Grove Ward the number of offences reduces substantially²¹.

Perceptions of safety

The public's perception/fear of crime is particularly important especially around shopping centres and on public transport. Even if occurrences of crime are low, perceptions of crime can still be a major barrier to walking, cycling, and public transport use.

The 2009 Fear of Crime Survey conducted by Kingston University and the TfL Community Safety Plan 2008/09 showed that perceptions of safety while using public transport could be improved in some parts of the borough; this may highlight the need for increased surveillance on public transport services and at bus/train stations, as well as the need for public realm improvements to improve perceptions of safety at bus stops.

The Reducing Crime Together Questionnaires in 2008 and 2009 identified KTC as the area where perceptions of safety are of greatest concern. Although crime and perceptions of safety are of some concern in KTC, levels of crime have been steadily decreasing with a 12% reduction in offences between 2007/08 and 2009/10²². These reductions are likely to be the result of crime prevention initiatives being carried out in the area by the Council and key partners (including the After Dark Strategy Implementation Plan). Efforts to improve safety have paid off and were formally recognised in January 2010 when KTC was awarded a 'purple flag' by the Association of Town Centre Management. A purple flag is only awarded to town centres that are seen as an example of national best practice; KTC was 1 of only 6 town centres in the UK to earn a purple flag. For more information please refer to RBK's website (http://www.kingston.gov.uk/information/news_and_events/news.htm?id=95474).

Partnership working is essential in tackling crime and there are several initiatives throughout the borough which aim to reduce crime and improve perceptions of safety through partnership working; such as:

- *Safer Neighbourhood Wards* – regular ward panel meetings attended by residents association representatives, local residents, and other partners.
- *Safer Kingston Partnership* – involves key organisations (including: Police, the Council, Fire Brigade, NHS Kingston, residential associations, ward councillors) working together at strategy and operation level to improve safety in the borough.
- *Kingston Town Centre Safer Transport Scheme* – focuses on getting people in/out of KTC safely (particularly after dark).
- *Kingston Police 24/7 Strategy for Kingston Town Centre*
- *Kingston Town Centre Night Time Initiatives* – involves initiatives such as Street Pastors, door supervisors, CCTV, Town Centre Radio, Town Centre Manager, marshalled black cab

²¹ Source: Royal Borough of Kingston Borough Profile 2009 & Metropolitan Police

²² Source: Metropolitan Police

ranks and booking kiosk.

Improving the public realm/designing out crime (e.g. improved lighting, open visible spaces, CCTV) is another important method of reducing crime and improving perceptions of safety in the public realm.

Policy (S3) – To reduce crime and improve perceptions of safety in the borough the Council will:

- a) Support the Safer Kingston Partnership and Safer Neighbourhood Wards as well as working with partners, including the Police, Pub Watch, Kingston First, Street Pastors, and Public Carriage Office to support 'night time initiatives' and tackle areas of the borough where crime or perceptions of safety is a concern.
- b) Support and implement measures identified in the 'After Dark Strategy Implementation Plan – Update 2008' and the 'Kingston Police 24/7 Strategy for Kingston Town Centre'.
- c) Work with public transport operators to reduce crime and the fear of crime at stations, stops, and on vehicles.
- d) Implement public realm ('design out crime') and other safety improvements in areas where crime or perceptions of safety is a concern; particular focus will be given to Grove Ward.

Policy (S4) – The Council will continue to support the 'Safer Transport Scheme' for Kingston Town Centre and will lobby public transport providers for the following:

- a) Ensure that night bus services are maintained at current levels, and where appropriate provide new/increased services to accommodate increasing demand.
- b) Improved late night train services from Kingston Train Station.
- c) Provide adequate provision for night time taxi services including supporting the marshalled taxi ranks.

(2.2.14) CLIMATE CHANGE/AIR QUALITY

Air quality

Air quality is critical for health and wellbeing. Regular exposure to poor air quality can reduce life expectancy and exacerbate heart and lung conditions such as asthma, particularly in children, older people, and those with poor health. National Air Quality Standards for Nitrogen Dioxide are being exceeded along parts of the Borough's major roads and transport has been identified as the borough's most significant source of nitrogen dioxide emissions.

The Council has an Air Quality Action Plan which identifies road based transport as the greatest source of PM₁₀ and NO₂ emissions in the borough. The Air Quality Action Plan is due for review, however most the actions identified are just as relevant today as they were when the plan was developed in 2005. The plan identifies 17 Actions to improve air quality in the borough, 14 of these actions are focused on reducing emissions from transport. Transport related actions in the plan focus on the following: increasing street trees (those species best suited to improving air quality), reducing congestion, improved public transport services, promotion of and improvement to walking and cycling facilities, management of car parking to reduce car use, traffic calming measures, vehicle testing, awareness campaigns, LEZ, alternatively fuelled vehicles, travel planning, partnership

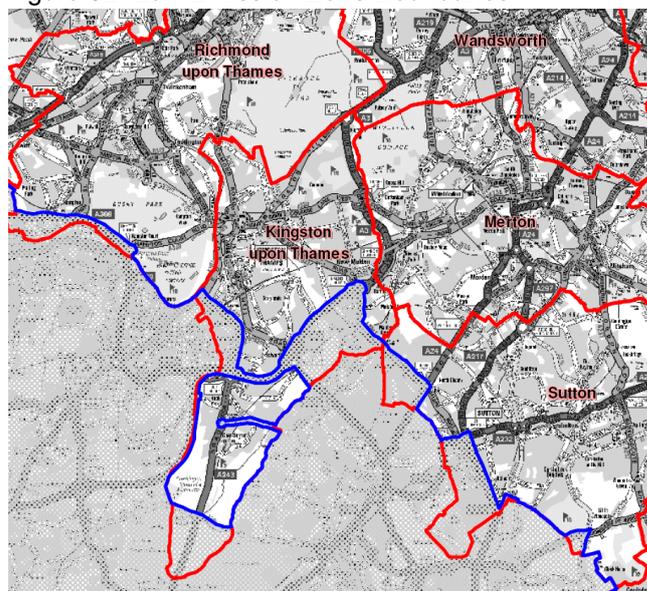
working. Most these actions are included in the LIP2 document, however it is important to ensure LIP2 provides the framework to enable the Council to implement all relevant actions in the Air Quality Action Plan, any new actions developed for the revised plan, and to ensure the revised plan is consistent with LIP2. Please refer to Appendix 2 for a compliance matrix demonstrating how the LIP2 objectives give effect to the actions outlined in the Air Quality Action Plan.

As RBK only has three air quality monitoring stations (diffusion tubes in New Malden High Street, Burlington Road, and Malden Road) air quality is monitored through a computer model. Unfortunately the accuracy of the computer model is not totally assured, in particular there are limitations to site specific information on air quality. It is an ambition of the Council to gather more comprehensive air quality monitoring data, as such it is proposed to continue the diffusion tube survey in New Malden and install diffusion tube surveys at 20 - 60 additional sites throughout the borough.

London's Low Emission Zone (LEZ) covers much of the borough, however heavily trafficked roads such as the A3, Malden Road, and Kingston Road are excluded from the LEZ (Figure 32 illustrates the LEZ boundaries). This allows high emitting vehicles to enter (or travel through) the borough along these routes and is likely to be affecting air quality.

To address this, the Council wants to extend the LEZ along these routes to the borough boundary. However there needs to be a 'safe point' at the start of the LEZ so that non-complying vehicles can turn around and escape the way they came; in the instances of the A3 and Kingston Road this would require an extension of the LEZ into Surrey. Currently the LEZ does not extend beyond London's boundaries and an extension into Surrey may present legal issues and would require support from Surrey County Council, Elmbridge Borough Council, and Epsom and Ewell Borough Council. If extending the LEZ into Surrey presents difficulties an interim solution could be to extend the LEZ along the A3 to its junction with the A240 (Tolworth Junction).

Figure 32: Low Emission Zone Boundaries



Source: www.tfl.gov.uk

Policy (CC1) – The Council will:

- a) **Revise the Air Quality Action Plan**
- b) **Implement recommendations of the current and revised Air Quality Action Plan**

Policy (CC2) – The Council will work with partners to extend the LEZ as follows:

- a) **LEZ Interim Solution: extend the LEZ along the A3 to its junction with the A240 (Tolworth Junction), as well as north and south along Malden Road.**
- b) **LEZ Preferred Solution: extend the LEZ along the A3 to its junction with the A244 (in Surrey), and along Kingston Road to its junction with Worcester Park Road (in Surrey).**

Please note: Air quality will also be improved through the implementation of policies and actions that seek to reduce CO₂ emissions, increase the uptake of sustainable modes of

transport, reduce total vehicle kilometres, reduce the need to travel, improve freight management, smooth traffic flows, and increase use of alternative vehicle technologies.

Reduction in CO₂ emissions

Many of the Council's measures to reduce CO₂ emissions are covered elsewhere in this strategy, such as policies and actions that seek to improve air quality, increase the uptake of sustainable modes of transport, reduce total vehicle kilometres, reduce the need to travel, improve freight management, smooth traffic flows, and increase use of alternative vehicle technologies.

To reduce CO₂ emissions from the borough the Council has also adopted the RBK Energy Strategy (reducing CO₂ emissions from transport is a principle objective of the strategy) and the RBK Low Carbon Management Plan (which outlines how the Council will reduce its own CO₂ emissions, including actions for transport such as management of fleet and contractor vehicles).

Policy (CC3) – To reduce the borough's CO₂ emissions the Council will:

- a) Implement LIP Policies that reduce vehicle use and CO₂ emissions from transport.**
- b) Promote and raise awareness of fuel efficient driving techniques (e.g. through workplace travel plans and general promotional activities).**
- c) Lobby TfL to ensure bus routes servicing RBK are priorities for the roll out of low emission buses (this is important given RBK's reliance on the bus network).**

Adapting to Climate Change

As directed in the Mayor's Transport Strategy, boroughs must improve the resilience of the transport network to the impacts of climate change. The most likely effects of climate change are that we will experience hotter summers, wetter winters, more extreme events of heat and cold, and increased droughts and flooding. Changes are expected to be noticeable by the next decade and therefore new transport initiatives will need to be designed to withstand the anticipated effects of climate change.

The areas of RBK's transport network which are most likely to suffer effects from climate change are:

- *Hotter drier summers causing discomfort for public transport passengers (requiring improve climate control systems) – The older bus fleet and many of the train fleet operating within the borough do not have air conditioning.*
- *Hotter summers leading to a more pronounced urban heat island effect and exacerbated air quality issues from transport emissions.*
- *Icy roads and pot holes during periods of extreme cold.*
- *Wetter winters and higher incidence and severity of flooding – flooding in RBK is prominent near rivers and streams and parts of the highway network (due to limited drainage capacity). The most effective way to reduce flooding risk is to improve the Thames Water Surface Water Sewer Network and develop more sustainable highway drainage systems when implementing improvement schemes; however this can be costly. Other options include emergency response measures such as mobile generators and water pumps.*

Increasing the number of trees and vegetation in London (urban greening) will contribute to climate change adaptation and mitigation by providing shade and absorbing rain water. Of note is that RBK's Planning Obligations Supplementary Planning Document includes requirements for developers to fund street trees.

Policy (CC4) – All transport projects will be designed with improved resilience to severe weather events expected as a result of climate change. To ensure this the Council will develop a climate change adaptation checklist to be used by all project and programme managers to assess, and build, resilience to climate change into all projects.

Policy (CC5) – The Council will conduct a comprehensive risk assessment to determine transport assets, network, and management systems that are vulnerable to the effects of climate change. The Council will use this and other information to develop a Climate Change Adaptation Strategy and a Surface Water Management Plan.

Policy (CC6) – The Council will implement the following measures to improve the resilience of the transport network to climate change:

- a) Lobby South West Trains to provide improved climate control systems in their train fleet.
- b) Maintain emergency response capacity to deal with extremes of weather e.g. grit stock piles and potholes repairs.
- c) Work with Thames Water (and where applicable TfL) to improve drainage in locations where flooding is a significant concern; this will include consideration of Sustainable Urban Drainage Systems.
- d) Ensure there is a net increase in street trees and explore opportunities for greening the streetscape in all suitable transport projects.

(2.2.15) NATURAL ENVIRONMENT AND ECOLOGY

The transport network can have a negative, neutral, or positive effect on the natural environment. Generally these effects can be divided into two categories:

1. The effect of the existing transport network on the natural environment.
2. The effect of new transport initiatives on the natural environment.

The effect of the existing transport network on the natural environment

For example, storm water runoff from the highway network can have an unacceptable effect on the biodiversity of waterways.

Policy (NE1) – Where the existing transport network (or certain aspects/locations) is having an avoidable and unacceptable adverse effect on the natural environment, the Council will investigate measures to reduce its impact.

The effect of new transport initiatives on the natural environment

Possible effects of new transport initiatives on the natural environment include, sediment run-off during construction, increased/decreased permeable surfaces, increased/decreased street trees and vegetation.

Policy (NE2) – The Council will implement the following measures to minimise the effect of new transport initiatives (including maintenance works) on the environment:

- a) Ensure that, during all types of highway works, the latest techniques are used to minimise the risk of contaminating watercourses and soil.
- b) Ensure that transport initiatives are designed to avoid adverse effects on, or to have a net positive effect on, the natural environment and natural character/landscape.
- c) Where practical, manage and maintain the network in a manner that favours fauna and flora e.g. green corridors along road verges.
- d) Where feasible the Council will use (and will actively encourage our contractors to use) sustainable and recycled materials in transport initiatives.

(2.2.16) NOISE AND VIBRATION

Noise

Perhaps the most practical option to reduce road noise is the use of Stone Mastic Asphalt (SMA); the Council has used SMA for the resurfacing of 'A' Roads since 1999/2000. SMA has two benefits over Hot Rolled Asphalt (HRA), which was previously used in RBK, namely reduced spray in wet conditions and reduced road noise. The Council also use SMA on many of our secondary traffic routes, bus routes, and roads where noise reduction will significantly benefit residents.

Policy (N1) – To reduce traffic noise, the Council will:

- a) Continue to use SMA when re-surfacing 'A' Roads, and where it will significantly benefit residents adjoining other roads.
- b) Ensure new transport projects consider noise mitigation

Vibration

The main cause of vibration on RBK's transport network is the quality of concrete slabs beneath the road surface; older slabs can be of poor quality and cause heavy vehicles to bounce which increases vibration. The most common locations of concrete slab failures are on TfL bus routes. Generally, there are limited options to address vibration and it will occur no matter what road surface material is used.

Policy (N2) – The Council will investigate the benefits of replacing concrete slabs in locations where vibration is a significant issue.

(2.2.17) ACCESS FOR DISABLED USERS AND THOSE WITH SPECIAL NEEDS

There are a number of initiatives that can improve access to the transport network, public realm, and key destinations for disabled people and people with special needs.

Accessible Streets

Ensuring access throughout the street environment is an important part of creating an accessible public realm for disabled people and those with special needs (such as the

elderly e.g. mobility scooters). Key ingredients of accessible streets are uncluttered footways, wide well surfaced footways, and DDA compliant pedestrian crossings.

There are dropped kerbs at all formal pedestrian crossings in RBK; however these are not necessarily DDA compliant. The majority of the borough's informal road crossings have dropped kerbs, but not all of these crossings have tactile paving to alert visually impaired users.

It is important for the Council to engage with disabled users and users with special needs to understand their existing concerns with the transport network and gain feedback on proposed transport initiatives likely to be of particular interest.

Policy (D1) – The Council will implement the following initiatives to improve the physical accessibility of the borough's transport network for disabled users and users with special needs:

- a) Improvements to the borough's roads and footways; particularly around key trip generators such as railway stations and town centres.**
- b) Review all formal marked pedestrian crossings (e.g. zebra, pelican etc) to assess DDA compliance, and set up an annual program to upgrade non-compliant crossings.**
- c) Provide dropped kerbs and tactile paving at all road crossings in the borough, and ensure suitable restrictions are in place to make sure these remain clear of vehicles.**
- d) Ensure that all new transport projects meet DDA requirements.**
- e) Set up a disabled user access forum to gain feedback on general transport issues and proposed transport initiatives.**

Please note:

- *RBK's proposals regarding train station accessibility are outlined in Section 2.2.2 (Train Stations).*
- *RBK's current performance and proposals regarding bus stop accessibility are outlined in Section 2.2.3 (Bus Stop Accessibility and Waiting Environment).*

Community Transport

Community transport makes a vital contribution to ensuring the transport network is socially inclusive. Both the Council and volunteers play a role in providing a range of community transport services in the borough; the following community transport services are currently available to RBK residents:

- Five publicly funded day centres for older people and adults with learning disabilities. Day centre clients are provided with free transport to and from their place of residence.
- Three independent, volunteer-led care schemes providing help and transport to elderly and disabled residents (they are located in New Malden, Surbiton, and Chessington).
- Transport provided by NHS Kingston Primary Care Trust (PCT); provides access to and from hospital appointments.
- RBK is part of the London Taxicard Scheme which permits eligible users 104 subsidised taxis trips a year.
- RBK residents have access to TfL's Dial-a-Ride service.
- The Council also provides funding support to RaKAT. RaKAT is a community transport provider serving Kingston and Richmond. They have a fleet of minibuses

(many of which are wheelchair accessible), which can be hired out by community groups or other organisations.

In 2010 the Council completed a review of accessible transport in the borough (Review of Accessible Transport for Independence and Wellbeing 2010). The study reviewed existing accessible transport services and made recommendations for improvements.

Policy (D2) – Where funding becomes available the Council will implement the recommendations from its Review of Accessible Transport for Independence and Wellbeing 2010.

Policy (D3) – The Council will continue to support (where resources are available):

- a) Transport to RBK's five day centres
- b) Independent, volunteer-led local care schemes in the Borough
- c) NHS Kingston Primary Care Trust transport
- d) The London Taxicard Scheme
- e) TfL's Dial-a-Ride service
- f) RaKAT

(2.2.18) CONTRIBUTION TO HEALTH

General

Many policies outlined in this strategy will contribute to improving the health of the borough, including:

- Measures to promote walking and cycling (e.g. infrastructure, cycle training, travel plans). These initiatives encourage physically active modes of transport.
- Measures to improve air quality.
- Measures to improve access to parks and open spaces.

Access to Healthcare

RBK has a range of healthcare facilities, but Kingston Hospital is the borough's largest hospital and provides for a residential catchment that extends beyond the borough's boundaries. RBK residents have reasonable access to the hospital via public transport with direct bus services operating from most parts of the borough. However, areas in Tolworth (east of the A3) would benefit from improved access via bus.

Policy (H1) – The Council will work with TfL to improve public transport access to healthcare facilities, in particular Kingston Hospital.



(2.3) COMPLIANCE CHECK 2 - LIP2 POLICIES AND MTS GOALS/CHALLENGES

The compatibility of the LIP2 Policies and the MTS Goals and Challenges are demonstrated in Table 9 below; however please note the following:

- Appendix 12 contains a summary of all the LIP Policies outlined above; it also shows which MTS Goals each policy is helping to deliver.
- A summary of all initiatives being promoted in LIP2 that will deliver the MTS Goals and Challenges is outlined at the end of the Section 3 - Delivery Plan.
- For tables demonstrating how the policies deliver the LIP2 Objectives please refer to Appendix 6.

Table 9: Compliance Check 2 – MTS versus LIP Policies

MTS GOAL	MTS CHALLENGE	SUPPORTING LIP POLICIES
Goal 1 – Support economic development and population growth	Supporting sustainable population and employment growth	GP1, GP4, RT1, PT1, PT4, PT5, ST1
	Improving transport connectivity	GP1, GP4, GP5, RT1-RT4, PT1, PT4, PT5, IT1, ST1, MV5, MV6, P1-P3
	Delivering an efficient and effective transport system for people and goods	GP1, GP2, GP5, RT1, RT4, PT1, PT5, IT1, C1, MV1-MV6, M1-M4, P1- P3, CC4-CC6
Goal 2 – Enhance the quality of life for all Londoners	Improve journey experience	GP1, GP2, GP5, RT1, PT1, PT3-PT6, IT1, C1, W1-W8, ST1, M1, M4, P1-P3, S3, S4, CC6, D1
	Enhance the built and natural environment	GP1, GP2, GP5, PT2, PT6, IT1, C1, W1, W5, MV6, M4, S3, NE1, NE2
	Improving air quality	GP1, GP2, GP4, GP5, RT1-RT3, PT1, PT4, PT5, C1, C3, W1, ST1, SV1, SV2, MV2-MV6, P1-P3, CC1-CC3
	Improving noise impacts	GP2, GP5, SV1, MV6, N1, N2
	Improving health impacts	GP1, GP2, GP4, GP5, PT1, PT3, IT1, C1-C4, W1-W8, ST1, P2, S2, S3, D1, H1
Goal 3 – Improve the safety and security of all Londoners	Reducing crime, fear of crime, and antisocial behaviour	GP3, GP5, PT4, PT6, IT1, C2, W1, W2, W5, S3, S4
	Improving road safety	GP2, GP3, GP5, C1, C4, W1-W3, ST1, P1, P3, S1, S2, D1
	Improving public transport safety	GP3, GP5, PT1-PT3, PT6, S3, S4
Goal 4 – Improve transport opportunities for all Londoners	Improving Accessibility	GP1-GP3, GP5, RT1-RT4, PT2, PT4-PT6, IT1, C1-C4, W1-W3, SV2, P1-P3, D1-D3, H1
	Supporting regeneration and supporting deprivation	GP3, PT1, PT4
Goal 5 – Reduce transport's contribution to climate change and improving its resilience	Reducing CO ₂ emissions	GP1, GP2, GP4, GP5, RT1-RT3, PT1, PT4, PT5, IT1, C1-C4, W1-W3, W5-W7, ST1, SV1, SV2, MV6, P1-P3, CC1-CC3
	Adapting to Climate Change	CC4- CC6

Section 3: Delivery Plan

This section sets out the Council's Delivery Plan Actions and a rolling 3-year Programme of Investment; which are the delivery mechanisms for achieving the MTS goals and LIP Objectives. It also outlines how the Annual Spending Submission is developed and discusses other factors relevant to transport investment, such as funding and risk management. This section covers the following topics:

- (3.1) *Potential funding sources* – Identifies potential funding sources for transport initiatives over the 2011/12 to 2013/14 period and beyond.
- (3.2) *Delivery Actions* – Outlines the Council's key interventions that will deliver the LIP2 Objectives; and also identifies more detailed actions and associated timeframes (out to 2031) for achieving the MTS goals and the LIP Objectives.
- (3.3) *Compliance Check 3 (LIP2 Actions and MTS Goals/Challenges)* – Demonstrates which LIP Actions are helping to deliver the MTS Goals and Challenges.
- (3.4) *Programme of Investment* – Sets out the Council's high level transport investment programme for 2011/12 to 2013/14 (and beyond for proposed Major Schemes). This section also discusses the borough's detailed annual transport investment programme called the Annual Spending Submission, and related topics such as risk management.
- (3.5) *Mayor's High Profile Outputs* – The MTS outlines six high profile outputs which LIP's should focus on delivering; this section outlines how RBK's LIP is delivering these high profile outputs.
- (3.6) *South London Sub-regional Transport Plan* – Outlines how RBK's LIP is delivering the aspirations of the SRTP.
- (3.7) *Compliance Check 4 (Overall Compliance Matrix)* – Summarises all LIP Objectives, Policies, and Actions that are helping to deliver the MTS Goals and Challenges.

(3.1) POTENTIAL FUNDING SOURCES

The following sets out potential funding sources for the implementation of RBK's Programme of Investment (POI) for the period 2011/12 to 2013/14 and beyond. Funding levels identified are estimates and may be subject to change; funding may also be transferred between years e.g. planning contributions indicated for 2011/12 may be spent in 2012/13. Table 10 clarifies whether funding sources/amounts are 'committed' (funding has been confirmed), 'indicative' (funding has been agreed in principle, or is likely to be confirmed), or 'uncommitted' (funding is aspirational and has not been committed).

The Council's key source of funding is the LIP allocation from TfL; this funding is provided in 3 categories:

- 1) *Integrated Transport (Corridors & Neighbourhoods, and Smarter Travel)*: TfL funding to support the Council to deliver transport improvement schemes in the borough. Current indications are that around £4.8 million will be available for the first three years of the Delivery Plan²³. Please note: the £100,000 'local transport funding' provided by TfL has been integrated into the overall funding provided from TfL for the POI and has been spread across all projects in the strategic transport, neighbourhoods, and smarter travel programmes.
- 2) *Maintenance*: TfL funding to support the Council's maintenance programme for the borough's principal road network and bridges. Current estimates are that about £1.1million will be available for principal roads and £3.7 million for bridges over the first three years of the Delivery Plan²⁴. However, TfL only release maintenance budgets annually so it is difficult to predict actual allocations for 2012/13 and 2013/14. It is also important to note that the Council does not get £3.7 million for maintenance of the borough's bridges; the funding for bridges assumes that the Council will continue to be the London Bridges Engineering Group (LoBEG) package leader for London, and as such we are responsible for allocating this funding amongst all London boroughs.

The borough will also contribute funding towards the maintenance of the borough's principal and non-principal roads.
- 3) *Major Schemes*: The main funding sources for Major Schemes are TfL Major Scheme funding, Council Capital, and Planning Contributions. The bulk of the funding for major schemes presented in Table 10 is not committed; although Planning Contributions have been reserved for several major schemes and £1million in Council Capital funding has been committed for the Tolworth Broadway scheme.

Additional funding to deliver the POI and Delivery Plan Actions will be sought from various sources, including Planning Contributions, Kingston Business Improvement District Funding, GLA (e.g. Mayor's Great Spaces), public transport operators (e.g. Network Rail), and other Council service directorates (e.g. Education Services). Where funding is secured the POI will be amended/ expanded accordingly.

As TfL funding allocated to the Council to implement the LIP has decreased in recent years it is even more important that the Council engage in a robust process to select transport initiatives that most effectively deliver the aspirations of this strategy. The Council has developed a Transport Initiative Prioritisation System, which is an important

²³ LIP Settlement Letter – Transport for London (Issued 4 November 2010),

²⁴ Indicative Maintenance Allocations 2011-12 (Principal Roads) – Transport for London (July 2010)

mechanism in ensuring that schemes are prioritised for delivery that best contribute to achieving the aspirations of LIP2 and the MTS. Please refer to Sections 3.4.1, 3.4.2, and 3.4.3 for further information on the Transport Initiative Prioritisation System.

Table 10: Potential Funding sources for LIP2 Delivery Plan (£000s)

Funding Source	2011/12 (£'000s)	2012/13 (£'000s)	2013/14 (£'000s)	Total (£'000s)	Confirmed
INTEGRATED TRANSPORT (CORRIDORS & NEIGHBOURHOODS, AND SUPPORTING MEASURES)					
Indicative LIP formula allocation	£1,710	£1,644	£1,424	£4,778	Indicative
Biking Borough targeted funding	£100	£210	£140	£450	Indicative
Council Capital / Revenue	Due to low and unpredictable levels of funding from these sources, no indicative funding levels have been included in LIP2. However, as funding becomes available it will be used to help deliver the LIP2 POI and reserve schemes from the POI. <i>Please note:</i> funding from Council Capital, Council Revenue, Neighbourhoods, Planning Contributions, and Heritage Grants is included under Maintenance and Major Schemes (below). The Council does not have any other existing funds available from Planning Contributions other than those identified in Major Schemes below.				
Match funding from Health, Education Services, Police					
Planning Contributions					
Kingston Business Improvement District					
Other TfL (e.g. Biking Borough)					
GLA (e.g. Mayor's Great Spaces)					
Match funding from public transport operators					
Sponsorships					
Total					
MAINTENANCE (STRUCTURES, CARRIAGEWAY, FOOTWAYS & FOOTPATHS)					
LIP Allocation – Principal Roads	£382			£382	2011/12 Acknowledged by TfL
		£382	£382	£764	Indicative
LIP Allocation – Bridges	£1009			£1009	2011/12 Acknowledged by TfL
		£1260	£1446	£2,706	Indicative
Council Capital	£20	£20	£20	£60	Estimate (based on previous financial year)
Council Revenue	£66	£66	£66	£198	Estimate
Neighbourhood	£1250	£1950	£2600	£5800	Estimate
Total	£2,727	£3,678	£4,514	£10,919	
MAINTENANCE (OTHER HIGHWAY ASSETS)					
LIP allocation	Nil	Nil	Nil	<i>Nil</i>	N/A
Council Capital	£1000	£1000	£1000	£3000	Estimate
Council Revenue	£642	£642	£642	£1926	Estimate
Neighbourhood	£51	£51	£51	£153	Estimate
Total	£1,693	£1,693	£1,693	£5,079	Estimate

Funding Source	2011/12 (£'000s)	2012/13 (£'000s)	2013/14 (£'000s)	Total (£'000s)	Confirmed
MAJOR SCHEMES					
TfL LIP Major Scheme Funding:					
<i>Tolworth Broadway</i>	£100	£2,200	0	£2,300	Indicative
<i>Surbiton Public Realm Improvements</i>	0	0	0	0	N/A
<i>Ancient Market Place</i>	0	£1,000	£1,000	£2,000	Uncommitted
<i>Kingston Train Station Access (Station Gateway)</i>	0	0	0	0	N/A
Council Capital:					
<i>Tolworth Broadway</i>	£1,000			£1,000	Committed
		£1,000	0	£1,000	Uncommitted
<i>Surbiton Public Realm Improvements</i>	£500	£500	0	£1,000	Uncommitted
<i>Ancient Market Place - Capital</i>	0	£1,500	0	£1,500	Uncommitted
<i>- Gold Zone (KTC Neighbourhood)</i>	£29	0	0	£29	Committed
<i>Kingston Station Access (Station Gateway)</i>	0	0	0	0	N/A
GLA (Mayor's Great Spaces):					
<i>All Projects</i>	0	0	0	0	N/A
Heritage Grant					
<i>Ancient Market Place</i>	£50	£50	0	£100	
Planning Contributions					
<i>Tolworth Broadway</i>	£27	0	0	£27	Committed
<i>Surbiton Public Realm Improvements</i>	0	£143	0	£143	Committed
<i>Ancient Market Place</i>	£200	£229	0	£429	Committed
<i>Kingston Station Access (Station Gateway)</i>	0	0	0	0	N/A
Total	£1,906	£6,622	£1,000	£9,528	



(3.2) DELIVERY PLAN ACTIONS

(3.2.1) Background

The Delivery Plan Actions are those actions the Council will deliver over the life of the LIP (until 2031) to achieve the MTS Goals and LIP Objectives. The Council has considered key challenges facing the borough, LIP Policies, and available funding/resources; then from this evidence Delivery Plan Actions (and associated timeframes) have been identified. These actions form the basis of the 3-year rolling POI.

The Delivery Plan Actions have been divided into 2 types of action:

- *General Delivery Plan Actions (Section 3.2.3)* - These are 'action based policies' extracted from the policy section of LIP2. They are higher level actions and are usually not specific to a geographical location.
- *Neighbourhood Delivery Plan Actions (3.2.4)* - These actions are based around geographical locations within in the borough, and are structured under the four neighbourhood administrative areas. These actions have been derived from the General Delivery Plan Actions.

The use of a 2-tier set of actions allows the Council to identify both strategic actions and more specific spatial based actions; this approach provides a comprehensive 'more accountable' indication of how the Council intends to deliver the MTS Goals and LIP Objectives out to 2031.

Further points to note on the Delivery Plan Actions:

- All actions are for the Council to lead on, unless otherwise stated.
- All actions and timeframes for delivery will be reviewed in 2013/14.
- Many actions have 'ongoing' timeframes which means:
 - (i) they will be delivered/pursued throughout the life of LIP2
 - (ii) they are general actions that will be delivered year after year, or
 - (iii) they rely on external partners and it was not deemed appropriate to set timeframes.
- Many of the General Delivery Plan Actions are duplicated as more concise actions with specific timeframes in the neighbourhood Actions section. This is indicated using a ** beside the General Delivery Plan action timeframe.
- Beside each action the MTS goal and LIP objective that it supports is noted.
- Table 11 provides an overview of the MTS Goals and Challenges and outlines those actions that support their achievement.

(3.2.2) Key Interventions Delivering LIP2 Objectives

The interventions outlined in the tables below will be delivered out to 2031 (over the life of LIP2); please refer to General Delivery Plan Actions (Section 3.2.3) and Neighbourhood Delivery Plan Actions (Section 3.2.4) for more specific actions and timeframes for delivery.

Objective	Interventions that give effect to objective
<p><u>Objective 1:</u> Reduce CO2 emissions from road based transport</p>	<ul style="list-style-type: none"> • Improved train services and stations (e.g. increased train frequencies, improved access to train stations) • Improved bus services and waiting environment (e.g. bus lanes, bus stop accessibility and safety) • Improved Integration of transport network (e.g. alignment of bus and train timetables, improved walking and cycling links to public transport stops/stations) • Promotion of cycling (e.g. improved cycling routes, strong focus on strategic cycling network, increased on-street and secure cycle parking, cycle training, education and awareness campaigns) • Promotion of walking (e.g. improved walking routes, strong focus on strategic walking network, way finding, pedestrian crossings, public realm improvements) • Smarter travel initiatives (e.g. travel planning, delivery servicing plans) • Promotion of smarter vehicles (e.g. car clubs, low emission vehicles) • Low emission buses • Smoothing traffic flow • Revise and Implement the Air Quality Action Plan • Extending LEZ
<p><u>Objective 2:</u> Maintain and enhance the resilience of the Kingston's transport system to the effects of climate change</p>	<ul style="list-style-type: none"> • Design new transport projects with improved resilience to severe weather events • Develop a Climate Change Adaptation Strategy and a Surface Water Management Plan. • Work with South West Trains to improve climate control systems in their fleet • Maintain emergency response capacity to deal with extremes of weather • Work with Thames Water (and where applicable TfL) to improve drainage in locations where flooding is a significant concern • Increase street trees
<p><u>Objective 3:</u> Promote and enhance public transport, walking, and cycling as transport modes; particularly for people accessing employment, education, and shopping activities within RBK</p>	<ul style="list-style-type: none"> • Improve regional and interregional public transport links • Improved train services and stations (e.g. increased train frequencies, improved access to train stations) • Improved bus services and waiting environment (e.g. bus lanes, bus stop accessibility and safety) • Improved Integration of transport network (e.g. alignment of bus and train timetables, improved walking and cycling links to public transport stops/stations) • Promotion of cycling (e.g. improved cycling routes, strong focus on strategic cycling network, increased on-street and secure cycle parking, cycle training, education and awareness campaigns) • Promotion of walking (e.g. improved walking routes, strong focus on strategic walking network, way finding, pedestrian crossings, public realm improvements) • Smarter travel initiatives (e.g. travel planning, delivery servicing plans) • Parking policies that support sustainable transport modes (e.g. supply, price) • Road safety and safety from crime • Contribution to health (e.g. promoting active modes of transport, access

Objective	Interventions that give effect to objective
<p><u>Objective 4:</u> Reduce congestion and smooth traffic flow in congestion hotspots</p>	<p>to parks and open spaces)</p> <ul style="list-style-type: none"> • Review borough road hierarchy • Review strategic highway network for opportunities to reduce congestion and smooth traffic flow. The priority road is Malden Road, which is identified in the SRTP as a sub-regional priority for congestion relief. • Where appropriate support TfL to install SCOOT technology. • Convert in-lane bus bays to recessed bus bays (where evidence shows this will significantly smooth traffic flow and will have a negligible effect on the efficiency and reliability of bus services. • Where beneficial work with stakeholders to upgrade vehicle entrances with direct access to congested road corridors. • Improve management, coordination, and awareness of road works. • Investigate other measures to further reduce the impact of road works e.g. variable message signs.
<p><u>Objective 5:</u> Reduce the need to travel during peak congestion times</p>	<ul style="list-style-type: none"> • Initiatives and campaigns to promote sustainable travel and provide accurate and easily accessible transport information. • Support schools to implement their travel plans. • Work with large work places to develop and implement travel plans. • Develop travel plan networks in areas of high trip generation e.g. town centres and industrial estates. • Work with housing estates and Residential Associations to develop travel plans and implement sustainable travel initiatives, such as communal cycle parking.
<p><u>Objective 6:</u> Reduce serious injuries and deaths on RBK's transport network</p>	<ul style="list-style-type: none"> • Improve layout and locations of pedestrian crossings • Other physical engineering measures e.g. junction realignments, traffic calming, public realm improvements, cycling facilities, wider footways. • Focus measures towards vulnerable road users. • Develop a borough wide 20mph implementation plan. • Campaigns to raise awareness of road safety issues and improve road user behaviour. • Work with Metropolitan Police, emergency services, and residents to localised safety issues including speeding drink/drug driving and dangerous parking. • Work with employers to improve work related road safety.
<p><u>Objective 7:</u> Reduce crime and fear of crime while in the public realm and on public transport</p>	<ul style="list-style-type: none"> • Support safer Kingston Partnership and Safer Neighbourhood Wards, as well as working with partners including the Police, Pub Watch, Kingston First, Street Pastors, and Public Carriage Office to support 'night time initiatives' and tackle areas of the borough where crime or perceptions of safety is a concern. • Support and implement the 'After Dark Strategy Implementation Plan – Update 2008' and the Kingston Police Strategy for Kingston Town Centre. • Work with public transport operators to reduce crime and fear of crime at stations, stops, and on vehicles. • Implement public realm improvements ('design out crime'); focus initiatives in Grove Ward.

Objective	Interventions that give effect to objective
<p><u>Objective 8:</u> Improve sustainable transport links to/from/within socially deprived areas and areas with poor access to public transport</p>	<ul style="list-style-type: none"> • Focus initiatives to improve sustainable transport modes of transport in Norbiton Ward, Grove Ward, Coombe, Berrylands/Hogsmill area, and South of the Borough. Refer to Neighbourhood Delivery Plan Actions (Section 3.2.4).
<p><u>Objective 9:</u> Improve the physical accessibility of RBK's transport network, especially for disabled people</p>	<ul style="list-style-type: none"> • Accessible streets e.g. uncluttered footways, wide well surfaced footways, and DDA compliant pedestrian crossings; particular focus in areas surrounding key trip generators such as railway stations and town centres. • Review all formal marked pedestrian crossings (e.g. zebra, pelican etc) to assess DDA compliance and set up an annual program to upgrade non-compliant crossings. • Provide dropped kerbs and tactile paving at all road crossings in the borough, and ensure they are clear of vehicles. • Upgrade all bus stops in the borough to satisfy Disability Discrimination Act 2005 (or Equalities Act 2010) requirements by 2013/14. • Work with Network Rail and Train Operating Companies to ensure all train stations and platforms in RBK are accessible by disabled users. • Set up a disabled access forum to gain feedback on general transport issues and proposed transport initiatives. • Ensure all new transport projects satisfy DDA requirements.
<p><u>Objective 10:</u> Improve pedestrian and cycling permeability and connectivity throughout RBK</p>	<ul style="list-style-type: none"> • Make all roads in the borough (except the A3) safe for cycling e.g. traffic calming, dedicated cycle routes • Improve cycling and walking access through parks and open spaces e.g. access points, implement greenways cycle routes, all weather surfaces.
<p><u>Objective 11:</u> Protect and enhance the built and natural environment</p>	<ul style="list-style-type: none"> • Public realm improvements • Improve gateways to borough and town centres • Investigate options to reduce the effect of existing transport network on natural environment e.g. improve drainage, increase street trees • Ensure highway works minimise risk of contaminating watercourses and soil. • Ensure new transport initiatives are designed to avoid adverse effects on or have a net positive effect on the natural and built environment e.g. permeable surfaces, street trees • Where practical, manage and maintain the network in a manner that favours fauna and flora e.g. green corridors along road verges
<p><u>Objective 12:</u> Improve air quality and reduce impacts of noise and vibration from transport</p>	<ul style="list-style-type: none"> • Improved train services and stations (e.g. increased train frequencies, improved access to train stations) • Improved bus services and waiting environment (e.g. bus lanes, bus stop accessibility and safety) • Improved Integration of transport network (e.g. alignment of bus and train timetables, improved walking and cycling links to public transport

Objective	Interventions that give effect to objective
	<p>stops/stations)</p> <ul style="list-style-type: none"> • Promotion of cycling (e.g. improved cycling routes, strong focus on strategic cycling network, increased on-street and secure cycle parking, cycle training, education and awareness campaigns) • Promotion of walking (e.g. improved walking routes, strong focus on strategic walking network, way finding, pedestrian crossings, public realm improvements) • Smarter travel initiatives (e.g. travel planning, delivery servicing plans) • Promotion of smarter vehicles (e.g. car clubs, low emission vehicles) • Low emission buses • Smoothing traffic flow • Extending LEZ • Install air quality monitoring stations • Revise and Implement the Air Quality Action Plan • Use SMA when resurfacing 'A' Roads, and where it will significantly benefit residents adjoining other roads. • Ensure new transport projects consider noise mitigation
<p><u>Objective 13:</u> Improve transport's contribution to health and wellbeing</p>	<ul style="list-style-type: none"> • Measures to promote walking and cycling (e.g. infrastructure, access to green spaces, cycle training, travel plans). These initiatives encourage physically active modes of transport. • Measures to improve air quality. • Measures to improve access to parks and open spaces. • Improve access to healthcare facilities in particular Kingston Hospital, refer to Neighbourhood Delivery Plan Actions (Section 3.2.4)
<p><u>Objective 14:</u> Improve economic viability of the borough by improving the accessibility of key employment, retail, entertainment, education, and growth areas</p>	<ul style="list-style-type: none"> • Improve regional and interregional public transport links • Improved train services and stations (e.g. increased train frequencies, improved access to train stations) • Improved bus services and waiting environment (e.g. bus lanes, bus stop accessibility and safety) • Improved Integration of transport network (e.g. alignment of bus and train timetables, improved walking and cycling links to public transport stops/stations) • Promotion of cycling (e.g. improved cycling routes, strong focus on strategic cycling network, increased on-street and secure cycle parking, cycle training, education and awareness campaigns) • Promotion of walking (e.g. improved walking routes, strong focus on strategic walking network, way finding, pedestrian crossings, public realm improvements) • Smarter travel initiatives (e.g. travel planning, delivery servicing plans) • Smooth traffic flow and relieve congestion in hotspots. • Parking policies that balance competing demands from cars, freight, disabled users, promotion of sustainable modes, low emission vehicles. • Road safety and safety from crime • Contribution to health (e.g. promoting active modes of transport, access to parks and open spaces)
<p><u>Objective 15:</u> Improve public transport links to</p>	<ul style="list-style-type: none"> • Improve access by bus to Heathrow and Gatwick Airports • Support projects to improve access by rail to Heathrow • Improve regional and interregional public transport links (e.g. train

Objective	Interventions that give effect to objective
key attractions outside of RBK e.g. Waterloo, London's airports	<ul style="list-style-type: none"> • frequencies to Waterloo, improved late night rail services) • HLOS1 • Lobby for reclassification of travel card zoning of Kingston and Surbiton Stations. • Improve transport links (particular orbital) between neighbouring centres and the borough's major trip attractors • Seek investigations into Tramlink extensions to improve orbital transport
<u>Objective 16:</u> Better manage and improve freight access, particularly to key industrial and commercial areas	<ul style="list-style-type: none"> • Continue to be an active member of the South London Freight Quality Partnership; or any other successor organisation. • The Council (with help from the South London Freight Quality Partnership) has been carryout ongoing investigations to improve freight access and servicing at Chessington Industrial Estate. • Freight loading and access is being improved as part of the Tolworth Broadway Public Realm Improvement Scheme. • The construction of an alternative access road to service Athelstan Road Waste site is being considered as part of the proposed redevelopment of the Hogsmill River area (as outlined in the LDF). • Improve freight access, loading, and servicing arrangements at key locations in the borough; including the development of freight management plans and delivery servicing plans. • Investigate measures such as freight restriction areas, increased night time deliveries, increased rail bound freight, and consolidation servicing centres. • Work with organisations that wish to use the River Thames for freight transport. • Safeguard Strategic Freight Sites and ensure that any development on these sites makes effective use of sustainable freight opportunities.
<u>Objective 17:</u> Bring and maintain all transport infrastructure assets to a state of good repair	<ul style="list-style-type: none"> • Maintain transport assets at an appropriate level of repair • Allocate annual maintenance funding to those parts of the transport network in greatest need of repair, and utilise the Asset Management Plan being developed by LoTAG • Lobby TfL to extend maintenance funding to non-principal roads which form part of the TfL bus network. • Develop a Highway Asset Management Plan for the borough • Monitor the success of the London Permit Scheme and Lane Rental Charges. • Replace street nameplates where missing, damaged, or dated. • Improve management, coordination, and awareness of road works. • Investigate other measures to further reduce the impact of road works e.g. variable message signs.

(3.2.3) General Delivery Plan Actions

The General Delivery Plan Actions are overarching actions and are the primary mechanism for achieving the aspirations of the MTS. They will be used to inform the POI and the more detailed Annual Spending Submission, but also involve many actions that will not feature in these programmes. They include wide ranging actions and often link to other Council strategies and action plans.

Action No.	GENERAL DELIVERY PLAN ACTIONS	Supports MTS Goals	Supports Objectives	Timeframe for Delivery
Guiding Actions				
GA1	Improve accessibility to, through, and within the borough's main trip generators and other important facilities for non-car users; and manage access by car and freight to these locations.	1, 2, 3, 4, 5	3, 14, 15	ONGOING**
GA2	Develop Planning Policy guidance on Sustainable Travel to outline developers' obligations with regards to sustainable transport initiatives (e.g. travel plans etc).	1, 2, 5	1, 3, 12, 13	2013/14
GA3	Review all RBK's 'strategic highway corridors (strategic routes)' and identify/prioritise improvements to walking, cycling, and bus infrastructure; as well as opportunities to relieve congestion. <i>The results of the review so far are outlined in Appendix 21.</i>	1, 2, 3, 4, 5	1, 3, 4, 6, 7, 8, 9, 10, 12, 13, 14, 16, 17	2013/14
Actions by Topic				
Regional & Interregional Transport				
RTA1	The Council recognises the regional importance of transport and will work with neighbouring authorities and other partners to: <ul style="list-style-type: none"> a) Seek increased transport investment to improve access to Kingston Town Centre in order to support its important sub-regional role as a Metropolitan Town Centre and enable sustainable future growth (in accordance with MTS Policy 8). b) Improve transport links (particularly orbital) between neighbouring centres and the Boroughs major trip attractors (in accordance with MTS Policy 7) c) Investigate ways to reduce car trips to Kingston Town Centre from Surrey particularly by improving cross boundary bus services, frequencies, and pricing d) Seek investigations into the feasibility of extensions to the Tramlink network to improve orbital transport links in the South London sub-regional and to the borough (in accordance with MTS Proposal 16) 	1, 2, 4, 5	1, 3, 12, 14, 15	ONGOING**
RTA2	Promote a permanent park and ride site to serve KTC as a sub-regional priority, and will seek to secure sub regional support and external funding to further investigate the feasibility of preferred park and ride sites.	1, 2, 4, 5	1, 3, 8, 12, 14, 15	ONGOING
RTA3	Work with TfL and neighbouring authorities to improve bus journey times and reliability to Heathrow Airport	1, 4	14, 15	2016/17
RTA4	Work with partners to investigate the feasibility of a bus link to Gatwick Airport	1, 4	14, 15	2016/17
Rail				
PTA1	Delivery of capacity increases on the borough's train services as set out the DfT's High Level Output Specification for the period 2009 to 2014	1, 2, 4, 5	1, 3, 14, 15	2013/14
PTA2	Prioritisation of RBK routes for further medium term rail capacity increases to address projected over-crowding (as set out in MTS proposal 8)	1, 2, 4, 5	1, 3, 14, 15	2031/32
PTA3	Lobby for the travel zone reclassification of Kingston and Surbiton Stations.	1, 2, 4, 5	1, 3, 12, 14, 15	ONGOING**
PTA4	Work with Network Rail and Train Operating Companies to ensure all train stations (platforms) in RBK are accessible by disabled users.	3, 4	1, 3, 9, 12, 15	2025/26**
PTA5	Work with Network Rail and Train Operating Companies to ensure that train stations are attractive, safe and comfortable and will seek to improve entrance points/areas to make stations inviting and accessible.	2, 3	1, 3, 12	ONGOING**
PTA6	Lobby for increased peak-hour train services.	1, 2, 4, 5	1, 3, 8, 12, 14, 15	ONGOING**
PTA7	Lobby for increased off-peak daytime train frequencies and improved late night train services from all RBK train stations, prioritising Kingston Station.	1, 2, 3, 4, 5	1, 3, 12, 14, 15	ONGOING**
PTA8	Work with Train Operating Companies to ensure high service standards including the availability of staff and the cleanliness and comfort of services.	2, 3	3, 9	ONGOING
PTA9	Improved facilities and arrangements for accommodating bicycles on train services	2, 5	1, 3, 13, 14, 15	2016/17
Buses				
PTA10	The Council will work with partners including TfL and Surrey to provide a network of local bus services that meet the needs of RBK residents and visitors including: <ul style="list-style-type: none"> a) New or improved services in areas with low transport accessibility b) Improved service provision to key local trip generators including District Centres, Schools and Healthcare facilities. c) Explore opportunities to improve cross boundary bus service routes, frequencies, and pricing from Surrey d) Increased bus capacities and frequencies on busy routes e) Improved late night services, particularly to serve Kingston Town Centre f) Consistent fair pricing and easy to use ticketing (e.g. Oyster Card); including lobbying TfL for introduction of a one hour bus ticket 	1, 2, 3, 4, 5	1, 3, 8, 12, 14, 15	ONGOING**
PTA11	The Council will review bus routes for opportunities to implement bus priority measures, with priority given to those routes that suffer from excessive delays.	1, 2, 4, 5	1, 3, 8, 12, 14	ONGOING**
PTA12	Operate all bus lanes in peak traffic periods and periods where congestion is likely to affect bus reliability	1, 2, 4, 5	1, 3, 12, 14	2013/14

Action No.	GENERAL DELIVERY PLAN ACTIONS	Supports MTS Goals	Supports Objectives	Timeframe for Delivery
PTA13	Work with TfL to ensure bus stops are conveniently located, easily accessible by pedestrians, and that the waiting environment is safe and pleasant. <i>For example the Council will aim to improve: locations of pedestrian crossings, dropped kerbs in surrounding streets, lighting, bus stop shelters etc.</i>	2, 3, 4	1, 3, 9, 12	ONGOING**
PTA14	Upgrade all bus stops in the borough to satisfy Disability Discrimination Act 2005 (or Equalities Act 2010) requirements.	2, 3, 4	1, 3, 9, 12, 15	2013/14
PTA15	Review existing hail and ride sections of bus routes and consider providing formal bus stops/waiting facilities or accessible boarding points.	2, 3, 4	3	2016/17
PTA16	Install 'real-time' bus information at priority bus stops; please refer to Appendix 17 for priority list.	2	1, 3, 12	Priority Locations: 2019/20** Other Locations: ONGOING**
Integration				
ITA1	Work with TfL and bus operators to ensure that bus timetables integrate efficiently with train timetables particularly on infrequent train and bus routes.	1, 2, 4, 5	1, 3, 12, 14	2013/14 & ONGOING**
ITA2	Improve signage between public transport stations/stops and onward destinations e.g. shopping areas, bus stops/train stations, Kingston Hospital etc.	2	1, 3, 12, 14	2016/17 & ONGOING**
ITA3	Ensure that there are safe and attractive pedestrian and cycle routes leading to public transport stations/stops.	2, 3, 5	1, 3, 12, 14	ONGOING**
ITA4	Work with TfL and stakeholders to ensure Oyster Card top-up facilities are provided at convenient locations throughout the borough, including all train stations.	2	1, 3, 12, 14	Train Stations: 2013/14** Other Locations: 2019/20**
ITA5	Work with partners to provide 'real-time' travel information at key destinations.	2	1, 3, 12, 14	2016/17**
Cycling				
CA1	Protect and improve RBK's on and off road cycle routes with priority given to the strategic cycling network; priority will also be given to improve cyclist accessibility across/along barriers such as busy roads, major junctions, rivers, and rail crossings.	1, 2, 3, 4, 5	1, 3, 8, 10, 12, 13, 14	ONGOING**
CA2	Implement the 'greenway' cycle network	2, 3, 4, 5	1, 3, 8, 10, 11, 12, 13	2025/26**
CA3	The Council will work with neighbouring authorities to ensure that continuous cycle routes are provided across borough boundaries; particularly to key attractions outside of the Borough.	1, 2, 3, 4, 5	1, 3, 10, 12, 13, 14	ONGOING**
CA4	Lobby TfL for the expansion of radial cycle superhighway routes into RBK and seek investigations into the feasibility of orbital continuous cycle superhighway routes between Kingston and the neighbouring centres of Sutton and Richmond.	1, 2, 3, 4, 5	1,3, 10, 12, 13, 14	ONGOING
CA5	Signage of the cycle network will be reviewed and if necessary improved, prioritising the strategic cycle network.	2, 5	1, 3, 10, 12, 13, 14	2013/14
CA6	Replace non-cycle friendly drains and gullies across the cycle network	2, 3	3, 6	2016/17
CA7	Provide adequate cycle parking (including secure cycle parking) at all key public locations in the borough, with priority given to KTC and District Centres	2, 3, 4, 5	1, 3, 12, 13, 14	2016/17 & ONGOING**
CA8	Install cycle parking at all local shopping parades, as outlined in Appendix 18.	2, 3, 4, 5	1, 3, 12, 13	2013/14
CA9	The Council will also improve cycle parking provision throughout the borough as follows: (i) By working with train operators to provide fully secure and sheltered cycle parking at all rail stations. (ii) Provide cycle parking to serve all Council owned buildings (including residential properties) (iii) Encourage and support other public organisations to provide cycle parking, including schools, Kingston University and Kingston Hospital. (iv) Encourage and support workplace, residential, leisure, retail, and other sites to provide cycle parking facilities. (v) Require all new developments in the Borough to provide cycle parking in accordance with minimum standards. (vi) Ensuring that planning policies are supportive of proposals to install cycle parking.	2, 3, 4, 5	1, 3, 12, 13, 14	(i) 2019/20** (ii) 2019/20** (iii) ONGOING** (iv) ONGOING (v) 2011/12 & ONGOING (vi) 2011/12 & ONGOING
CA10	Support the Metropolitan Police to provide initiatives to reduce bike theft.	2, 3, 5	1, 3, 12, 13, 14	ONGOING
CA11	Work with partners to introduce cycle hire schemes in the borough.	2, 4, 5	1, 3, 12	2016/17**
CA12	Support basic cycle training by primary school children and increase the numbers of secondary school children and adults receiving advanced cycle training.	2, 3, 4, 5	1, 3, 12, 13, 14	Increase Secondary & Adults: 2013/14 & ONGOING Cycle Training Programme: ONGOING
CA13	Implement other measures to support and encourage cycling; including led commuter rides, Dr Bike sessions, and bicycle maintenance courses.	2, 3	1, 3, 12, 13, 14	ONGOING
CA14	Install permanent cycle counters across RBK's strategic cycling network. A prioritised list of locations for the installation of permanent cycle counters is provided in Appendix 22.	2	1, 3, 12, 13, 14	2013/14
Walking				
WA1	The Council will prioritise improvements to the strategic walking network and will give high priority to improving pedestrian connectivity across barriers such as major junctions, busy roads, rivers, and rail lines.	2, 3, 4, 5	1, 3, 10, 12, 13, 14	ONGOING**
WA2	Implement and continue an annual walking audit program based on the Commuter Walking Strategy prioritised list of walking routes.	2, 3, 4, 5	1,3, 10, 12, 13, 14	Implement: 2011/12 & ONGOING**
WA3	Implement public realm improvements where appropriate (e.g. pedestrianisation, area based schemes, and shared space schemes); particularly in shopping centres.	2, 3, 5	1, 3, 7, 10, 11, 12, 13, 14	ONGOING**

Action No.	GENERAL DELIVERY PLAN ACTIONS	Supports MTS Goals	Supports Objectives	Timeframe for Delivery
WA4	Improve way finding for pedestrians throughout the borough, including implementation of the Legible London way finding system, with priority given to KTC and Surbiton District Centre.	2, 5	1, 3, 10, 12, 13, 14	ONGOING**
WA5	Implement the recommendations of the Rights of Way Improvement Plan and where appropriate secure access routes as public rights of way.	2, 5	1, 3, 10, 12, 13, 14	ONGOING
WA6	Work with Walk London to promote and improve the Thames Path and London Loop and ensure all significant issues along these routes are resolved by 2012.	2, 5	1, 3, 10, 12, 13	2012/13
WA7	Improve all key gateways into the borough, KTC, and the District Centres	2	3, 11	2028/29
Smarter Travel Information and Awareness				
STA1	Implement a range of initiatives and campaigns to promote sustainable travel and provide accurate and easily accessible transport information	1, 2, 3, 5	1, 3, 12, 13, 14	ONGOING**
STA2	Work with schools to better implement their travel plans to promote road safety and sustainable travel, prioritising schools for support that have the most significant transport problems and the greatest potential for mode shift.	2, 3, 5	1, 3, 12, 13, 14	ONGOING**
STA3	Work with large workplaces and other organisations to manage travel through the development and implementation of travel plans.	1, 2, 3, 5	1, 3, 5, 12, 13, 14, 16	ONGOING**
STA4	Develop travel plan networks in areas that generate significant amounts of trips and experience transport problems including town centres and industrial estates.	1, 2, 3, 5	1, 3, 5, 12, 13, 14, 16	2016/17**
STA5	Work with Housing and Residents Associations to develop residential travel plans and implement measures to encourage sustainable travel such as communal cycle parking and site specific travel information.	2, 3, 5	1, 3, 5, 12, 13, 14	Develop: 2016/17 Implement: ONGOING**
Smarter Vehicle Use				
SVA1	Promote the benefits of low emission vehicles to residents and businesses; and increase the awareness of available infrastructure, in particular through improving signage of EV charging infrastructure.	2, 5	1, 12, 13	ONGOING
SVA2	Low emission vehicle infrastructure (including EV charging points) will be provided through the following means: <ul style="list-style-type: none"> • Provided by the Council. • Local Development Framework • Working with other organisations e.g. supermarkets, workplaces. 	2, 5	1, 12, 13	ONGOING**
SVA3	Investigate the viability of introducing a system of emissions based parking charges	2, 5	1, 12, 13	2016/17
SVA4	To promote and support the use of car clubs the Council will work with partners to: <ol style="list-style-type: none"> a) Retain existing, and provide additional, on-street car club bays to develop a borough-wide car club network b) Promote car club services to residents and to businesses through travel planning c) Secure car club provision for new developments through planning obligations and contributions 	2, 4, 5	1, 12, 14, 15	ONGOING
Roads and Managing Vehicle Use				
MVA1	Review RBK's road hierarchy. If the review recommends changes that will be beneficial from a network management or maintenance perspective, then the Council will work with DfT and TfL to reclassify the road hierarchy.	1	14, 16, 17	2013/14
MVA2	Install solar ATC recording devices (permanent traffic counters) across RBK's highway network. A prioritised list of locations for the installation of permanent traffic counters is provided in Appendix 22.	1, 2	4, 14	2016/17
MVA3	Review RBK's strategic road corridors for opportunities to reduce traffic congestion and smooth traffic flow. The priority corridor for improvement is Malden Road (south of the A3), and the Council will work with TfL and the London Borough of Sutton to improve journey times along this route, particularly bus journey times.	1, 2	1, 4, 12, 13, 14, 15	Review all Strategic road corridors and implement improvements to Malden Road: 2013/14** Implement recommendations: 2028/29**
MVA4	Where it does not adversely affect sustainable modes of transport; support TfL to install SCOOT technology at RBK junctions	1, 2	1, 4, 12, 13, 14	ONGOING**
MVA5	Implement a range of measures to plan, coordinate, and raise awareness of road works; including utilisation of the Londonworks system, email bulletins, working with neighbouring boroughs, and working with third parties who are carrying out works.	1, 2	1, 4, 12, 13, 14	ONGOING
MVA6	The Council will investigate the following options to further reduce the impact of road works on traffic flow: <ul style="list-style-type: none"> • More variable message signs - to advise users of scheduled road works, road works further up the road, and large events that may disrupt traffic flow. • Purchase/hire mobile CCTV to set up at road works – to monitor the layout of works, traffic queues, signal timings etc from the office. • Upgrade Street Works Register ICT package – to improve information for the coordination of works. • Provide RBK highway contractors with ICT facility to submit ETON works notices directly to the Street Works register. 	1, 2	1, 4, 12, 14	2019/20

Action No.	GENERAL DELIVERY PLAN ACTIONS	Supports MTS Goals	Supports Objectives	Timeframe for Delivery
MVA7	Improve freight access, loading, and servicing arrangements at key locations in the borough, including development of freight management plans, delivery servicing plans, and investigating the use of the River Thames.	1, 2, 5	1, 4, 12, 14, 16	ONGOING**
MVA8	The Council will continue to be an active member of the South London Freight Quality Partnership, or any subsequent equivalent organisation .	1	14, 16	ONGOING
Maintenance				
MA1	The Council will continue to allocate annual maintenance funding to those parts of the highway in greatest need of repair.	1, 2	3, 4, 11, 12, 17	ONGOING
MA2	The Council will lobby TfL to extend maintenance funding to non-principal roads which form part of the TfL bus network.	1, 2	1, 3, 4, 12, 13, 14, 17	ONGOING
MA3	The Council will develop a Highway Asset Management Plan for the borough	1, 2	3, 4, 11, 12, 17	2013/14
Parking				
PA1	Control on-street parking where it compromises the safety and amenity of residents and other road users.	2, 3	6	ONGOING
PA2	Manage the existing provision of town centre and shoppers parking more efficiently in order to support economic vitality	1, 4	14	ONGOING**
PA3	Require businesses that are allocated parking permits to also develop travel plans to encourage employees to use sustainable travel modes	2, 3, 5	1, 3, 5, 12, 13, 14	2013/14 & ONGOING
Road Safety and Safety from Crime				
SA1	Monitor and implement transport initiatives (including road safety campaigns and engineering measures) to address road accident 'hotspots', locations of road safety concern, and improve safety for vulnerable road users (e.g. school children, pedestrians, cyclists, and power 2 wheeler users).	2, 3	3, 6	ONGOING
SA2	Work with partners, including the Metropolitan Police, to address localised safety issues such as speeding and dangerous parking.	2, 3	3, 6	ONGOING
SA3	The Council will develop a 20mph implementation plan; areas around schools, shopping, and residential areas will be priorities.	2, 3	3, 6	2013/14
SA4	Work with employers (including through travel plans) to improve work related road safety and to reduce casualties involving work related vehicles and activities	3	6	ONGOING
SA5	To reduce crime and improve perceptions of safety in the borough the Council will: a) Support the Safer Kingston Partnership and Safer Neighbourhood Wards as well as working with partners, including the Police, Pub Watch, Kingston First, Street Pastors, and Public Carriage Office to support 'night time initiatives' and tackle areas of the borough where crime or perceptions of safety is a concern. b) Support and implement measures identified in the 'After Dark Strategy Implementation Plan – Update 2008' and the 'Kingston Police 24/7 Strategy for Kingston Town Centre'. c) Work with public transport operators to reduce crime and the fear of crime at stations, stops, and on vehicles.	2, 3	3, 7	ONGOING
SA6	The Council will continue to support the 'Safer Transport Scheme' for Kingston Town Centre and will lobby public transport providers for the following: • Ensure that night bus services are maintained at current levels, and where appropriate provide new/increased services to accommodate increasing demand. • Improved late night train services from Kingston Train Station.	2, 3	3, 7	ONGOING**
SA7	Implement public realm ('design out crime') and other safety improvements in areas where crime or perceptions of safety is a concern; particular focus will be given to Grove Ward.	2, 3	3, 7, 10, 11	ONGOING
Climate Change and Air Quality				
CCA1	Revise the boroughs Air Quality Action Plan	2, 5	1, 12, 13	2012/13
CCA2	Install air quality monitoring stations (diffusion tubes) throughout the borough, and make information from the stations available to the public.	2	1, 12, 13	2013/14
CCA3	<i>LEZ Interim Solution:</i> Work with TfL to extend the LEZ along the A3 to its junction with the A240 (Tolworth Junction), as well as north and south along Malden Road.	2, 5	1, 12, 13	2013/14
CCA4	<i>LEZ Preferred Solution:</i> Work with TfL, Surrey County Council, Elmbridge Borough Council, and Epsom and Ewell Borough Council to extend the LEZ along the A3 to its junction with the A244 (in Surrey), and along Kingston Road to its junction with Worcester Park Road (in Surrey).	2, 5	1, 12, 13	2016/17
CCA5	Promote and raise awareness of fuel efficient driving techniques (e.g. through workplace travel plans and general promotional activities).	2, 5	1, 12, 13	ONGOING
CCA6	Lobby TfL to ensure bus routes servicing RBK are priorities for the roll out of low emission buses (<i>this is important given RBK's reliance on the bus network</i>).	2, 5	1, 12, 13	ONGOING
CCA7	All transport projects will be designed with improved resilience to severe weather events expected as a result of climate change. To ensure this the Council will develop a climate change adaptation checklist to be used by all project and programme managers to assess, and build, resilience to climate change into all projects.	1, 5	2, 17	2013/14 & ONGOING
CCA8	The Council will conduct a comprehensive risk assessment to determine transport assets, network, and management systems that are vulnerable to the effects of climate change. The Council will use this and other information to develop a Climate Change Adaptation Strategy and a Surface Water Management Plan.	1, 5	2, 17	2013/14

Action No.	GENERAL DELIVERY PLAN ACTIONS	Supports MTS Goals	Supports Objectives	Timeframe for Delivery
CCA9	The Council will implement the following measures to improve the resilience of the transport network to climate change: a) Lobby South West Trains to provide improved climate control systems in their train fleet. b) Maintain emergency response capacity to deal with extremes of weather e.g. grit stock piles and potholes repairs. c) Work with Thames Water (and where applicable TfL) to improve drainage in locations where flooding is a significant concern; this will include consideration of Sustainable Urban Drainage Systems. d) Ensure there is a net increase in street trees in all suitable transport projects.	1, 2, 5	2, 11, 17	ONGOING
Access for Disabled Users and those with Special Needs				
DA1	Review all formal marked pedestrian crossings (e.g. zebra, pelican etc) to assess DDA compliance, and set up an annual program to upgrade non-compliant crossings.	3, 4	9, 13	2016/17**
DA2	Provide dropped kerbs and tactile paving at all road crossings in the borough.	3, 4	9, 13	2019/20
DA3	The Council will set up a disabled user access forum to gain feedback on general transport issues and proposed transport initiatives.	3, 4	9, 13	2013/14
Contribution to Health				
HA1	Work with TfL to improve public transport access to Kingston Hospital; particularly from Tolworth (east of the A3) and areas of high demand.	2, 4	8, 13, 14	ONGOING**

(3.2.4) Neighbourhood Delivery Plan Actions

The Neighbourhood Delivery Plan Actions were developed to replicate RBK's neighbourhood administrative structure and provide a more spatial and localised look at Delivery Plan Actions. They are specific actions which are guided by higher level policies and General Delivery Plan Actions, and are structured around spatial planning themes applicable to each neighbourhood (such as major trip generators, deprived areas, areas with poor public transport accessibility, and segregation barriers). Many of these actions resulted from stakeholder feedback obtained during the development of LIP2.

The Neighbourhood Delivery Plan Actions have been/will be used to help guide the development of the POI and will also inform the more detailed Annual Spending Submissions. They are intended to be a continuously updated reference point for staff, Councillors, and stakeholders.

The benefits of the Neighbourhood Delivery Plan Actions are as follows:

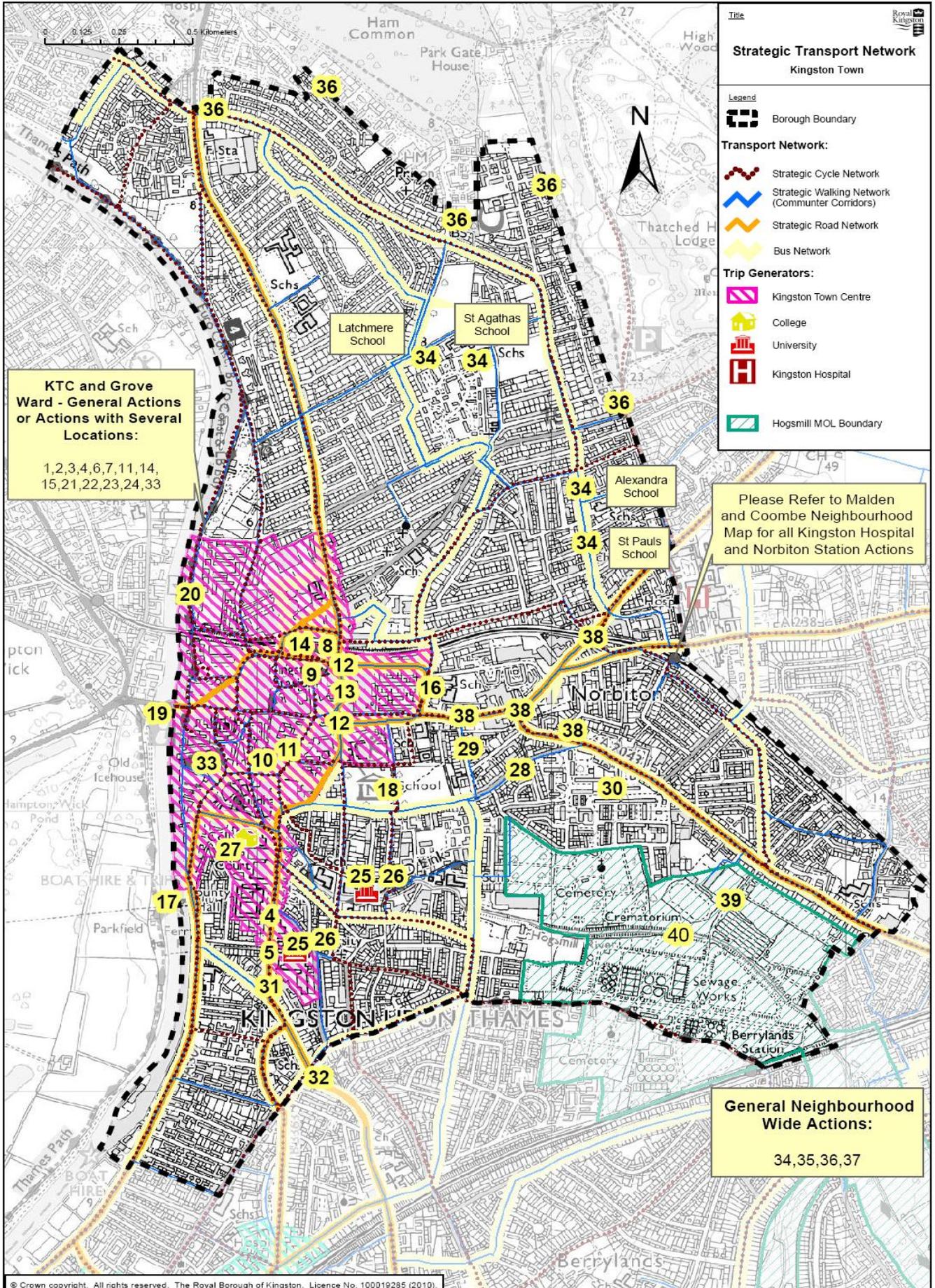
- It focuses actions to those locations that have the greatest impact on the transport network (e.g. key trip generators).
- It focuses actions to those areas in greatest need of transport improvements (e.g. areas with poor public transport accessibility).
- It links LIP2 more effectively with the LDF and Kingston Plan.
- It further focuses higher level policies and General Delivery Plan Actions into practical solutions based on local context. These actions can be used to help develop the LIP Annual Spending Submission.
- It complements RBK's administrative boundaries, and assists local decision making (also called the 'big society approach').
- They provide an ideal location within the LIP document to integrate transport initiatives identified in the emerging Neighbourhood Community Plans.
- It ensures that actions identified while developing the LIP (including consultation feedback) are recorded in an accessible location.

Please note: The Neighbourhoods section does not yet include actions identified from the Council's ongoing strategic highway corridor review; these recommendations will be inserted as they come to hand.



Kingston Town Neighbourhood

Figure 33: Kingston Town Neighbourhood Actions Map



Major Trip Generators: Kingston Town Centre, Kingston University, Kingston College, Kingston Hospital.

Kingston Town Centre Actions	Supports MTS Goals	Supports Objectives	Timeframe for Delivery
The Council will (in partnership with Kingston First) continue to provide the Christmas Park and Ride service between Chessington World of Adventures and KTC (subject to funding availability). (1)	1, 2, 4, 5	1, 3, 4, 8, 12, 14	ONGOING
Work with TfL to ensure that night bus services are maintained at current levels, and where appropriate provide new/increased services to accommodate increasing demand. (2)	2, 3, 4, 5	1, 3, 4, 7, 12, 14	ONGOING
The Council will work with TfL and Surrey County Council to improve access to KTC by public transport (particularly from west Surrey); including consideration of transferring some Surrey services to TfL to reduce the cost of bus travel from Surrey. (3)	1, 2, 4, 5	1, 3, 4, 8, 12, 14	ONGOING
Work with Kingston First and the train operating company to promote the train to Surbiton then bus to KTC link from Surrey. (4)	1, 2, 5	1, 3, 4, 8	2016/17
Improve walking, cycling, and bus links, signage, and travel information between KTC and Surbiton District Centre. (5)	1, 2, 3, 4, 5	1, 3, 4, 8, 10, 14	2011/12 – 2016/17
Work with Kingston First to install electronic train time signs at key locations in the town centre. (6)	2	1, 3	2016/17
Lobby TfL to provide 'real-time' bus information at all bus stops in the town centre. (7)	2	1, 3	2013/14
The Council will lobby for the following improvements to Kingston Train Station: <ul style="list-style-type: none"> • Reclassify the travel zoning of Kingston Station • Improved off peak and late night train services. For late night services, in particular, increase the number of services after midnight, and reduce the impact of engineering works on service provision. (8)	1, 2, 4, 5	1, 3, 4, 7, 12, 14, 15	ONGOING
Progress the Kingston Train Station Access and Relief Road Crossing Improvements (Major Project). (9)	2	3, 6, 9, 10, 11, 14, 17	2016/17
Progress the Ancient Market Place Public Realm Improvements (Major Project). (10)	2	7, 10, 11, 14, 17	2013/14
Implement Kingston Town Centre Area Action Plan (K+20) transport initiatives. This includes a significant redevelopment of Eden Quarter which is likely to involve major transport improvements in the area, such as the removal of buses from Eden Street, a new bus station site, and improvements to Fairfield Bus Station. Further details of these initiatives are outlined in K+20. (11)	1, 2, 3, 4, 5	1, 3, 4, 6, 7, 9, 10, 11, 14, 15, 16	2028
Improvements to Gateway 1 and Gateway 3 into KTC (as identified in K+20) are priority gateways for improvements as they have the greatest potential to provide transport benefits (as opposed to just defining the gateway). (12)	2	3, 10, 11	2016/17

Kingston Town Centre Actions	Supports MTS Goals	Supports Objectives	Timeframe for Delivery
Investigate the potential for a 20mph speed limit on highly populated pedestrian sections of the relief road (such as between Fairfield Bus Station, Kingston Train Station, and Queen Elizabeth Road Bridge). (13)	2, 3	3, 6, 11, 14	2016/17
Increase secure public cycle parking facilities in KTC including upgrading the existing cycle parking at <i>Kingston Station</i> to a secure facility, and requiring the provision of secure cycle parking as part of the <i>Eden Quarter</i> development proposals. (14)	2, 3, 4, 5	1, 3, 7, 13, 14, 15	KS: 2013/14 EQ: Ongoing
Work with partners to introduce a cycle hire scheme linking Surbiton, KTC, Hampton Court, and Richmond. (15)	2, 4, 5	3, 10, 13, 14	2013/14
Provide a safe and direct cycle route along Queen Elizabeth Road (note: this will require moving of 'Listed Wall' and would be dependent on redevelopment of Tiffin Boys School). (16)	2, 3, 5	3, 6, 10, 13, 14	2016/17
Improve cycling access along Queens Promenade/Portsmouth Road Transport Corridor. (17)	2, 3, 5	3, 6, 10, 13, 14	2016/17
Improve the surface of and widen Fairfield Recreation Ground Path (Footpath 15) to create a shared use walking and cycling path. (18)	2	3, 10, 13, 14	2016/17
Construct a pedestrian and cycle boardwalk along the River Thames (will require significant third party funding). (19)	2, 5	3, 10, 11, 13	2031/32
Work with Thames Landscape Strategy to improve pedestrian and cycling links along the River Thames from John Lewis to half mile tree (northern end of Lower Ham Road). Project to consider improvements to lighting, footway width/surface, segregation between cyclists and pedestrians, improved access along Lower Ham Road, improved entrances to Canbury Gardens. (20)	2, 5	3, 10, 11, 13, 14	2016/17
Improve pedestrian signage including Implementation of the Legible London way finding system. Legible London signage scheme should extend/link to Surbiton, including signage outside the University Campus. (21)	2	3, 10, 14	2016/17
The Council will develop a Freight Management Plan for KTC. (22)	1, 2, 5	4, 5, 14, 16	2013/14
Working with TfL and other authorities <i>review</i> the X26 bus route and <i>implement</i> measures to improve journey time reliability to Heathrow Airport. (23)	1	3, 14, 15	RV: 2013/14 IP: 2016/17
Working with local businesses and Kingston First, the Council will continue to <i>develop</i> , improve, and <i>implement</i> the travel plan network in the town centre; including provision of local travel information and promotion of car sharing schemes. (24)	1, 2, 3, 5	1, 3, 4, 5, 12, 13	ONGOING
Kingston University Actions	Supports MTS Goals	Supports Objectives	Timeframe for Delivery
The Council will continue to work with the University to implement their travel plan, including:	1, 2, 3, 5	1, 3, 4, 5	ONGOING

Kingston University Actions	Supports MTS Goals	Supports Objectives	Timeframe for Delivery
<ul style="list-style-type: none"> Working to improve and promote sustainable modes of travel to their site. Working with the University (and supporting their efforts) to manage car parking at university campuses. Continuing to increase/improve cycle parking provision and security. Exploring the best options for intercampus bus services. <p>(25)</p>			
Promote walking and cycling between KTC campus, Surbiton Station, and KTC (e.g. cycle hire scheme, cycle lanes, signage, footway condition, awareness of travel times etc).	2, 3, 5	1, 3, 4, 8, 10, 14	2011/12 - 2016/17

Kingston College Actions	Supports MTS Goals	Supports Objectives	Timeframe for Delivery
<p>The Council will continue to work with the College to implement their travel plan, including:</p> <ul style="list-style-type: none"> Working to improve and promote sustainable modes of travel to their site. Manage car parking at the College. <p>(27)</p>	1, 2, 3, 5	1, 3, 4, 5	ONGOING

Areas of Special Need: Norbiton Ward and Grove Ward.

Norbiton Ward Actions	Supports MTS Goals	Supports Objectives	Timeframe for Delivery
Improve cycling route through Hawks Road and Bonner Hill.	2, 3, 4, 5	3, 6, 8, 10, 13	2016/17
Widen pedestrian/cycle links beside St Josephs Primary School to accommodate cyclists.	2, 3, 4, 5	3, 6, 8, 10, 13, 14	2016/17
Provide secure cycle parking at Cambridge Road Estate.	2, 3, 4, 5	3, 8	2013/14

Grove Ward Actions	Supports MTS Goals	Supports Objectives	Timeframe for Delivery
Improve walking, cycling, and bus links, signage, and travel information between KTC and Surbiton.	2, 3, 4, 5	3, 4, 8, 10, 14	2016/17
Upgrade the pedestrian crossing outside the Waggon and Horses Pub (1 Surbiton Hill Road).	2, 3, 4	3, 6, 10	2016/17
Identify and implement public realm improvements to improve perceptions of safety from crime in the area	2, 3, 4	3, 7, 8, 10, 11	ONGOING

Train Stations: Kingston Station, Norbiton Station (on neighbourhood boundary), Berrylands Station (on neighbourhood boundary).

Sustainable Transport and Public Transport Accessibility: KTC has the best public transport accessibility in the neighbourhood. Accessibility becomes worse further out from KTC with the north and southeast of the area having the worst access to public transport. The table below contains a range of actions to improve sustainable modes of transport in the neighbourhood (please note: many actions to promote sustainable modes of transport are also listed in the tables above).

Sustainable Transport Actions	Supports MTS Goals	Supports Objectives	Timeframe for Delivery
Work with schools to improve and implement their travel plans. Priority schools in Kingston Neighbourhood for travel plan support are: Latchmere School, St Agatha's Catholic Primary School, Alexandra Infant School, St Paul's Church of England Junior School. (34)	2, 3, 5	1, 3, 4, 12, 13	2013/14 & ONGOING
The Council will review the K1, K2, K4, K5 bus corridors to identify opportunities to improve the reliability of these routes (e.g. eliminating parking obstructions). (35)	1, 2, 4, 5	3, 4, 8, 14	2013/14
Review pedestrian and cycle links into Richmond Park, including directional signage and travel times from closest bus stops and main roads. (36)	2	3, 10, 13	2013/14
Investigate (IV) and implement (IP) improvements to the all routes on the strategic cycle network. (37)	1, 2, 3, 4, 5	1, 3, 4, 6, 7, 10, 11, 12, 13, 14	IV: 2013/14 IP: 2022/23
Lobby TfL to install SCOOT technology in the London Road/Cambridge Road Area (from Queen Elizabeth Road to Park Road and Hawks Road) – <i>this would bring all of the town centre signal installations under this responsive control system.</i> (38)	1, 2	1, 4, 12, 14, 16	ONGOING
Explore options to improve sustainable transport access to Kingsmeadow Stadium on match days. (39)			

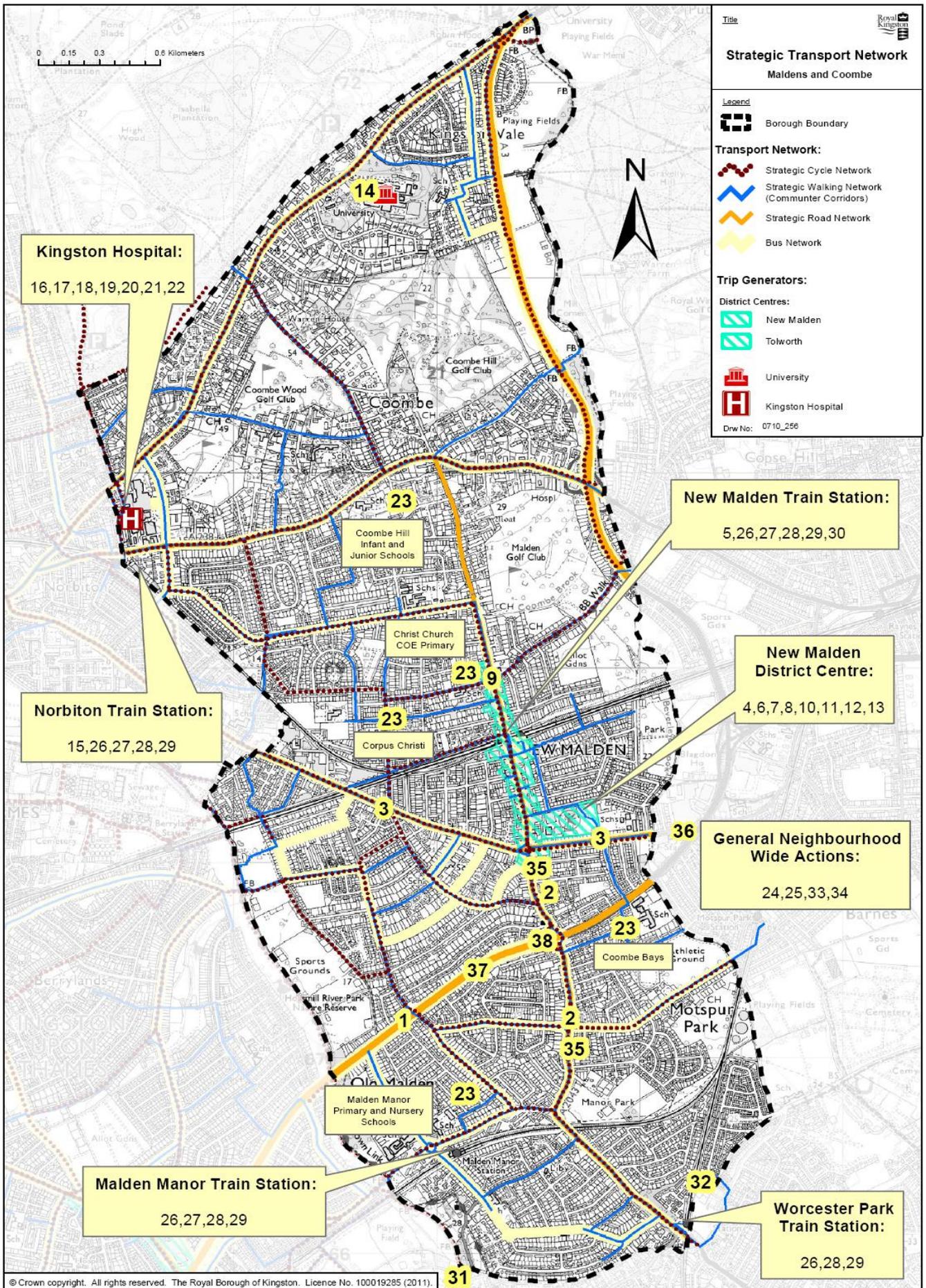
Traffic Congestion: The borough's congestion 'hot spots' and initiatives to smooth traffic flow are outlined in Section 2.2.10 (Roads and Management Vehicle Use), Section 3.2.2 (General Delivery Plan Actions), and Appendix 8.

Segregation Barriers: Relief Road, Cromwell Road, Fairfield North, London Road, Penrhyn Road, Surbiton Road, Cambridge Road, River Thames, Hogsmill River, other busy roads.

Segregation Barriers Actions	Supports MTS Goals	Supports Objectives	Timeframe for Delivery
<i>The Hogsmill River between AFC stadium and Thames Water</i> – Due to land ownership issues preventing public access there is no pedestrian or cyclist access across (or along) this section of the Hogsmill River. The Council propose to improve walking and cycling access in this area through a comprehensive redevelopment (as outlined in the Core Strategy). (40)	1, 2, 4, 5	3, 7, 8, 10, 11, 13	2019/20

Maldens and Coombe Neighbourhood

Figure 34: Maldens and Coombe Neighbourhood Actions Map



General Actions	Supports MTS Goals	Supports Objectives	Timeframe for Delivery
<i>LEZ Interim Solution</i> – The Council will work with TfL to extend the LEZ along the A3 to its junction with the A240 (Tolworth Junction), as well as north and south along Malden Road. (1)	2, 5	1, 12, 13	2013/14
Traffic congestion relief on Malden Road is a borough and sub-regional priority. (2)	1, 2	1, 4, 12, 13, 14	2016/17
Corridor improvements along Burlington and Kingston Road (these will also consider improvements to Burlington Road Shopping Parade). (3)	1, 2, 3, 4, 5	3, 4, 6, 14	2013/14

Major Trip Generators: New Malden Town Centre, Kingston University (Kingston Hill Road Campus).

New Malden District Centre Actions	Supports MTS Goals	Supports Objectives	Timeframe for Delivery
Review freight access and servicing arrangements in New Malden District Centre. (4)	1, 2, 5	4, 14, 16	2016/17
Work with Train Operating Companies to provide secure cycle parking and increase unsecured cycle parking at New Malden Station. (5)	2, 3, 4, 5	1, 3, 7, 13, 14, 15	2013/14
Install Electronic Train time signs in New Malden District Centre (6)	2	1, 3	2016/17
Reconstruct road surface in New Malden High Street and improve access for cyclists. (7)	1, 2	3, 9, 10, 11, 17	2016/17
Investigate kerb realignments to smooth traffic flow on New Malden High Street. If feasible realignments should be integrated with the reconstruction of the High Street road surface. (8)	1, 2	3, 4, 14, 17	2016/17
Coombe Road/Cambridge Avenue: <ul style="list-style-type: none"> Junction improvements Improve cycle crossing facilities at locations existing Zebra Crossing. (9)	2, 3	3, 6, 10	2013/14
Improve accessibility for cyclists and pedestrians through New Malden Fountain Roundabout (identified as major barrier in biking borough report). (10)	2, 3	3, 6, 10, 14	2016/17
Better management of public parking spaces to support the vitality and viability of the District Centre. Including a pricing review and a 250 parking space reduction in the Blagdon Road Car Park (as recommended in MVA parking study 2009). (11)	1, 4	14	2016/17
Improve pedestrian signage including consideration of implementing the Legible London way finding system (12)	2	3, 10	2019/20
Create a travel plan network in New Malden District Centre (i.e. area wide travel plan), and work with businesses/organisations to manage travel to their site and promote sustainable travel by employees and visitors. (13)	1, 2, 3, 5	1, 3, 4, 5, 12 13	2016/17

Kingston University (Kingston Hill Road Campus) Actions	Supports MTS Goals	Supports Objectives	Timeframe for Delivery
<p>The Council will continue to work with the University to implement their travel plan, including:</p> <ul style="list-style-type: none"> Working to improve and promote sustainable modes of travel to their site. Working with the University (and supporting their efforts) to manage car parking at university campuses. Continuing to increase/improve cycle parking provision and security. Exploring the best options for intercampus bus services. <p>(14)</p>	1, 2, 3, 5	1, 3, 4, 5	ONGOING
Kingston Hospital Actions	Supports MTS Goals	Supports Objectives	Timeframe for Delivery
Lobby Network Rail to improve step access from train to platform at Norbiton Train Station. (15)	3, 4	3, 9, 13, 15	2013/14
The Council will review the condition of the pedestrian route between Norbiton Station and Kingston Hospital e.g. accessibility for disabled users, signage, pedestrian crossings. (16)	2, 3, 4	3, 9, 13	2013/14
Work with Kingston Hospital to improve access into and within the site from Coombe Road. (17)	2, 4	3, 9, 10, 13	ONGOING
Improve pedestrian accessibility (including DDA compliance) on surrounding road network and bus stops. (18)	2, 3, 4	3, 9, 10, 13	2016/17
Ensure all bus stops in the immediate vicinity of the hospital have 'real-time' bus information. (19)	2	3, 9, 13	2013/14
Work with TfL to investigate opportunities to improve access via public transport from Tolworth (east of the A3) to the Hospital. The Council request the K1 bus service is extended to serve Kingston Hospital (i.e. create a circular route). (20)	2, 4	3, 9, 13, 14	2013/14
Work with TfL and other partners to investigate opportunities to improve access to the hospital (via public transport) from areas of greatest demand; including from areas outside the borough. (21)	2, 4	3, 9, 13, 14	ONGOING
<p>The Council will continue to work with Kingston Hospital to reduce car travel to the site through the implementation and ongoing development of their travel plan, including:</p> <ul style="list-style-type: none"> Management of onsite parking (particularly for staff), including controls on the supply, allocation, and price of parking Improved pedestrian access, circulation, and signage within the site; focusing on aligning the site around a central "street" linking onwards to Norbiton Station Adequate on site facilities for buses that terminate at the hospital Installation of electronic train & bus time information in hospital and provision of oyster card top up facilities Provision of quality travel information for staff, patients, and visitors Secure covered cycle parking in convenient locations on site and improved cycle links through the site. (22) 	1, 2, 3, 5	1, 3, 4, 5, 13	ONGOING

Areas of Special Need: No areas of special need.

Train Stations: New Malden Station, Malden Manor, Norbiton Station (on neighbourhood boundary), and Worcester Park (on borough boundary).

Sustainable Transport and Public Transport Accessibility: Public transport accessibility is best around New Malden Station, and towards Worcester Park Station. Public transport accessibility is worst in the north and west of the neighbourhood. The table below contains a range of actions to improve sustainable modes of transport in the neighbourhood (please note: many actions to promote sustainable modes of transport are also listed in the tables above).

Sustainable Transport Actions	Supports MTS Goals	Supports Objectives	Timeframe for Delivery
Work with schools to improve and implement their travel plans. Priority schools in the Maldens and Coombe Neighbourhood for travel plan support are: Corpus Christi Catholic Primary School, Malden Manor Primary and Nursery School, Coombe Hill Infant School, Combe Hill Junior School, Christ Church New Malden Church of England Primary School, Coombe Boys' School. (23)	2, 3, 5	1, 3, 4, 12, 13	2013/14 & ONGOING
Work with TfL to investigate an extension to the K1 bus route; creating a circular route that also serves Kingston Hospital. (24)	2, 4	1, 3, 4, 8, 13, 14	2013/14
The Council will review the K1, K2, K4, K5 bus corridors to identify efficiency improvements to these routes (e.g. eliminating parking obstructions). (25)	1, 2, 4, 5	1, 3, 4, 8, 13, 14	2013/14
Lobby Train Operating Companies to improve late night train services from New Malden, Malden Manor, Norbiton, and Worcester Park Station, in particular reduce the impact of engineering works on the provision of late night services. (26)	1, 2, 3, 4	1, 3, 4, 14, 15	ONGOING
The Council will strive to provide inviting, safe, accessible links and entrances to New Malden, Norbiton, and Malden Manor Train Stations. Of particular importance is to maintain and enhance all access points to New Malden Station. (27)	2, 3, 5	3, 9, 11, 15	NM: 2013/14 N: 2013/14 MM: 2019/20
Work with Network Rail and train operating companies to make Norbiton, New Malden, Worcester Park, and Malden Manor train stations accessible for disabled users (platforms). <i>Please note: The Council will also need to work with the London Borough of Sutton regarding Worcester Park station.</i> (28)	3, 4	3, 9, 13, 14, 15	N: 2013/14 NM: 2016/17 WP: 2019/20 MM: 2022/23
Work with the train operating company to provide secure cycle parking at New Malden, Worcester Park, Norbiton, and Malden Manor Train Stations. (29)	2, 3, 4, 5	1, 3, 4, 7, 13, 14, 15	NM: 2013/14 WP: 2016/17

Sustainable Transport Actions	Supports MTS Goals	Supports Objectives	Timeframe for Delivery
			N: 2016/17 MM: 2019/20
Work with Network Rail and the Train Operating Company to improve the facilities and cleanliness at New Malden Train Station. (30)	1, 2	3, 11, 17	ONGOING
Work with Surrey CC (and Epsom and Ewell District Council) to seek the provision of a footway along Old Malden Lane, which would complete a missing link of the London Loop and Hogsmill Walk. (31)	2, 3	3, 9, 10, 11, 13	ONGOING
Work with LB Sutton to improve pedestrian and cycle links from Old Malden to Worcester Park and Sutton. (32)	2, 3	3, 8, 10	2019/20
Investigate (IV) and implement (IP) improvements to the all routes on the strategic cycle network. (33)	1, 2, 3, 4, 5	1, 3, 4, 6, 7, 10 11, 12, 13,14	IV: 2013/14 IP: 2022/23
Working with TfL and other authorities <i>review</i> the X26 bus route and <i>implement</i> measures to improve journey time reliability to Heathrow Airport. (34)	1	3, 14, 15	RV: 2013/14 IP: 2016/17
Smooth traffic flow, improve bus reliability, and improve cycling facilities along Malden Road. (35)	1, 2, 3, 5	1, 3, 4, 6, 10, 12 13, 14,16, 17	2013/14
Work with Merton Council to improve pedestrian and cyclist access around/across Shannon's Corner. (36)	2, 3, 4, 5	3, 6, 10, 14	ONGOING

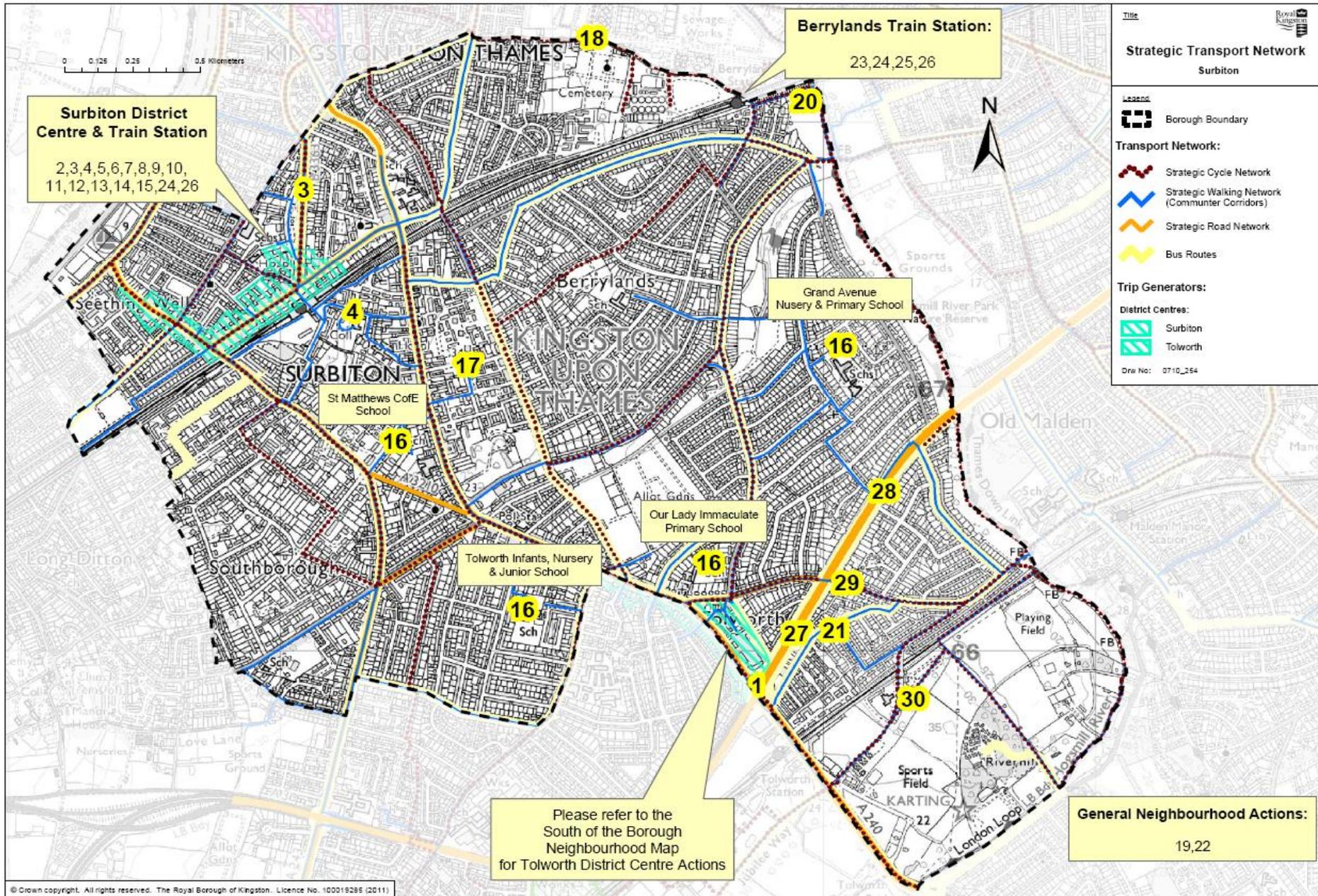
Traffic Congestion: The borough's congestion 'hot spots' and initiatives to smooth traffic flow are outlined in Section 2.2.10 (Roads and Management Vehicle Use), Section 3.2.2 (General Delivery Plan Actions), and Appendix 8.

Segregation Barriers: A3, Hogsmill River, Malden Road, Coombe Road, Coombe Lane West, Kingston Hill, Kingston Road, other busy roads.

Segregation Barriers Actions	Supports MTS Goals	Supports Objectives	Timeframe for Delivery
The Council will support TfL to progress feasibility studies to improve cycle facilities along the A3. Currently they are progressing designs in the section between Tolworth and Shannon's Corner. (37)	2, 3	3, 8, 10	ONGOING
Improve pedestrian and cyclist access across the A3. (38)	2, 4	3, 8, 10	ONGOING

Surbiton Neighbourhood

Figure 35: Surbiton Neighbourhood Actions Map



General Actions	Supports MTS Goals	Supports Objectives	Timeframe for Delivery
<i>LEZ Interim Solution</i> – The Council will work with TfL to extend the LEZ along the A3 to its junction with the A240 (Tolworth Junction), as well as north and south along Malden Road. (1)	2, 5	1, 12, 13	2013/14

Major Trip Generators: Surbiton Town Centre, Tolworth Town Centre (on neighbourhood boundary).

Surbiton District Centre Actions	Supports MTS Goals	Supports Objectives	Timeframe for Delivery
Lobby TfL to provide a cycle hire scheme linking Surbiton District Centre, KTC, Hampton Court, and Richmond. (2)	2, 4, 5	3, 10, 13, 14	ONGOING
Improve walking, cycling, and bus links, signage, and travel information between KTC and Surbiton District Centre; including signage of all bus stops and bus routes when exiting Surbiton Station. (3)	1, 2, 3, 4, 5	1, 3, 4, 8, 10, 14	2011/12 – 2016/17
Improvements to path linking Surbiton Station/District Centre to Hospital and residential areas to the south-east: (i) Work with the train operating company to ensure this path is maintained in a good state of repair and is cleaned regularly (short-term) (ii) Upgrade the path as part of long-term development plans in the area (reliant on redevelopment of Surbiton Station). (4)	2, 4	3, 7, 10, 11, 13, 14	(i) 2013/14 & ONGOING (ii) ONGOING
The Council will progress Surbiton public realm improvement scheme (Major Project). (5)	1, 2, 3	3, 4, 6, 7, 9, 10, 11, 14, 17	2013/14 & ONGOING
Improve pedestrian signage, including the installation of the Legible London way finding system. Legible London signage scheme should extend/link to KTC, including signage outside the university campus. (6)	2	3, 10	2016/17
Install electronic train time signs in Surbiton District Centre. (7)	2	1, 3	2016/17
Lobby for Surbiton Train Station's travel zone to be reclassified. (8)	1, 2, 4, 5	1, 3, 14, 15	ONGOING
Work with the train operating company to improve the management (and where required increase the amount) of secure and short stay cycle parking at Surbiton Station. (9)	2, 3, 4, 5	1, 3, 7, 13, 14	ONGOING
The Council will review freight access and servicing arrangements in Surbiton District Centre, including investigations into the development of delivery servicing plans. (10)	1, 2	4, 14, 16	2016/17
<i>Investigate</i> and <i>implement</i> solutions to smooth traffic flow and improve bus journey times along Brighton Road. (11)	1, 2, 5	1, 3, 4, 12, 14	IV: 2013/14 IP: 2016/17
Retain short term parking at around 500 spaces, and improve signage of available parking. Also reduce the	1, 4	14	ONGOING

Surbiton District Centre Actions	Supports MTS Goals	Supports Objectives	Timeframe for Delivery
capacity of Surbiton Station Glenbuck Road car park as part of redevelopment proposals (412 spaces only 60% occupied). (12)			
Work with Network Rail to seek a reduction in long stay commuter parking at Surbiton Station, which attracts car trips into the area from a wide catchment but does not add to the vitality of the District Centre. (13)	1, 2, 5	1, 4, 14	ONGOING
Install publicly available electric vehicle charging points in Surbiton Town Centre. (14)	2, 5	1, 12	2013/14
Create a travel plan network in Surbiton District Centre (i.e. area wide travel plan), and work with businesses/organisations to manage travel to their site and promote sustainable travel by employees and visitors. (15)	1, 2, 3, 5	1, 3, 4, 5, 12, 13	2016/17

Areas of Special Need: No areas of special need.

Train Stations: Surbiton Station, Berrylands Station.

Sustainable Transport and Public Transport Accessibility: Public Transport accessibility is best around Surbiton Station, and Tolworth Town Centre. Public transport accessibility is worst in the east and South West of the neighbourhood. The table below contains a range of actions to improve sustainable modes of transport in the neighbourhood (please note: many actions to promote sustainable modes of transport are also listed in the tables above).

Sustainable Transport Actions	Supports MTS Goals	Supports Objectives	Timeframe for Delivery
Work with schools to improve and implement their travel plans. Priority schools in Surbiton Neighbourhood for travel plan support are: Grand Avenue Primary and Nursery School, Our Lady Immaculate Catholic Primary School, St Matthew's Church of England Primary School, Tolworth Infant and Nursery School, Tolworth Junior School (16)	2, 3, 5	1, 3, 4, 12, 13	2013/14 & ONGOING
Investigate the introduction of a Controlled Parking Zone in area bounded by Ewell Road, King Charles Road, main rail line and Browns Road/King Charles Crescent. The CPZ is required to prevent commuter parking. (17)	1, 2, 5	1, 3, 12	2013/14
Improve perceptions of safety for cyclists and pedestrians along lower Marsh Lane. (18)	2, 3	3, 7, 8, 11	2016/17
Investigate (IV) and implement (IP) improvements to the all routes on the strategic cycle network. (19)	1, 2, 3, 4, 5	1, 3, 4, 6, 7, 10, 11, 12, 13, 14	IV: 2013/14 IP: 2022/23
If feasible provide an off-road cycle link between Berrylands Station and Hogsmill cycle bridge (Green Lane). (20)	2, 3	3, 10	2019/20

Sustainable Transport Actions		Supports MTS Goals	Supports Objectives	Timeframe for Delivery
Implement improvements to walking and cycling routes in Barnsbury Lane and the surrounding area.	(21)	2, 3	3, 10	2019/20
The Council will review the K1, K2, K4 bus corridors to identify efficiency improvements to these routes (e.g. eliminating parking obstructions).	(22)	1, 2, 4, 5	1, 3, 4, 8, 14	2013/14
Work with Network Rail and the train operating company to make Berrylands Train Station accessible for disabled users (platforms).	(23)	3, 4	3, 8, 9, 13, 15	2025/26
Lobby the train operating company to improve late night train services from Surbiton and Berrylands Stations, reduce the impact of engineering works on late night services, and increase peak train frequencies from Berrylands Station.	(24)	1, 2, 3, 4	1, 3, 4, 8, 14, 15	ONGOING
Work with the train operating company to provide secure cycle parking at Berrylands Train Station.	(25)	2, 3, 4, 5	1, 3, 7, 13, 14, 15	2019/20
Work with Network Rail and the train operating company to improve the facilities and cleanliness at Berrylands and Surbiton Train Stations.	(26)	1, 2	3, 15	ONGOING

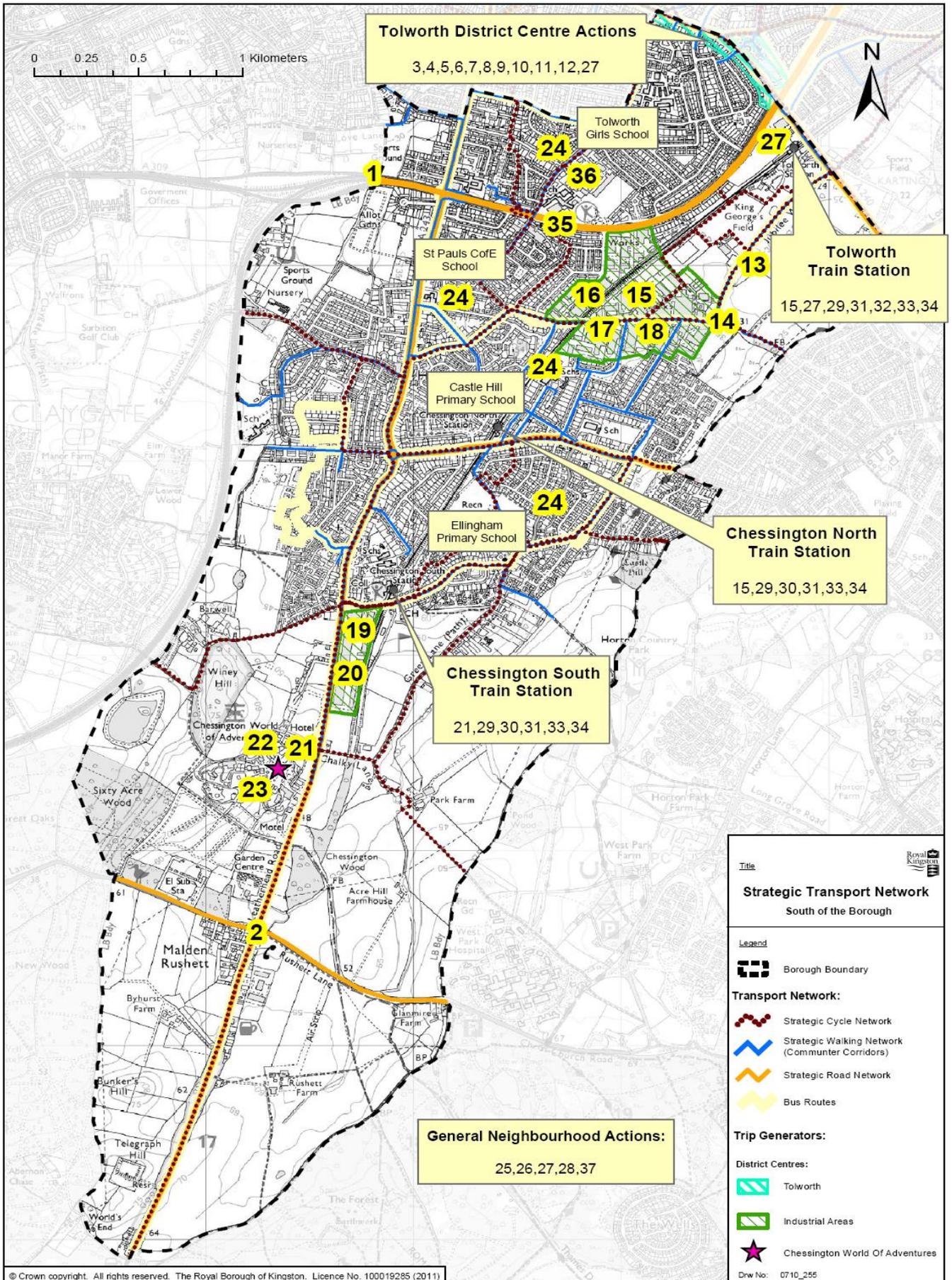
Traffic Congestion: The borough's congestion 'hot spots' and initiatives to smooth traffic flow are outlined in Section 2.2.10 (Roads and Management Vehicle Use), Section 3.2.2 (General Delivery Plan Actions), and Appendix 8.

Segregation Barriers: Rail lines, A3, Kingston Road, Hogsmill River, Ewell Road, Hook Road, Kingsdowne Road, Ditton Road, Warren Drive North, Surbiton Hill Road, Victoria Road, Hogsmill River, River Thames.

Segregation Barriers Actions		Supports MTS Goals	Supports Objectives	Timeframe for Delivery
Support TfL feasibility studies to improve cycle facilities along the A3. Currently TfL is progressing designs in the section between Tolworth and Shannons Corner.	(27)	2, 3	3, 8, 10	ONGOING
Lobby TfL to provide cycle access to Oakdene footbridge (currently it only has stairs).	(28)	2, 4	3, 8, 10	ONGOING
Work with TfL to improve pedestrian and cyclist access via Warren Drive subway.	(29)	2	3, 8, 10	ONGOING
The Council will work with Kingston University and other stakeholders to provide a shared use (walking and cycling) 'greenway route' through the University sports grounds that links the Hogsmill Valley Walk, A240 (Kingston Road), Sheep House Way, and Old Malden Lane (via Camping Ground/Speedway access). <i>The proposed route is shown in Appendix 23.</i>	(30)	2, 3, 4	3, 8, 10	ONGOING

South of the Borough Neighbourhood

Figure 36: South of the Borough Neighbourhood Map



General Actions	Supports MTS Goals	Supports Objectives	Timeframe for Delivery
<i>LEZ Preferred Solution:</i> Work with TfL and Surrey Authorities to extend the LEZ along the A3 to its junction with the A244 (in Surrey), and along Kingston Road to its junction with Worcester Park Road (in Surrey). (1)	2, 5	1, 12, 13	2016/17
Leatherhead/Hook Road is important strategic transport corridor in the Neighbourhood, but as part of the TLRN is controlled by TfL. The Council will work with TfL to identify and implement improvements to this corridor including congestion relief in the southern part of the corridor and ensuring adequate safe crossing opportunities for cyclists and pedestrians. In particular, safety improvements and congestion relief are required at Leatherhead/Fairoak Lane/Rushett Lane junction. (2)	1, 2, 3	1, 3, 4, 6, 9, 10, 12, 14, 16	ONGOING

Major Trip Generators: Tolworth Town Centre, Chessington Industrial Estate, Barwell Business Park, Chessington World of Adventures.

Tolworth District Centre Actions	Supports MTS Goals	Supports Objectives	Timeframe for Delivery
The Council will complete the Tolworth Public Realm Improvement Scheme (major scheme). (3)	1, 2, 3, 4, 5	1, 3, 4, 6, 7, 8, 9, 10, 11, 12, 13, 14, 16	2013/14
The Council will investigate the following future extensions to the Tolworth Public Realm Improvement Scheme: <ul style="list-style-type: none"> Extend the Greenway north along A240 (Ewell Road) to King Charles Road Extend the Greenway South along A240 (Kingston Road) to Jubilee Way. (4)	2, 3, 5	1, 3, 6, 7, 8, 9, 10, 11, 12, 13, 14	2019/20
Review freight access and servicing arrangements in Tolworth District Centre. (5)	1, 2, 5	1, 4, 14, 16	2016/17
Work with Tolworth Tower to improve permeability through the site for pedestrians and cyclists. (6)	2	3, 8, 10, 11	ONGOING
Investigate public realm, parking, and cycling improvements in Ewell Road (Warren Drive North to A3). (7)	2, 3, 4	3, 6, 10, 11, 14	2016/17
Improve pedestrian signage including consideration of implementing the Legible London way finding system (8)	2	3, 10	2016/17
Install Electronic Train time signs in Tolworth District Centre. (9)	2	1, 3	2016/17
The Council will resist any reduction of public parking, and seek an increase in the level of short term public parking (shoppers) at Tolworth Tower by reducing the amount of long stay private office parking. (10)	4	14	ONGOING
Install publicly available electric vehicle charging points and car club bays in Tolworth District Centre. (11)	2, 5	1, 12	2013/14
Create a travel plan network in Tolworth District Centre (i.e. area wide travel plan), and work with businesses/organisations to manage travel to their site and promote sustainable travel by employees and visitors. In particular the Council will focus on working with businesses in Tolworth Tower to develop travel plans and implement travel planning initiatives, with the aim of reducing the levels of office parking. (12)	1, 2, 3, 5	1, 3, 4, 5, 12, 13	2016/17

Chessington Industrial Estate Actions	Supports MTS Goals	Supports Objectives	Timeframe for Delivery
Improve freight access and signage, including possible lorry lay-by on Jubilee Way. (13)	1, 2, 3	11, 12, 14, 16	2013/14
The Council will progress the following improvements to cycle facilities in area: (i) Cycle links across and along Bonesgate Stream (need to work with Surrey Authorities to improve cycle route on Surrey side of stream) (ii) Improve cycle links along Jubilee Way; improved signage for cyclists is also required (iii) Improve links through King George's Playing Field (iv) Make the existing advisory cycle lane on Cox Lane permanent (v) Improve Cranborne subway, make it available as a cycle route, and sign it as a cycle route (to Chessington Industrial Estate and green spaces to the south). (vi) Investigate a cycle hire scheme to facilitate cycle trips between Tolworth Train Station, Chessington North Train Station, and Chessington Industrial Estate. (vii) Generally improved signage for cyclists. (14)	1, 2, 3, 4, 5	1, 3, 4, 6, 8, 10 11, 12, 13, 14, 15	(i): 2016/17 (ii): 2016/17 (iii): 2016/17 (iv): 2013/14 (v): 2013/14 (vi): 2016/17 (vii): 2016/17
Improve pedestrian directional signage from Chessington North and Tolworth Train Station to Chessington Industrial Area. (15)	2	3, 10, 14	2016/17
Work with business to improve and implement their travel plans. (16)	1, 2, 3, 5	1, 3, 4, 5, 12, 13,16	ONGOING
Provide 'real-time' bus information at bus stops in Cox Lane. (17)	2	3	2016/17
The Council will strive to work with local business and TfL to provide an Oyster top up facility within the Industrial Estate. (18)	2	3	2013/14
Barwell Business Park Actions	Supports MTS Goals	Supports Objectives	Timeframe for Delivery
Work with TfL to improve signage for vehicles accessing the site (i.e. to locate the entrance to the site). (19)	1, 2	14, 16	ONGOING
Work with businesses to develop, improve, and implement travel plans. (20)	1, 2, 3, 5	1, 3, 4, 5, 12, 13, 16	ONGOING

Chessington world of Adventures Actions	Supports MTS Goals	Supports Objectives	Timeframe for Delivery
Review and improve pedestrian signage between CWA and Chessington South Station. (21)	2	3, 10, 14	2016/17
Work with CWA to market the train to Surbiton Train Station then bus to CWA link. (22)	2, 5	3, 4, 14,	ONGOING
The Council will continue to work with CWA to promote and improve sustainable travel options and reduce car travel to the site through the implementation of their travel plan including: <ul style="list-style-type: none"> • Management of the onsite parking (particularly for staff) • Offer discounted or combined ticket prices for those travelling to the site on public transport • Adequate on site facilities for buses that terminate at the site (specifically for bus route 71) • Install Electronic Train time information and provide oyster card top up facilities • Provide good quality travel information to staff and visitors. (23) 	2, 5	1, 3, 4, 5, 12, 13	ONGOING

Areas of Special Need: No areas of special need.

Train Stations: Tolworth Station, Chessington North Station, Chessington South Station.

Sustainable Transport and Public Transport Accessibility: Generally, public transport accessibility is poor across the entire neighbourhood. The locations with the best access to public transport are along Leatherhead Road, and near Tolworth Town Centre. Tolworth Girls school has poor access to public transport (PTALS rating = poor – none), and is more than 400m from the nearest bus stop. The table below contains a range of actions to improve sustainable modes of transport in the neighbourhood (please note: many actions to promote sustainable modes of transport are also listed in the tables above).

Sustainable Transport Actions	Supports MTS Goals	Supports Objectives	Timeframe for Delivery
The Council will work with schools to improve and implement their travel plans. Priority schools in SOB Neighbourhood for travel plan support are: Ellingham Primary School, Castle Hill Primary School, St Paul's Church of England Primary School, St Mary's Church of England Primary School, Tolworth Girls ' School (24)	2, 3, 5	1, 3, 4, 12, 13	2013/14 & ONGOING
Implement improvements to cycle links to and through green spaces in South of the Borough (25)	2, 3, 5	3, 8, 10, 11, 13	2028/29
The Council will complete a travel survey of South of Borough residents to determine their travel habits, modes, origins and destinations (as well as desired); then use this to determine the best areas to improve bus services in the area (i.e. public transport accessibility). (26)	1, 2, 4, 5	1, 3, 4, 8, 12, 13, 14, 16	2013/14
Work with TfL to extend the 281 bus service from the rear of Tolworth Tower across the A3 to serve Tolworth Station, housing, and facilities south of the A3. This should be carried out in conjunction with any significant	1, 2, 4	3, 8, 14	ONGOING

Sustainable Transport Actions	Supports MTS Goals	Supports Objectives	Timeframe for Delivery
development of the former government offices site Tolworth. (27)			
The Council will review the K1, K2, K4 bus corridors to identify efficiency improvements to these routes (e.g. eliminating parking obstructions). (28)	1, 2, 4, 5	1, 3, 4, 8, 14	2013/14
Work with Train Operating Companies to improve train frequencies on the Chessington South rail line, particularly for late night and off-peak (including weekends) train services; to reduce the impact of engineering works on late night services; and reduce general disruptions to services. (29)	1, 2, 3, 4	1, 3, 4, 8, 14, 15	ONGOING
Lobby for the reclassification of Chessington North and South Train Stations travel zone as means to reduce travel costs (and to help overcome the poor PTALs rating of the area). (30)	1, 2, 4, 5	1, 3, 8, 14, 15	ONGOING
Work with Network Rail and the train operating company to make Tolworth, Chessington North, and Chessington South Train Stations accessible for disabled users (platforms). The Council will provide blue badge parking at Chessington South station to compliment improvements to platform access. (31)	3, 4	3, 8, 9, 14, 15	T: 2025/26 CN: 2022/23 CS: 2019/20
Tolworth Station – The Council will work with the train operating company and TfL to: (i) Improve platform accessibility (for disabled users) (ii) Improve the forecourt and booking hall (iii) Provide secure cycle parking (iv) Improved interchange (timing) with buses and display of ‘real-time’ bus information within the station. (32)	2, 3, 4, 5	3, 8, 9, 14, 15	(i) 2025/26 (ii) ONGOING (iii) 2016/17 (iv) 2013/14
The Council will work with the Train Operating Company to provide secure cycle parking at Tolworth, Chessington North, and Chessington South Train Stations. (33)	2, 3, 4, 5	1, 3, 7, 13, 14, 15	T: 2016/17 CN: 2019/20 CS: 2019/20
Work with Network Rail and the Train Operating Company to improve the facilities and cleanliness at Chessington North, Chessington South, and Tolworth Train Stations. (34)			
The Council will work with TfL to improve pedestrian and cycling access/safety via Fullers Way Subway. <i>Please note: Fullers Way Subway is a key route serving Tolworth Girls School and Southborough High.</i> (35)	2, 3, 4, 5	3, 4, 8, 10, 13, 14	ONGOING
Improve walking, cycling, and public transport links to Tolworth Girls School (from surrounding area, nearest bus stations), including links across the A3; and prioritise school for school travel plan support. (36)	1, 2, 3, 4, 5	3, 4, 5, 6, 14	ONGOING
Investigate (IV) and implement (IP) improvements to the all routes on the strategic cycle network. (37)	1, 2, 3, 4, 5	1, 3, 4, 6, 7, 10, 11, 12, 13, 14	IV: 2013/14 IP: 2022/23

Traffic Congestion: The borough’s congestion ‘hot spots’ and initiatives to smooth traffic flow are outlined in Section 2.2.10 (Roads and Management Vehicle Use), Section 3.2.2 (General Delivery Plan Actions), and Appendix 8.

Segregation barriers: A3, Kingston Road, Hook Road, Hook Roundabout, Leatherhead Road, Hogsmill River, Bonesgate Stream.

(3.3) COMPLIANCE CHECK 3 - LIP2 ACTIONS AND MTS GOALS/CHALLENGES

The table below demonstrates how the MTS Goals and Challenges will be delivered through the implementation of the General Delivery Plan Actions and the Neighbourhood Delivery Plan Actions.

Table 11: Compliance Check 3 – MTS versus LIP Delivery Plan Actions

MTS GOAL	MTS CHALLENGE	SUPPORTING DELIVERY PLAN ACTIONS				
		General	KT	NM	S	SOB
Goal 1 – Support economic development and population growth	Supporting sustainable population and employment growth	GA1, GA2, RTA1, RTA2, PTA1, PTA2, PTA6, PTA7, PTA10, STA1, STA2, STA4	1, 3, 8, 24, 25 27	13, 14, 22	15, 24	12, 16, 20, 26
	Improving transport connectivity	GA1-GA3, RTA1-RTA4, PTA1-PTA3, PTA6, PTA7, PTA10, CA1, CA3, CA4, STA1, STA4, MVA3, MVA7, MVA8, PA2	1, 3-5, 8, 11, 22, 24, 35, 37	3, 4, 11, 25, 34	3, 8, 10, 12, 13, 15, 17, 19, 22, 24	3, 5, 12-14, 16, 19, 20, 26-30, 37
	Delivering an efficient and effective transport system for people and goods	GA1-GA3, RTA1, RTA3, PTA11, PTA12, ITA1, MVA1-MVA7, MA1-MA3, CCA6-CCA8	3, 5, 8, 11, 23 35, 38, 39	2, 3, 7, 8, 25, 26, 30, 34, 35	3, 5, 11, 22, 24, 26	2, 3, 26, 28, 29, 34, 36
Goal 2 – Enhance the quality of life for all Londoners	Improve journey experience	GA1-GA3, RTA1, RTA2, PTA1-PTA3, PTA5-PTA16, ITA1-ITA5, CA1-CA9, WA1-WA7, MVA2-MVA7, MA1-MA3, PA1, SA1-SA3, SA5-SA7	1-9, 11, 14, 16, 17, 20, 21, 26, 28-33, 35-39	2, 3, 5, 6, 8-10, 12, 14, 16-21, 24-26, 29-33, 35-38	3-9, 11, 18-22, 24-30	2-4, 6, 7, 14-19, 21, 25-30, 32-37
	Enhance the built and natural environment	GA1, GA3, PTA12, ITA3, CA2, WA1, WA3, WA5-WA7, SA7	5, 9-13, 19, 20, 33, 39	3, 7, 27, 31-33, 36	5, 20	3, 4, 7-9, 14, 25
	Improving air quality	GA1- GA3, RTA1, RTA2, PTA1-PTA3, PTA6, PTA7, PTA9-PTA12, ITA2, ITA3, CA1-CA13, WA1-WA7, STA1-STA5, SVA1-SVA4, MVA3-MVA7, PA1, PA2, CCA1-CCA6	1, 3-5, 8, 11, 14-17, 19, 20, 22 24-31 33-35, 37-39	1-5, 8 13, 14, 22-26, 29, 32, 35-38	1-3, 5, 8-11, 13-19, 21, 22, 24, 25, 27, 28, 30	1-5, 7 11, 12, 14, 16 20, 22-30, 32, 33 36, 37
	Improving noise impacts	MVA7	22	4	10	5, 13
	Improving health impacts	GA1-GA3, PTA9, ITA3, CA1-CA14, WA1-WA7, STA1-STA5, PA2, SA1-SA3, SA5, SA7, HA1	5, 9, 11-21, 24-34, 36, 37, 39	3, 5, 7, 9, 10, 12-14, 16, 18, 22, 23, 27 29, 31-33, 35-38	2-6, 9 13, 15, 16, 18-21, 25, 27-30	3, 4, 6-8, 12, 14-16, 20, 23-25, 32, 33, 35-37
Goal 3 – Improve the safety and security of all Londoners	Reducing crime, fear of crime, and antisocial behaviour	GA1, GA3, PTA7, PTA10, PTA13, ITA3, CA7-CA10, WA1-WA3, SAT3-STA5, PA1 PA3, SA5-SA7	5, 11,14, 24- 27, 30 31, 33	5, 13, 14, 16, 22, 26, 27, 29	3, 5, 9, 15, 18 21, 24, 25	3, 7, 12, 16, 29, 32, 33, 35, 37
	Improving road safety	GA1, GA3, PTA13, ITA3, CA1-CA4, CA6, CA12, WA1, WA2, STA1, STA2, PA1, SA1-SA6, DA1-DA3	5, 11, 13, 16, 17, 26, 28, 29 31, 32, 34, 37	3, 9, 10, 16, 18, 23, 27, 31-33, 35, 37	3, 5, 16, 19, 20, 21, 27,309	2-4, 7, 13, 14, 24, 25, 36, 37
	Improving public transport safety	GA1, PTA4, PTA5, PTA8, PTA13-PTA15		15, 28	23	31, 32
Goal 4 – Improve transport opportunities for all Londoners	Improving Accessibility	GA1, GA3, RTA1-RTA4, PTA1-PTA4, PTA6, PTA7, PTA10-PTA15, ITA1, CA1-CA4, CA7-CA9, CA11, CA12, WA1, WA2, SVA4, PA2, DA1-DA3, HA1	1-3, 5, 8, 10, 11, 14, 15, 29, 31, 35, 37, 39	3, 5, 11, 15, 16, 18, 20, 21, 24, 25, 26, 29, 33, 38	2-4, 8, 9, 12, 19, 22-25, 28,30	3, 7, 10, 14, 26-33, 35-37
	Supporting regeneration and supporting deprivation	GA3, PTA10, SVA4, PA2	8, 10, 11, 28-33, 39	11, 20, 24, 26	8, 12, 24	3, 7, 10, 26, 27, 29, 30
Goal 5 – Reduce transport’s contribution to climate change and improving its resilience	Reducing CO ₂ emissions	GA1-GA3, RTA1, RTA2, PTA1-PTA3, PTA6, PTA7, PTA9, PTA10-PTA12, ITA1, ITA3, CA1-CA5, CA10-CA12, WA1-WA6, STA1-STA5, SVA1-SVA4, MVA7, PA3, CCA1, CCA3-CCA6	1-5, 8, 11, 14-17, 19, 20, 22, 24-31, 34, 35, 37, 39	1-5, 13, 14, 22, 23, 25, 27, 29, 33, 35, 36	1-3, 8, 9, 11, 13-17, 19, 22, 25	1, 3-5, 11, 12 14, 16, 23-26 28, 30, 32, 33, 35-37
	Adapting to Climate Change	CCA7-CCA9				

(3.4) PROGRAMME OF INVESTMENT

The POI is derived from the LIP Delivery Plan Actions and sets out the Council's high level transport investment programme for 2011/12 to 2013/14 (and beyond for proposed Major Schemes). This section also discusses the borough's detailed annual transport investment programme (which is submitted to TfL annually as a document called the Annual Spending Submission), major schemes, and risk management.

(3.4.1) Programme Overview

Table 12 contains the borough's POI for the period 2011/12 to 2013/14. The programme reflects the Delivery Plan Actions identified above, and is focused on achieving the MTS Goals and LIP Objectives in a cost effective manner. *Please note:* the POI illustrates which MTS Goals and LIP Objectives each transport intervention helps to deliver.

The POI is divided into 5 areas as follows:

- *Strategic Transport Programme* – This programme contains holistic or borough-wide interventions that will cost less than £1m to deliver. Interventions include comprehensive upgrades to RBKs 'strategic road, cycling, and walking Routes', and schemes that create benefits that extend beyond the immediate area (i.e. borough wide implications). The majority of this programme will be delivered through TfL LIP Integrated Transport 'Corridors & Neighbourhood' funding.
- *Neighbourhoods Programme* – This programme contains smaller scale interventions in each of our four neighbourhood areas (Kingston Town, Surbiton, Maldens & Coombe, and South of the Borough), and reflects RBK's internal administrative boundaries. This programme ensures that neighbourhood-specific transport issues are addressed. The majority of this programme will be delivered through TfL LIP Integrated Transport 'Corridors and Neighbourhood' funding.
- *Smarter Travel Programme* – This programme contains proposals which seek to create a shift towards sustainable travel behaviour, including initiatives to promote road safety. It is divided into four core areas; cycle training, travel awareness and information, schools sustainable transport, and workplace sustainable transport. The majority of this programme will be delivered through TfL LIP Integrated Transport 'Smarter Travel' funding.
- *Maintenance Programme* – This programme outlines funding made available to the borough from TfL for maintenance of the principal road network and bridge strengthening/assessment; however the programme will also be supplemented by Council capital/revenue where appropriate. The allocation of funds for principal road maintenance is determined by annual road condition surveys. *Please note:* non-principal roads are funded through the Council's capital and revenue budgets.
- *Major Schemes Programme* – This programme contains comprehensive schemes that will cost more than £1m to deliver. Major schemes contain packages of measures that make significant transformations to a particular area. The programme will primarily be delivered through TfL Major Scheme and Council Capital funding.

The POI is indicative only, but presents a picture of where the Council intends to direct transport funding over the next three years. There is flexibility to change or update the programme in response to delays, cost savings/over-runs, stakeholder feedback, new evidence as to the likely impact of interventions, changes in priority, or changes in funding availability. Where additional funding becomes available schemes will be added to the POI from the Council's reserve list of transport schemes.

Each year an Annual Spending Submission will be submitted to TfL for approval. The Annual Spending Submission is extracted from the relevant year of the POI and provides a detailed breakdown of transport initiatives to be investigated, designed, and/or delivered in the subsequent financial year (as opposed to the high level approach of the POI). The Council has developed a Transport Initiative Prioritisation System, which is used to develop the Annual Spending Submission and to guide the development of the POI. Due to the high level nature of the POI, the Transport Initiative Prioritisation System is only suitable to be used to guide the development of the 3-year programme. *Please refer to Sections 3.4.2 and 3.4.3 for further information on the Transport Initiative Prioritisation System.*



Programme of Investment - Reserve Schemes

STRATEGIC ROUTE 1 PROGRAMME (A307) - This programme will implement a phased package of comprehensive measures along this strategic corridor in future Programmes of Investment (i.e. 2014+). This route has been determined as a priority route for investment in LIP2. Specific areas for investment are currently being determined.

STRATEGIC ROUTE 3 PROGRAMME (A238) - This programme will implement a phased package of comprehensive measures along this strategic corridor in future Programmes of Investment (i.e. 2014+), however the 'Future & reserve scheme development' programme will enable RBK to undertake a detailed analysis of this corridor to determine future priorities of investment.

STRATEGIC ROUTE 6 PROGRAMME (A243) - This programme will implement a phased package of comprehensive measures along this strategic corridor. Priority segments identified on this route over the next three years include Hook Road (between Ash Tree Close and Verona Drive).

STRATEGIC ROUTE 8 PROGRAMME (B282) - This programme will implement a phased package of comprehensive measures along this strategic corridor in future Programmes of Investment (i.e. 2014+), however the 'Future & reserve scheme development' programme will enable RBK to undertake a detailed analysis of this corridor to determine future priorities of investment.

STRATEGIC ROUTE 9 PROGRAMME (B3370) - This programme will implement a phased package of comprehensive measures along this strategic corridor in future Programmes of Investment (i.e. 2014+), however the 'Future & reserve scheme development' programme will enable RBK to undertake a detailed analysis of this corridor to determine future priorities of investment.

STRATEGIC ROUTE 10 PROGRAMME (B3363) - This programme will implement a phased package of comprehensive measures along this strategic corridor in future Programmes of Investment (i.e. 2014+), however the 'Future & reserve scheme development' programme will enable RBK to undertake a detailed analysis of this corridor to determine future priorities of investment.

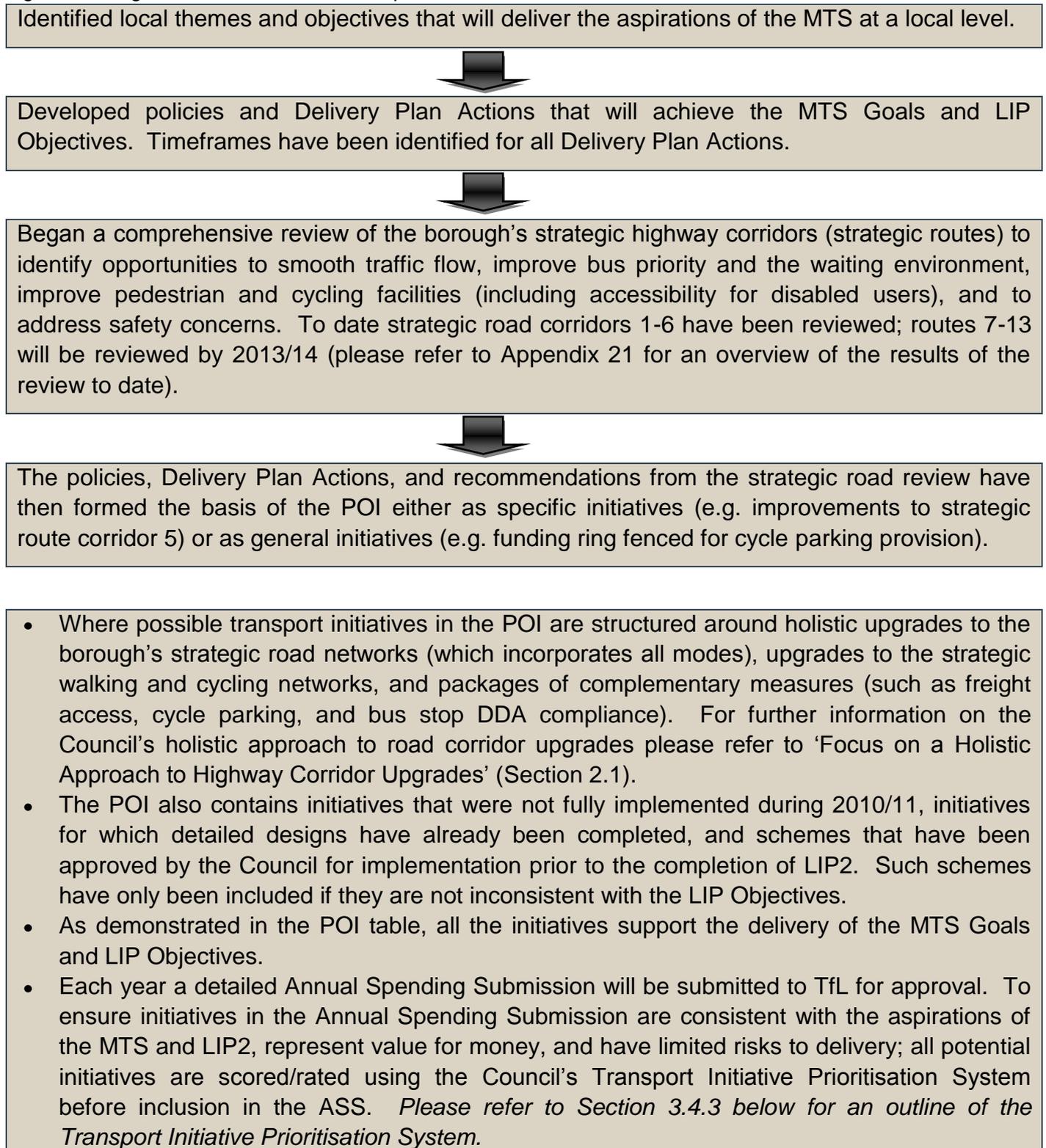
STRATEGIC ROUTE 11 PROGRAMME (SURBITON CRESCENT) - This programme will implement a phased package of comprehensive measures along this strategic corridor in future Programmes of Investment (i.e. 2014+), however the 'Future & reserve scheme development' programme will enable RBK to undertake a detailed analysis of this corridor to determine future priorities of investment.

STRATEGIC ROUTE 13 PROGRAMME (B280) - This programme will implement a phased package of comprehensive measures along this strategic corridor in future Programmes of Investment (i.e. 2014+), however the 'Future & reserve scheme development' programme will enable RBK to undertake a detailed analysis of this corridor to determine future priorities of investment.

(3.4.2) Developing the Programme of Investment

In developing the POI, the Council has considered documents and strategies of importance, the borough's geographic layout, local challenges and opportunities, and then having regard to these factors has carried out the following:

Figure 37: Programme of Investment Development Flow Chart



(3.4.3) Transport Initiative Prioritisation System

Assessment Area	Assessment Criteria	Scoring Options	Details
1. POLICY COMPLIANCE	MTS GOALS Economic Development and Population Growth Quality of Life Safety and Security Opportunities for All Climate Change	+1	<i>Positive Impact on Goal</i>
		-1	<i>Negative Impact on Goal</i>
		0	<i>Neutral Impact on Goal</i>
		Provide score for <u>each</u> Goal. Total score possible is therefore +5 to -5	
	LIP OBJECTIVES	+1	<i>Positive Impact on LIP Objective</i>
	1: Reduce CO2 emissions from road transport	-1	<i>Negative Impact on LIP Objective</i>
	2: Climate Change resilience	0	<i>Neutral Impact on LIP Objective</i>
	3: Promote sustainable modes		
	4. Reduce congestion, smooth traffic flow at congestion hotspots		
	5. Reduce need to travel during peak congestion times		
	6. Reduce KSIs		
	7. Reduce crime and fear of crime		
	8. Improve links to/from/ within deprived areas and areas with poor public transport access		
9. Improve physical accessibility of transport network			
10. Improve pedestrian and cycling permeability and connectivity			
11. Protect and enhance built & natural environment			
12. improve air quality and reduce noise & vibration impacts from transport			
13. Improve transport's contribution to health & well-being			
14. improve economic viability of Borough with better links to key sites			
15. Improve PT links to key attractions outside RBK (e.g. Waterloo, London Airports)			
16. Better manage and improve freight access, particularly to key industrial and commercial areas			
17. Bring and maintain all transport assets to a good state of repair			
LIP MANDATORY TARGETS	+1	<i>Supports Target</i>	
Mode Share (more PT, C & W)	-1	<i>Hinders Target</i>	
Improved Bus service Reliability	0	<i>Neutral Impact on Target</i>	
Better Asset Condition			
Reduction in Road Traffic Casualties			
Reduction in CO2 Emissions			
	Provide score for <u>each</u> Objective. Total score possible is therefore +5 to -5		

2. VALUE FOR MONEY

What is the need for Improvement / Severity of problem	+20	<i>Urgent need for improvement</i>
	+10	<i>Moderate need for improvement</i>
	0	<i>No / little need for improvement</i>
	Score as appropriate but should be grounded in hard evidence to support 'need' e.g. accident hotspot, Strategic Route Assessment or other.	
	What is the Impact on Transport Network Hierarchy	
	+10	<i>Strategic Road /Cycle/Walk Network</i>
	+5	<i>Secondary Road Network</i>
	+2	<i>Neighbourhood Bus</i>
	0	<i>Other roads</i>
	Score depending on the highest hierarchy the scheme impacts on	
	Modal Impact - how will scheme affect each mode?	
	+5/-5	<i>Walking</i>
	+5/-5	<i>Cycling</i>
	+5/-5	<i>Public Transport</i>
	+2/-2	<i>Cars</i>
	+2/-2	<i>Freight</i>
	Combine score for each mode = total score	
	What is the Extent of Impact (No. of people or vehicles benefitted / hindered by scheme)	
	+10/-10	<i>More than 250</i>
+5/-5	<i>100-249</i>	
+2/-2	<i>50-99</i>	
+1/-1	<i>49 or fewer</i>	
Select appropriate score		
Does scheme address Low PTAL?		
+5	<i>Yes</i>	
0	<i>No</i>	
Select appropriate score		
Will scheme improve access to RBK key destinations (e.g. Kingston hospital, university, CWA, Kingston town centre)		
+10	<i>Yes</i>	
0	<i>No</i>	
+15	<i>More than 1 attractor</i>	
Select appropriate score		
Deprivation - Will proposal benefit a deprived area ?		
+5	<i>Yes</i>	
0	<i>No</i>	
Select appropriate score		
Funding - What is the Scale of Cost?		
-10	<i>Very High Cost >£1m</i>	
-5	<i>High Cost £500k to £1m</i>	
0	<i>Medium Cost £100k to £499k</i>	
+5	<i>Low Cost <£100k</i>	
Select appropriate score		
Are there linkage with other proposals?		
+1	<i>Link</i>	
0	<i>No Link</i>	
Select appropriate score		

3. DELIVERABILITY	Implementation Risks - Are there any practical risks likely to hinder delivery?	+5	<i>No practical issues</i>
		-2	<i>Some issues expected</i>
		-5	<i>Practical issues likely to hinder delivery</i>
		<i>Select appropriate score</i>	
	Technical Risks - Do we have the appropriate technology to deliver the scheme?	+2	<i>Yes</i>
		-2	<i>No / Untested</i>
		<i>Select appropriate score</i>	
	Political Risks - Do members/ public support the scheme	+10	<i>Yes</i>
		-10	<i>No</i>
		<i>Select appropriate score</i>	
	Funding Risks (Funding Certainty) - Can scheme be fully funded by LIP and / or other certain funding sources?	+10	<i>Yes</i>
		-10	<i>No</i>
<i>Select appropriate score</i>			

What does the Score Mean?

- *The total possible score = 140*
- A score of 70 was the cut off for the 2011/12 LIP Funding Submission, so has been used as the 'benchmark' score for approving schemes to the programme.

Score	Rating	Analysis
>100	Good	Scheme performs exceptionally well against all the assessment criteria and should be included in future programmes
70-99	Satisfactory	Scheme performs adequately against the assessment criteria and should be considered for inclusion in future programmes
40-69	Unsatisfactory	Scheme performs poorly against the assessment criteria, and should only be included in future programmes in exceptional circumstances, or if improvements can be made to the scope of the scheme.
<39	Poor	Scheme performs very poorly against the assessment criteria and should not be considered for implementation, unless significant improvements can be made to the scheme.

(3.4.4) Timetable for Delivery

- Most interventions set out in this POI will be delivered by April 2014; however some schemes will run beyond 2014, such as; schemes not fully implemented (including some 'major schemes') and ongoing initiatives (e.g. cycle training and other Smarter Travel initiatives).
- Schemes and timeframes outlined in the POI assume that funding levels from TfL will remain as estimated during the 3-year period.
- The POI will be refreshed every three years, the next time being April 2014.

(3.4.5) Major Schemes

The POI includes four proposed major schemes for which a funding contribution from TfL may be sort: Tolworth Broadway, Surbiton Public Realm Improvements, Kingston Ancient Market Place, and Kingston Station Gateway Improvements. Details of these schemes are provided below.

Of note is that TfL are developing a new project evaluation methodology for evaluating various options (scales of intervention) for major schemes; this methodology was adopted by the Council when selecting the preferred option for the Kinston Station Gateway Improvements Major Scheme. If supported by TfL, this methodology will be adopted to appraise all Major Schemes developed by the Council in future.

Major Scheme Proposal 1: Tolworth Broadway (Greenway)

Description: An initiative to enhance the physical, environment, and economic vitality of Tolworth District Centre. It focuses on improving: the public realm, pedestrian and cycling access, freight access and loading arrangements, car and cycle parking facilities, and de-cluttering the footway.

The centre piece of the scheme is the 'Greenway', which is a shared use cycling and pedestrian path along the centre of Ewell Road and Tolworth Broadway, across the A3, and then along Kingston Road to Tolworth Train Station.

Desired Timeline:

- Currently at design stage
- Construction is scheduled for 2011/12 – 2012/13

Funding: Please refer to Table 10.

When will the Major Scheme application be submitted to TfL: TfL has been involved in this scheme for some time, the detailed design/application for construction funding is due to be sent to TfL in November 2010.

Priority (against other Major Schemes): Top Priority.

Contribution to LIP Objectives and Targets:

Objectives: 1, 2, 3, 4, 6, 7, 8, 9, 10, 11, 12, 13, 14, 16, 17

Targets: It is unlikely that any one scheme can have an impact of the scale that would warrant changes to the targets that have been set in LIP. However the scheme will make a noticeable contribution to achieving the following targets:

Core Targets: Walking and Cycling Mode Share, Bus Reliability, Asset Condition, Casualties (KSI's & Total), CO₂ Emissions.

Local Targets and Indicators: Cycling Numbers.

Major Scheme Proposal 2: Surbiton Public Realm Improvements (Medium-Term)

Description: This initiative is based on the Surbiton Public Realm Improvement Strategy and is a significant initiative to enhance the physical environment and economic vitality of Surbiton District Centre (in particular Victoria Road). Improvements aim to achieve a simple, elegant, and uncluttered street environment and an accessible and inclusive public realm for all users. It will provide a framework for integrating current and future development projects, as well as creating a coherent new high quality public space and transport interchange based around Surbiton Station.

The project is divided into 3 phases:

- *Short-term* – this involved localised environmental and highway improvements, which have all been implemented.
- *Medium-term* – focuses on improving: the public realm (footway alterations and other street enhancements), access across Victoria Road, and access to public car parking.
- *Long-term* – focuses on the development of a transport interchange at Surbiton Station. This phase of the project will require negotiations and agreements with partners such as Network Rail, Train Operating Companies and other private landlords and stakeholders; there is an expectation that the Council will also contribute funding towards this stage of the project.

Desired Timeline (Medium-Term Initiatives):

- Design completed in 20011/12
- Construction 2012/13

Funding: Please refer to Table 10.

When will the Major Scheme application be submitted to TfL: At this stage the Council does not intend to bid for TfL Major Scheme funding.

Priority (against other Major Schemes): Second Priority

Contribution to LIP Objectives and Targets:

Objectives: 3, 4, 6, 7, 9, 10, 11, 14, 17

Targets: It is unlikely that any one scheme can have an impact of the scale that would warrant changes to the targets that have been set in LIP. However, the Surbiton Public Realm Improvements will make a noticeable contribution to achieving the following targets:

Core Targets: Walking and Cycling Mode Share, Casualties (KSI's & Total).

Local Targets and Indicators: Cycling Numbers.

Major Scheme Proposal 3: Kingston Ancient Market Place

Description: This is a significant initiative to enhance the Ancient Market Place and surrounding area. The scheme aims to build on the historic identity of the area, raise its profile, and reinforce the space as the town's cultural quarter.

Desired Timeline:

- Currently in feasibility and concept stage
- Design 2011/12
- Construction 2012/13

Funding: Please refer to Table 10.

When will the Major Scheme application be submitted to TfL: At this stage the Council does not intend to bid for TfL Major Scheme funding.

Priority (against other Major Schemes): Third Priority

Contribution to LIP Objectives and Targets:

Objectives: 7, 10, 11, 14, 17

Targets: It is unlikely that any one scheme can have an impact of the scale that would warrant changes to the targets that have been set in LIP. However the Kingston Ancient Market Place Major Scheme will make a contribution to achieving the local cycling numbers indicator.

Major Scheme Proposal 4: Kingston Station Gateway Improvements

Description: The primary focus of this initiative is to improve pedestrian and cyclist access across the relief road (A307) between KTC and Kingston Train Station; improvements will focus on improving the relief road crossing and access along Fife Road (to its junction with Castle Street). The project may also be expanded to consider other crossing places along the relief road.

Desired Timeline:

- Currently in investigation stage. This is being carried out by TfL with assistance from the Council.
- Initial/concept design in 2011/12.
- Detailed design and construction from 2012/13 onwards.

Funding: It is anticipated that Council will bid for Major Scheme Funding from TfL of £1.2million to construct the scheme in 2014/15. Please refer to Table 10 for further funding information.

Of note is that the various options (scales of intervention) consider for this project have been evaluated using the new project evaluation methodology being developed by TfL; the preferred option/scheme was selected based on this methodology. If supported by TfL this methodology will be adopted to appraise all Major Schemes developed by the Council in future.

When will the Major Scheme application be submitted to TfL: It is anticipated that the Council will submit a Step 1 application during the POI period; a specific date is still to be confirmed.

Priority (against other Major Schemes): Fourth Priority

Contribution to LIP Objectives and Targets:

Objectives: 3, 6, 9, 10, 11, 14, 17

Targets: It is unlikely that any one scheme can have an impact of the scale that would warrant changes to the targets that have been set in LIP. However, the Kingston Station Gateway Improvements will make a noticeable contribution to achieving the following targets:

Core Targets: Walking Mode Share, Cycling Numbers.

(3.4.6) Risk Management

Robust risk management procedures are essential if the Council is to successfully deliver the LIP POI. Recognising this, the Council has developed risk management procedures to identify, assess, and mitigate risks to the delivery of the POI.

The Council's risk management procedures are outlined below:

Programme Level Risks -

- Delivery risks are considered before transport initiatives are included in the POI; the POI will also be reviewed annually to identify new risks.
- Before inclusion in the Annual Spending Submission schemes are scored in the Transport Initiative Prioritisation System. This system considers various risks to delivery, with schemes being scored according to severity of risk. Therefore the Council is made aware of the risks at an early stage in the project life cycle and can plan for and closely monitor the risks; alternatively high risk schemes can be excluded from the Annual Spending Submission.
- Table 13 identifies a range of risks and mitigation measures relating to the delivery of the POI, however please refer to the section on 'Project/Scheme Level Risks' below for more detailed information on the management of risks to scheme deliverability.

Table 13: Programme Risks and Mitigation Measures

Risk	Mitigation Measures
Resources to plan, design and implement the POI	<ul style="list-style-type: none"> The POI and individual schemes are developed in conjunction with the Council's in-house and consultant resources. These staff have a wealth of experience in transport scheme development, design, and implementation. Resource requirements and availability were assessed during the development of the POI. The Council has developed a reserve list of schemes that can be progressed if other schemes are delayed.
Policy compatibility	<ul style="list-style-type: none"> The MTS Goals and LIP2 Objectives/Targets have been the basis for developing the POI, as demonstrated in the POI table all interventions are compatible with key policy aspirations. Please refer to Tables' 11 & 12 for evidence that Delivery Plan Actions are compatible with the MTS Goals/Challenges and LIP Objectives.
Delays to the progress of work	<ul style="list-style-type: none"> Timescales for delivery allow sufficient time to develop a detailed design, undertake required consultation, and identify/address any issues/risks. Consultation with key stakeholders will be undertaken at the earliest possible stage. Neighbourhood Committee approvals are required at appropriate points in the scheme development. Where schemes experience delays to implementation, funding will be transferred to the next highest priority scheme.
Cost increases	<ul style="list-style-type: none"> Project/scheme costs are reviewed by the project team on a monthly basis and any variants in cost are escalated to the Programme Manager and the relevant Project Board as appropriate. Scheme delivery will be monitored at monthly Project Board meetings in order to identify and resolve any problems as soon as they occur. Serious risks are elevated to the DMT Project Board and the SLT. Permission may then be given to transfer funds from one budget to another to ensure the highest priority projects are completed, while staying within overall budgets. Through tracking individual projects, the Programme Manager will monitor the overall POI budgets/costs and ensure the programme stays within budget.
Funding uncertainty/reductions	<ul style="list-style-type: none"> At this stage the POI (excluding Major Schemes) is predominantly funded through the TfL borough LIP allocation and Planning Contributions. Planning Contributions identified in the POI are confirmed and TfL funding is fairly certain; thus minimising funding risks to the programme. If TfL funding reduces, then generally, interventions that perform least well against the MTS Goals and LIP2 Policies will be transferred to the reserve programme list, or will be deferred to future years. Where additional external funding sources become available, reserve schemes will be added to the POI. It is accepted that Major Scheme delivery is dependent on successful major projects funding bids to TfL, and as such LIP2 Targets have been set assuming no Major Scheme funding.

Project/Scheme Level Risks -

- Project managers are required to identify/assess risks to the deliverability of schemes at the investigation, design, and implementation stages. Risks and mitigation measures (etc) are recorded in a 'risk register' which is regularly updated by the project manager; all risks are monitored and reported on throughout the development of the project.
- Risks are formally discussed with the project sponsor and the relevant Council Project Board. Project Board meetings are held every month and comprise senior transport, planning, and financial staff; the risk register is reported on at every meeting. The project manager, project sponsor, and Project Board members agree on mitigation

measures and monitoring arrangements with regards to identified risks. Serious risks are elevated to the DMT Project Board and the SLT.

- Risks are also discussed with relevant TfL Programme Managers on a regular basis and formal Bi-Monthly reporting is undertaken through the TfL Portal system.

(3.5) MAYOR’S HIGH PROFILE OUTPUTS

The MTS outlines a number of specific interventions that borough’s LIP’s should contribute towards achieving; these are known as the Mayor’s High Profile Outputs. These ‘Outputs’ and the Council’s contribution towards delivering them are outlined below:

- *Cycle Superhighway Schemes* – The existing cycle superhighway network does not extend into RBK; however the Council is keen to work with TfL to identify opportunities to implement cycle superhighway schemes in the borough.
- *Cycle Parking* – The Council has several policies and Delivery Plan Actions relating to the implementation of cycle parking, including implementation of on street and secure public cycle parking, working with Schools and workplaces to install cycle parking and requiring cycle parking as part of new development. There is an annual programme of funding allocated towards cycle parking implementation in the POI, and where appropriate cycle parking will be installed as part of other transport schemes. By March 2014 the borough will deliver:

Year	Type	Number
2011/12	On-Street	40
	Off-Street	100
2012/13	On-Street	40
	Off-Street	100
2013/14	On-Street	40
	Off-Street	100

For a list of locations where the Council intend to install cycle parking please refer to Appendix 18. *Please note: the above figures do not include possible provision of cycle parking through the planning process (i.e. from development).*

- *Electric Vehicle Charging Points* - The Council has several policies and Delivery Plan Actions relating to the implementation of electric vehicle charging points, as well as a Local Indicator in the Monitoring Plan. There is annual funding allocated towards electric vehicle charging point provision in the POI, and where appropriate they will be installed as part of other transport schemes. It is also anticipated that TfL will provide additional targeted funding for electric vehicle charging point installation. However, it is envisaged that the majority of electric vehicle charging points will be installed through other means such as planning obligations.
- *Better Streets* - The Council has several policies and Delivery Plan Actions relating to public realm improvements, including initiatives in the POI; the major schemes identified by the Council are largely based around improving the public realm; and where appropriate the principles of ‘better streets’ will be integrated into all transport schemes.

- *Cleaner Local Authority Fleets* – The Council is carrying out the following to help reduce emissions from vehicles used for Council operations:
 - The Council's Low Carbon Management Plan acknowledges the importance of reducing CO₂ emissions from RBK fleet vehicles.
 - Staff in the Directorate for Environmental Services can use the car club low emission pool car for business trips; it is planned to extend this to other directorates.
 - The Council's reimbursement policy for use of private vehicles for Council business provides a greater reimbursement rate for cycling than car use. The Council is currently reviewing its reimbursement rates for private car use based on engine size/emissions.
 - The Low Carbon Management Plan Project Team are working with the Council's Commissioning and Procurement Team to review procurement processes and ensure that reducing CO₂ emissions from contractor vehicles is a key consideration/clause when future contracts are awarded for Council services.
 - The Council is working towards ingraining a strong weighting to low emission vehicles in all procurement procedures for leased vehicles.
 - The Council is working towards ingraining a strong weighting to low emission vehicles in all procurement procedures for Council owned vehicles.
- *Street Trees* - The Council will ensure there is a net increase in street trees in all suitable transport projects.

(3.6) SOUTH LONDON SUB-REGIONAL TRANSPORT PLAN

To achieve the Mayor's aspirations TfL have embarked on a new collaborative way of working with boroughs based on sub-regions. London has been divided into 5 sub-regions (north, east, south, west, and central); RBK is located in the South London Sub-region. To cement these working relationships and translate the MTS at a more local level each sub-region has develop Sub-regional Transport Plans (SRTP). The South London SRTP is being developed and is structured around meeting the MTS Goals at a sub-regional level. The SRTP looks at infrastructure and attractions of sub-regional importance, considers challenges and opportunities facing the sub-region, and develops sub-regional priorities for transport improvements (such as Tramlink extensions).

The following outlines key outcomes/aspirations of the SRTP that are of relevance to RBK and require supporting actions on the Council's (LIP's) behalf:

- *Transport Connectivity – Strategic Sub-regional Transport Corridors*: KTC is identified as a location of sub-regional importance and strategic transport corridors (of sub-regional importance) are identified into/out of KTC, these include: orbital links from Heathrow to KTC then through to Sutton and Croydon; links northeast; and links southwest into Surrey. However, only the KTC to Heathrow link is identified as a sub-regional priority for investigations/improvements. The LIP proposes a package of measures to improve access to KTC and along these corridors, including:
 - Improving the borough's strategic walking, cycling, and highway network. The borough's strategic networks connect key attractions within and beyond the borough. Working with neighbouring boroughs to improve links within and beyond the borough boundary will improve transport links between key attractions for bus, cycling, walking, car, and freight.

- Working with TfL and Surrey County Council to improve bus services (including services to Heathrow Airport).
 - Lobbying the train operating company to improve train services to Kingston Station.
 - Lobbying TfL to investigate new orbital based rail links connecting KTC to other key centres in outer London.
 - Improved integration of transport in KTC.
 - Kingston Station Access Improvements (Major Scheme).
 - Increased secure/unsecure cycle parking provision in KTC.
- *Potential for KTC to become a 'cycling hub'*: This will be achieved through a package of LIP measures, such as improving strategic cycle links and to/through the town centre, increased provision of secure/unsecure cycle parking, smarter travel initiatives, and other initiatives (e.g. Dr Bike sessions). The Council will also lobby TfL and other partners to connect KTC to the cycle superhighway network and develop a cycle hire scheme in the area. However, further targeted funding from TfL may be required to create a successful cycle hub in KTC.
 - *Smooth Traffic and Relieve Congestion*: The Council is currently reviewing its strategic highway network for opportunities to smooth traffic flow and relieve congestion. Investigations are also underway into corridor based improvements along three of the boroughs most congested routes (strategic routes 9, 10, & 11); it is hoped improvements to these routes will be completed by 2013/14.
 - *Air Quality*: Kingston is identified as an area at risk of poor air quality, particularly in terms of exceeding the EU limit values for NO₂ in 2015; locations where EU limits are at risk of being exceeded are not specifically mentioned. There is a package of measures outlined in LIP that will help improve air quality, including promotion of sustainable modes of transport, extension of LEZ, and electric vehicle infrastructure.



(3.7) COMPLIANCE CHECK 4 (OVERALL COMPLIANCE MATRIX) – DELIVERING THE MTS GOALS & CHALLENGES

The table below demonstrates how all the LIP Objectives, Policies, and Actions are helping to deliver the MTS Goals and Challenges.

Table 14: Compliance Check 4 (Final) – MTS versus LIP Objectives, Policies, Delivery Plan Actions, and Key Initiatives

MTS GOAL	MTS CHALLENGE	SUPPORTING OBJECTIVES	SUPPORTING POLICIES	SUPPORTING DELIVERY PLAN ACTIONS	KEY LIP INITIATIVES THAT DELIVER THE MTS GOALS
Goal 1 – Support economic development and population growth	Supporting sustainable population and employment growth	3, 5, 8, 14, 15	GP1, GP4, RT1, PT1, PT4, PT5, ST1	GA1, GA2, RTA1, RTA2, PTA1, PTA2, PTA6, PTA7, PTA10, STA1, STA2, STA4	Reducing the need to travel by locating development appropriately, improved public transport to key growth areas, increased train and bus capacities, travel planning networks
	Improving transport connectivity	3, 4, 8, 9, 10, 14, 15, 16	GP1, GP4, GP5, RT1-RT4, PT1, PT4, PT5, IT1, ST1, MV5, MV6, P1-P3	GA1-GA3, RTA1-RTA4, PTA1-PTA3, PTA6, PTA7, PTA10, CA1, CA3, CA4, STA1, STA4, MVA3, MVA7, MVA8, PA2	Better regional and orbital transport links, improved transport integration, cycle superhighways, better signage, travel awareness
	Delivering an efficient and effective transport system for people and goods	3, 4, 8, 14, 15, 16, 17	GP1, GP2, GP5, RT1, RT4, PT1, PT5, IT1, C1, MV1-MV6, M1-M4, P1- P3, CC4-CC6	GA1-GA3, RTA1, RTA3, PTA11, PTA12, ITA1, MVA1-MVA7, MA1-MA3, CCA6-CCA8	Managing car use and parking, smoothing traffic flow, promoting sustainable freight, bus priority schemes, car clubs
Goal 2 – Enhance the quality of life for all Londoners	Improve journey experience	3, 4, 6, 7, 8, 9, 10, 11, 13, 14, 15, 16, 17	GP1, GP2, GP5, RT1, PT1, PT3-PT6, IT1, C1, W1-W8, ST1, M1, M4, P1-P3, S3, S4, CC6, D1	GA1-GA3, RTA1, RTA2, PTA1-PTA3, PTA5-PTA16, ITA1-ITA5, CA1-CA9, WA1-WA7, MVA2-MVA7, MA1-MA3, PA1, SA1-SA3, SA5-SA7	Reduced train overcrowding and increase frequencies, increased bus frequencies and capacities, reduced bus journey times, improved public transport customer service levels and station facilities, more efficient transport integration, smoothing traffic flow, mode shift to cycling and walking
	Enhance the built and natural environment	3, 9, 10, 11, 13, 17	GP1, GP2, GP5, PT2, PT6, IT1, C1, W1, W5, MV6, M4, S3, NE1, NE2	GA1, GA3, PTA12, ITA3, CA2, WA1, WA3, WA5-WA7, SA7	Public realm improvements, removing clutter, street trees
	Improving air quality	1, 3, 4, 5, 8, 10, 11, 12, 13, 13, 14, 15, 16	GP1, GP2, GP4, GP5, RT1-RT3, PT1, PT4, PT5, C1, C3, W1, ST1, SV1, SV2, MV2-MV6, P1-P3, CC1-CC3	GA1- GA3, RTA1, RTA2, PTA1-PTA3, PTA6, PTA7, PTA9-PTA12, ITA2, ITA3, CA1-CA13, WA1-WA7, STA1-STA5, SVA1-SVA4, MVA3-MVA7, PA1, PA2, CCA1-CCA6	LEZ, managing freight, low emissions vehicles, cycling and walking, street trees, fuel efficient driver behaviour
	Improving noise impacts	12, 13, 16, 17	GP2, GP5, SV1, MV6, N1, N2	MVA7	Electric vehicles, road surfacing materials, speed restrictions, traffic smoothing
	Improving health impacts	3, 6, 7, 8, 9, 10, 11, 13, 14	GP1, GP2, GP4, GP5, PT1, PT3, IT1, C1-C4, W1-W8, ST1, P2, S2, S3, D1, H1	GA1-GA3, PTA9, ITA3, CA1-CA14, WA1-WA7, STA1-STA5, PA2, SA1-SA3, SA5, SA7, HA1	Cycling and walking routes, greenways cycle routes, school and workplace travel planning, cycle training, improved access to open space/ leisure facilities, improved access to healthcare facilities.
Goal 3 – Improve the safety and security of all Londoners	Reducing crime, fear of crime, and antisocial behaviour	7, 11	GP3, GP5, PT4, PT6, IT1, C2, W1, W2, W5, S3, S4	GA1, GA3, PTA7, PTA10, PTA13, ITA3, CA7-CA10, WA1-WA3, SAT3-STA5, PA1 PA3, SA5-SA7	Cycle parking and cycle security measures, improved public realm and designing out crime,
	Improving road safety	6, 9, 17	GP2, GP3, GP5, C1, C4, W1-W3, ST1, P1, P3, S1, S2, D1	GA1, GA3, PTA13, ITA3, CA1-CA4, CA6, CA12, WA1, WA2, STA1, STA2, PA1, SA1-SA6, DA1-DA3	cycle and pedestrian infrastructure- crossing facilities, cycle lanes etc, speed restrictions, managing parking, cycle training, road safety education, school travel planning
	Improving public transport safety	7	GP3, GP5, PT1-PT3, PT6, S3, S4	GA1, PTA4, PTA5, PTA8, PTA13-PTA15	improving security at stations, bus stops and on train/ bus services
Goal 4 – Improve transport opportunities for all Londoners	Improving Accessibility	3, 4, 8, 9, 10, 13, 14, 15	GP1-GP3, GP5, RT1-RT4, PT2, PT4-PT6, IT1, C1-C4, W1-W3, SV2, P1-P3, D1-D3, H1	GA1, GA3, RTA1-RTA4, PTA1-PTA4, PTA6, PTA7, PTA10-PTA15, ITA1, CA1-CA4, CA7-CA9, CA11, CA12, WA1, WA2, SVA4, PA2, DA1-DA3, HA1	DDA compliant bus stops, crossing facilities and transport scheme design, improved bus links in areas of low accessibility
	Supporting regeneration and supporting deprivation	8, 14, 15	GP3, PT1, PT4	GA3, PTA10, SVA4, PA2	Workplace travel plans and travel networks, smoothing traffic flow, managing freight
Goal 5 – Reduce transport’s contribution to climate change and improving its resilience	Reducing CO ₂ emissions	1, 3, 5, 8, 10, 11, 12, 13, 14, 15, 16	GP1, GP2, GP4, GP5, RT1-RT3, PT1, PT4, PT5, IT1, C1-C4, W1-W3, W5-W7, ST1, SV1, SV2, MV6, P1-P3, CC1-CC3	GA1-GA3, RTA1, RTA2, PTA1-PTA3, PTA6, PTA7, PTA9, PTA10-PTA12, ITA1, ITA3, CA1-CA5, CA10-CA12, WA1-WA6, STA1-STA5, SVA1-SVA4, MVA7, PA3, CCA1, CCA3-CCA6	Car clubs, low emission vehicle infrastructure, walking, cycling, public transport use, managing car use, LEZ boundaries.
	Adapting to Climate Change	2, 17	CC4- CC6	CCA7-CCA9	Highways maintenance and design considerations

Section 4: Monitoring Plan

The Monitoring Plan sets out how the borough intends to monitor the progress and effectiveness of the LIP Delivery Plan. The Monitoring Plan therefore outlines the boroughs core LIP Targets and Indicators, sets trajectories, and monitors progress against these targets on an annual basis. Setting and monitoring key targets and indicators helps the Council and TfL to determine whether the LIP Policies, Delivery Plan Actions, and Programme of Investment are effective in delivering the LIP Objectives and Mayor's Transport Strategy aspirations. If the Monitoring Plan reveals underperformance against the targets, a number of steps can be taken; these could include amendments to policies, a refocus of the Delivery Plan, or closer working with local partners.

This section has two main parts:

- (4.1) *Core Targets* – Outlines the five strategic performance indicators prescribed by TfL, which will be used to measure the progress of all boroughs in delivering the Mayor's Transport Strategy at a local level. The five Core Targets measure: cycling and walking levels; bus reliability; road asset condition; road casualties; and CO₂ emissions.
- (4.2) *Local Targets and Indicators* – A range of Local Targets and Indicators set by the Council that are designed to supplement the Core Targets: bus reliability, car club bays, cycle training, and cycle counts.

(4.1) CORE TARGETS

In conjunction with TfL, the Council has set annual targets for a set of Core Indicators until 2013/14, with further long-term targets set up to 2031. The targets have been set with consideration of a range of factors that may help or hinder the boroughs performance including: delivery of transport infrastructure improvements, funding availability, the impact of regional and national policies, as well as other local circumstances. Whilst the Council has a degree of influence over the achievement of the Core Targets other factors beyond the Councils control can also impact on performance (e.g. national advances in clean vehicle technologies will influence CO₂ emissions from road based transport in the borough). To achieve the Core Targets the Council will work with local partners and other organisations, such as TfL, Healthcare providers, businesses and employers, bus operators, schools, and neighbouring authorities.

(4.1.1) Monitoring Progress Against Targets and Reporting

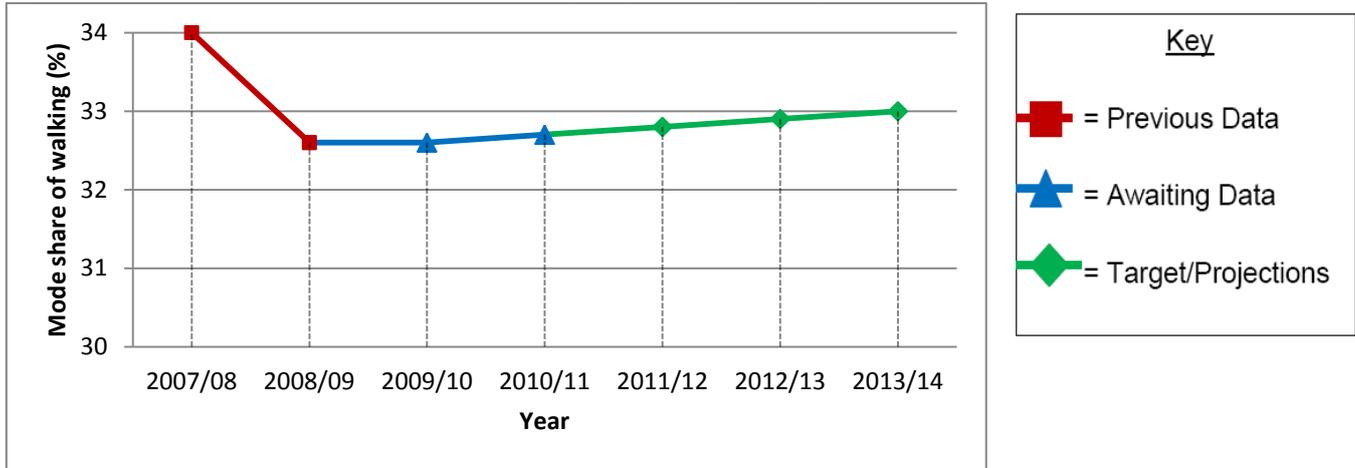
- The Council monitor and keep track of progress against targets by relying on information released by TfL; e.g. the LIP Benchmarking Tool or Travel in London Reports. Upon receiving the data the Council will compare the results to the actual targets set.
- If targets are not being met then the Council will implement the measures outlined under the “keep progress against targets under review and address areas of over or under performance” section of each target. This heading is included in the table for each mandatory target.
- The Council will prepare an annual report on its progress against LIP2 targets. The report will discuss the borough’s performance and any measures proposed to address instances of under performance against targets. Such measures could include a change in focus (and funding) away from a target that is being over delivered towards a target that is not being delivered; or a change in the type of initiative being delivered to achieve a target. The report will be presented to the relevant Council Project Board; and depending on the results and recommendations a decision will be made whether to escalate the report to the various elected member committees for further comments and approval. The recommendations of the report (including any changes required by the Elected Member Committees) will be reflected in the Annual Spending Submission submitted by the Council for the proceeding financial year; the Programme of Investment will also be updated to reflect any change in priorities.
- The Council will also complete a 3-year impact report on progress against targets for submission to TfL.

(4.1.2) Walking Mode Share

Increase in the mode share of walking in RBK (2011/12 – 2013/14)	
Target trajectory	See Figure 38
Link between target, LIP Objectives, and Delivery Plan	<ul style="list-style-type: none"> • <i>LIP Objectives:</i> 1, 3, 6, 7, 8, 9, 10, 12, 13, 14 • <i>Delivery Plan:</i> There are many actions in the Delivery Plan that focus on encouraging walking. Also the LIP2 'project initiative prioritisation system' supports walking and as such many projects in the POI support the uptake of walking. Funding has also been included in the POI for walking audits which will identify specific walking interventions required.
Evidence that the target is ambitious and realistic	<ul style="list-style-type: none"> • According to the LIP Benchmarking Tool 2010, 32.6% of trips originating in RBK were made by walking between 2006/07 and 2008/09 (i.e. 3-year rolling average). This is the fourth highest of any Outer London borough, and higher than some inner London boroughs. Walking mode share has decreased from 34% (between 2005/06 and 2007/08) which was reported in the 2009 Travel in London Report. • The first aim is to ensure walking trips increase to 33% mode share by 2013/14, then 34% by 2020/21, and 35% of mode share by 2026. • Given RBK's current performance, the performance of neighbouring boroughs and Outer London boroughs, and the lack of a definitive target in the MTS, it is considered that the targets are definitely ambitious. • The Council believe these targets are realistic as 35% mode share for walking has been achieved in previous years by the neighbouring borough of Richmond, and levels of up to 40% have been achieved in Central London. Also evidence suggests that there is significant potential for a shift from car use to walking for trips under 1km (according to the South London Sub-regional Transport Plan – Interim Report on Challenges and Opportunities February 2010, 24% of trips less than 1km are made by car/motorcycle in the South London Sub-region).
Key actions for the Council	<ul style="list-style-type: none"> • Improving strategic walking routes; including ongoing audit program. • Improving access to train stations and bus stops. • Public realm improvements (including street de-cluttering etc). • Improved accessibility of the public realm for disabled users. • Overcoming segregation barriers e.g. busy roads. • Reducing crime and fear of crime. • Improved signage e.g. Legible London. • Travel planning.
Principal risks and how they will be managed	<ul style="list-style-type: none"> • <i>Delays to the implementation of schemes.</i> The Council will manage this risk by ensuring the risks of delivering schemes are considered before they are included in the LIP 3-year POI. The Council has a good history of delivering schemes on time. • <i>Funding reductions from TfL borough LIP2 allocation, and/or a reduction in funding from other potential sources (e.g. Major schemes funding, Council funding).</i> Impact of risk cannot be fully managed, however the Council can ensure funding is prioritised towards schemes that will have the greatest contribution to increasing walking numbers. • The Council also has a LIP2 target to increase the number of people cycling in the borough; it is possible that any increase in cycling will be at the expense of some existing walking trips. This risk is difficult to manage; however, funding will be directed at schemes that are likely to achieve a shift away from car use (as opposed to other sustainable modes of transport).
Keep progress against targets under review and address areas of over or under	<ul style="list-style-type: none"> • Review walking mode share annually. • Record/review the type of walking initiatives we are investing in e.g. public realm improvements, travel planning etc. • If targets are not being met then re-evaluate the level of funding allocated to walking initiatives, and/or re-evaluate the type of walking initiatives the Council is

performance.	investing in. What do people feel are the barriers to walking in the borough that are not being overcome?
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Figure 38: % Increase in Mode Share for Walking – 3yr Rolling Average

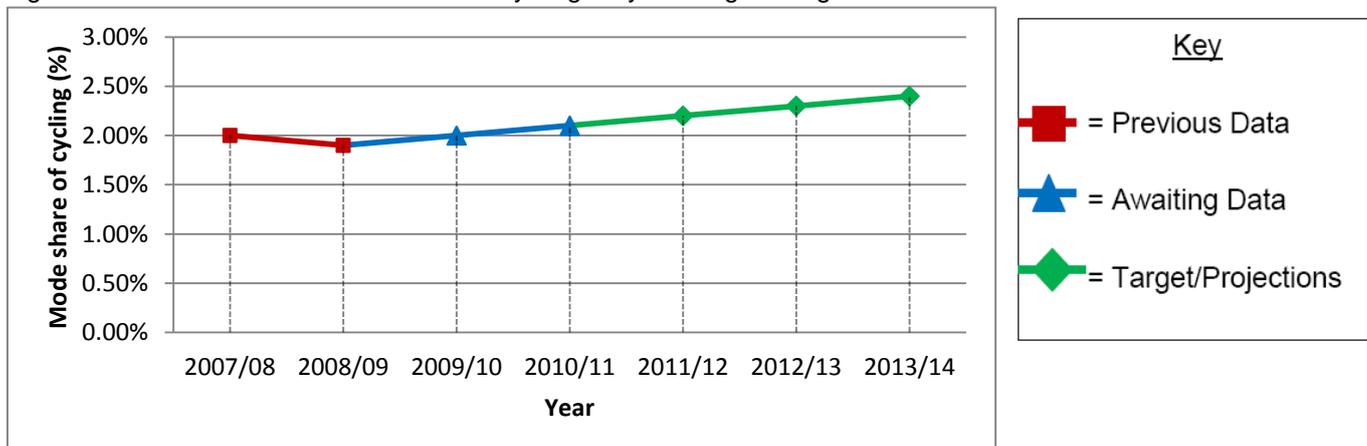


(4.1.3) Cycling Mode Share

Increase in the mode share of cycling in RBK (2011/12 – 2013/14)	
Target trajectory	See Figure 39
Link between target, LIP Objectives, and Delivery Plan	<ul style="list-style-type: none"> • <i>LIP Objectives:</i> 1, 3, 6, 8, 10, 12, 13, 14 • <i>Delivery Plan:</i> There are many actions in the Delivery Plan that focus on encouraging cycling. Also the LIP2 ‘project initiative prioritisation system’ supports cycling and as such many projects in the POI support the uptake of cycling. General funding sums have also been included in the POI for cycle parking and other cycle infrastructure.
Evidence that the target is ambitious and realistic	<p>According to the Travel in London Report 2010 1.9% of trips originating in RBK were made by cycle between 2006/07 and 2008/09 (i.e. 3-year rolling average). This is the third highest of any Outer London borough, but is significantly lower than RBK’s neighbouring borough of Richmond which has managed to achieve a mode share of 4.2%; the highest in London. Cycling potential and cycling market segmentation information provided by TfL shows that there is potential for an additional 97,078 cycling trips per year, originating in RBK and replacing trips currently made by a mechanised mode of transport. The greatest potential for increased cycle trips is around RBK’s town centres, in particular Surbiton and KTC. As such there is obvious potential to increase cycling mode share within RBK.</p> <p>The Council has set targets and trajectories initially based on increments of 0.10% per annum, which will achieve a mode share of 2.4% by 2013/14; this target is seen as particularly ambitious given current low funding levels. However, it is hoped that funding levels will increase towards 2020 and the infrastructure that has been implemented during the LIP2 period will begin to attract more cyclists (e.g. cycle parking, cycle lanes, and aspirational schemes such as cycle hire and super cycle highways). An increase in cyclists on the roads will raise the profile of cycling and attract further cyclists. Therefore we expect cycling levels to increase at a faster rate from 2015/16 through to 2025/26. The Council anticipates that from 2015/16 cycling numbers will begin to rise at a rate of 0.2% per annum with cycling mode share of 3.6% being achieved in 2020/21 and 4.60% by 2026. This would exceed the Mayors target for 2026 of a cycling mode share for Outer London of 4.3%,</p> <p>Although funding is restricted and these targets are ambitious, they are seen as realistic</p>

	<p>for the following reasons:</p> <ul style="list-style-type: none"> • The increases predicted are required to achieve the Mayor’s target of 4.3% mode share for cycling in Outer London by 2026. • The Council can use cost effective initiatives such as such as smarter travel activities (including cycle training and travel planning) to increase cycling numbers. • There is scope within the borough to improve cycle parking at many key locations, which is a relatively inexpensive measure to overcome a major barrier to cycling.
Key actions for the Council	<ul style="list-style-type: none"> • Increase secure and unsecure cycle parking in public places and key destinations (e.g. KTC, District Centres, train stations). • Increase cycle facilities at work places (e.g. cycle parking, showers, and lockers). • Smarter Travel (schools and workplace travel plans, cycle training, other events). • Improve ‘on-route’ cycling infrastructure (particularly the strategic cycle network and over key barriers) e.g. cycle lanes, cycling priority, safety improvements etc. • Improve signage of strategic cycling network.
Principal risks and how they will be managed	<ul style="list-style-type: none"> • Delays to the implementation of schemes. The Council will manage this risk by ensuring the risks of delivering schemes are considered before they are included in the LIP 3-year POI. The Council has a good history of delivering schemes on time. • Funding reductions from TfL borough LIP allocation, and/or a reduction in funding from other potential sources (e.g. Major schemes funding, Council funding). Impact of risk cannot be fully managed, however the Council can ensure funding is prioritised towards schemes that will have the greatest contribution to increasing cycling numbers. • The Council also has a target to increase the mode share of walking trips in the borough; it is possible that an increase in walking will be at the expense of some existing cycling trips. This risk is difficult to manage; however, funding will be directed at schemes that are likely to achieve a shift away from car use (as opposed to other sustainable modes of transport). • A year(s) of particularly adverse weather. Risk cannot be fully managed, but can be partly managed by promoting the benefits of all year round cycling including promoting use of high visibility clothing, lights etc.
Keep progress against targets under review and address areas of over or under performance	<ul style="list-style-type: none"> • Review mode share data annually. • Record/review the type of cycling initiatives we are investing in e.g. cycle lanes, cycle parking, travel planning etc. • If targets are not being met then re-evaluate the level of funding allocated to cycling initiatives, and/or re-evaluate the type of cycling initiatives the Council is investing in. What do people feel are the barriers to cycling in the borough that are not being overcome?

Figure 39: % Increase in Mode Share for Cycling – 3yr Rolling Average

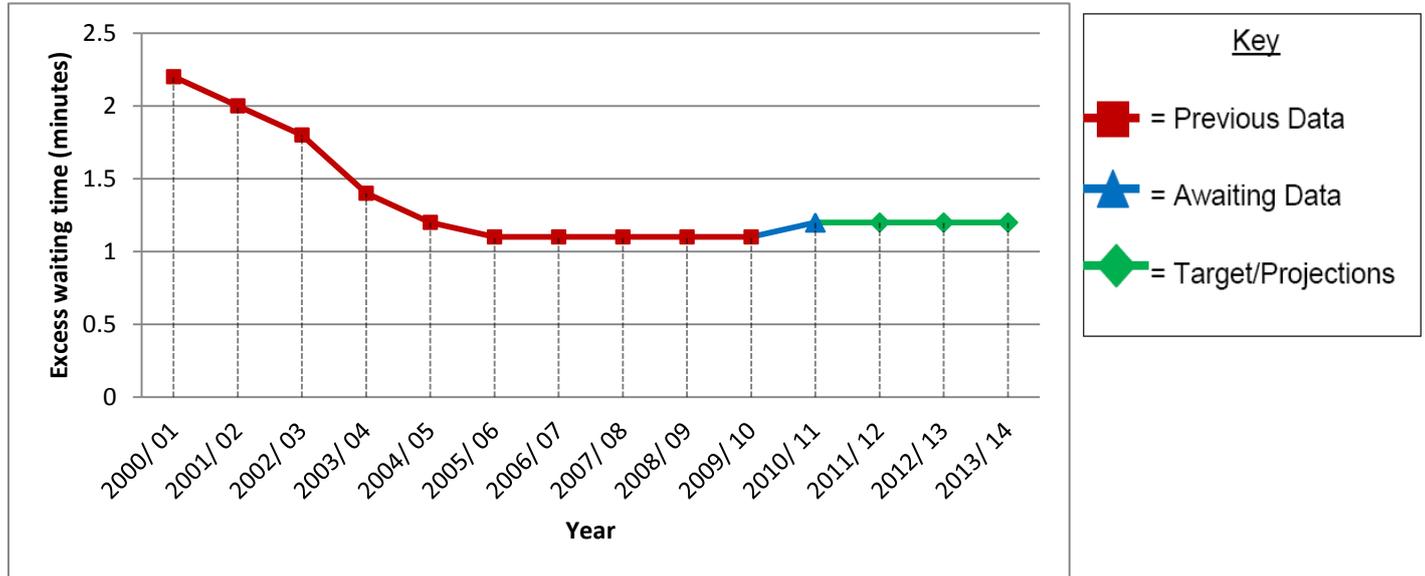


(4.1.4) Bus Service Reliability – High Frequency Routes

Bus service reliability for high frequency routes – Excess Waiting Time - (2011/12 – 2013/14)	
Target trajectory	See Figure 40
Link between target, LIP Objectives, and Delivery Plan	<ul style="list-style-type: none"> • <i>LIP Objectives:</i> 1, 3, 4, 8, 12, 14, 15 • <i>Delivery Plan:</i> There are many actions in the Delivery Plan that focus on encouraging bus use. Also the LIP2 'project initiative prioritisation system' supports projects that encourage bus use, and as such many projects in the POI support measures to improve the reliability of bus services in the borough. Additionally the Council is investigating the potential to improve bus priority along all the boroughs major bus routes (e.g. strategic highway network review).
Evidence that the target is ambitious and realistic	<ul style="list-style-type: none"> • The target set for Excess Waiting Time (EWT) is 1.2mins until 2013/14 and 1.2mins in 2017/18. Targets for later years will be set after the 2013/14 monitoring period. • The Council achieved an EWT of 1.1mins for 2009/10. The borough EWT between 2005/06 and 2008/09 was 1.1mins. • 2009/10 EWT for neighbouring boroughs was: Richmond (1.2), Wandsworth (1.1), Merton (1.1), and Sutton (1.0). • Previously the Mayor had set a target of EWT of 1.3mins for the borough. The 2009 TfL Business Plan forecasts that EWT across London will increase from 1.1mins to 1.2mins in 2011/12 and beyond. • An EWT of 1.2mins until 2013/14 is seen as an ambitious and realistic target because: it is similar to our neighbouring boroughs, exceeds the previous Mayor's Targets, is consistent with TfL forecasts for London wide EWT, maintains a high level of performance despite likely increases in traffic levels and potential reductions in available funding for transport initiatives.
Key actions for the Council	<ul style="list-style-type: none"> • Investigate and implement opportunities to improve bus priority along bus routes experiencing delays. • Investigate and implement opportunities to smooth traffic flow along bus routes experiencing delays. • Investigate opportunities to reinstate bus lay-bys (if they will improve bus reliability).
Principal risks and how they will be managed	<ul style="list-style-type: none"> • Delays to the implementation of schemes. The Council will manage this risk by ensuring the risks of delivering schemes are considered before they are included in The LIP 3-year POI. The Council has a good history of delivering schemes on time. • Increases in car use/congestion. To overcome this risk the Council is focussing on promoting sustainable modes of transport, and will look at options to smooth traffic flow and/or improve bus priority measures on congested routes. • Funding reductions from TfL borough LIP2 allocation, and/or a reduction in funding from other potential sources (e.g. Major schemes funding, Council funding). Impact of risk cannot be fully managed, however the Council can ensure funding is prioritised towards schemes that will have the greatest contribution to improving bus reliability. • Excess waiting times on high frequency bus routes is often caused by delays in other boroughs (which are out of the control of the Council). Delays in other boroughs are included in the EWT data reported for RBK's performance and could result in failure by RBK to meet bus EWT performance targets. This risk is being managed by setting local LIP Targets for bus reliability based on iBus data (travel times) between bus stops on 4 RBK bus routes. Results for the Local Targets can be used to check the accuracy of the EWT performance data supplied by TfL. • Significant increases in passenger numbers and bus crowding will increase passenger loading/unloading times. This risk can be managed by working with TfL to ensure bus services are provided at frequencies that ensures adequate passenger capacity.
Keep progress against targets	<ul style="list-style-type: none"> • Progress against targets will be monitored by analysing EWT data supplied by TfL, and monitoring the local target for bus performance as explained above.

<p>under review and address areas of over or under performance</p>	<ul style="list-style-type: none"> • Where under performance occurs the Council will investigate the causes (e.g. temporary causes such as road works). • Where causes of underperformance can be addressed the Council will progress initiatives to improve bus reliability along the section of road (e.g. bus priority etc).
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Figure 40: Bus Service Reliability (Excess Waiting Time for all RBK High Frequency Services)

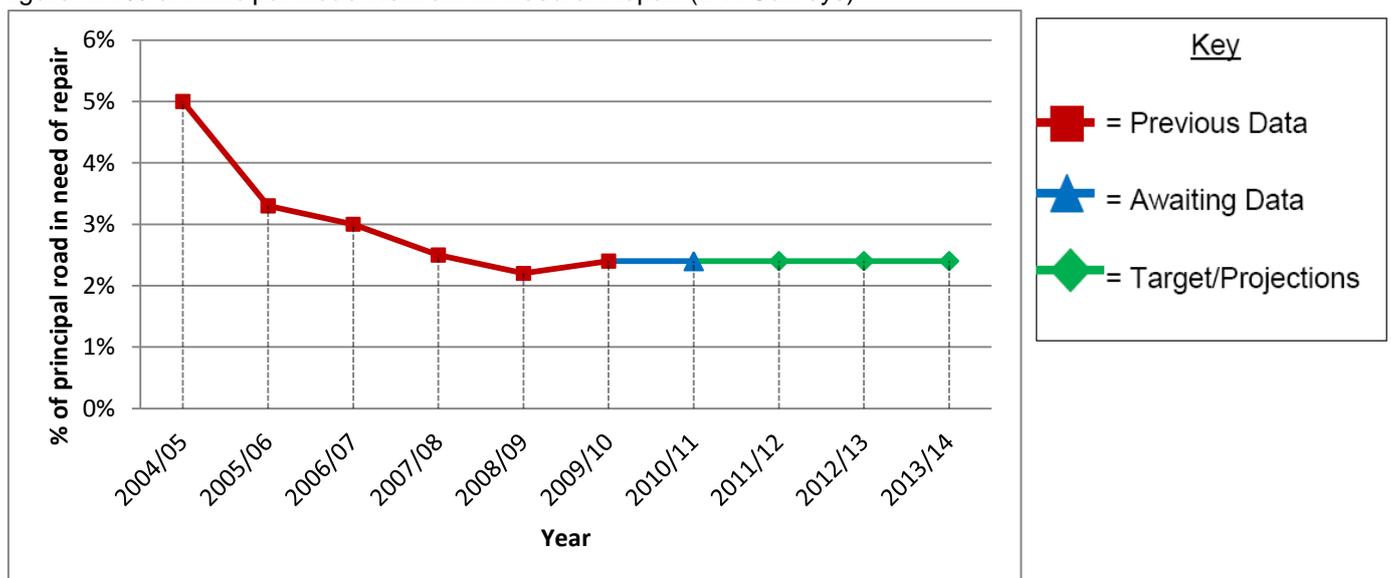


(4.1.5) Asset Condition – Principal Roads (DVI Surveys) Detailed Visual Inspection

Asset condition – principal roads (DVI Surveys)	
Target trajectory	See Figure 41
Link between target, LIP Objectives, and Delivery Plan	<ul style="list-style-type: none"> • <i>LIP Objectives</i>: 17; although a well maintained principal road network also helps to achieve LIP2 Objectives 3, 4, 6, 11, 12. • <i>Delivery Plan</i>: The Council is allocated annual funding from TfL for maintenance of the principal road network; areas for maintenance are determined by DVI and SCANNER surveys. The Council will allocate funding to those roads in greatest need of repair (as determined by DVI and SCANNER surveys).
Evidence that the target is ambitious and realistic	<ul style="list-style-type: none"> • The Council has set a target to keep the percentage of principal road network in need of repair at 2.4% annually (based on DVI surveys) until 2013/14, and out to 2026/27. • The percentage of principal road in need of repair was 2.4% in 2009/10, which is the lowest (equal) of any London borough. In fact according to the TfL Benchmarking Data for Boroughs (DVI surveys) no London borough has ever achieved a rate of less than 2%. • RBK has outperformed its neighbouring boroughs. In 2009/10 neighbouring boroughs performance in terms of principal road network in need of repair is as follows: Richmond (14.2%), Wandsworth (6.9%), Merton (9.3%), and Sutton (7.5%). • As the percentage of road network in need of repair gets lower it becomes increasingly difficult to achieve additional improvements; such improvements often require significant increases in funding. Therefore without considerable increases in funding for road maintenance from TfL it is not realistic to expect further reductions in the percentage of principal road network in need of repair. • Accordingly, a target of 2.4% of the principal road network in need of repair is both ambitious and realistic. • <u>Please note</u>: this target is largely reliant on funding levels from TfL. As funding up until 2013/14 has not been confirmed there is some uncertainty as to the suitability of

	this target.
Key actions for the Council	<ul style="list-style-type: none"> The Council will ensure that all funds for maintenance of the principal road network are fully allocated each year and are allocated to those roads in greatest need of repair (as determined by DVI and SCANNER surveys). The Council will continue its reactive maintenance activities with respect to the principal road network.
Principal risks and how they will be managed	<ul style="list-style-type: none"> A reduction in funding for principal road maintenance from TfL. This risk is difficult for the Council to manage as funding levels are set by TfL. In the case of a funding reduction the Council will discuss funding levels with TfL and/or investigate alternative funding sources. As this target includes roads maintained by TfL there is a risk that TfL may underperform which will affect the performance of the borough. The Council will work closely with TfL to ensure their roads are maintained to a high standard. Where under performance occurs the Council can analyse figures to determine whether under performance is occurring on TfL maintained roads. Frequent occurrences of adverse weather conditions deteriorating the principal road network. There is little the Council can do to address this risk, other than investigate alternative funding sources for maintenance works. Frequent/high occurrences of major works by utility companies. Works such as laying new pipes under the road, even if completed to a high standard, usually create adverse effects on the stability of the roadway. There is little the Council can do to manage this risk.
Keep progress against targets under review and address areas of over or under performance	<ul style="list-style-type: none"> Review annual DVI and SCANNER surveys to determine where funds for maintenance should be allocated. Options to address areas of underperformance are difficult to address as the ability to implement maintenance works depends on TfL funding levels. As such in the case of underperformance the Council will discuss funding levels with TfL and/or investigate alternative funding sources to increase the amount of maintenance works completed annually.

Figure 41: % of Principal Road Network in Need of Repair (DVI Surveys)



(4.1.6) Road Traffic Casualties - Total Number of People Killed or Seriously Injured

Total number of people killed or seriously injured in RBK (2011 – 2013), & Total number of casualties in RBK (2011 – 2013)	
Target trajectory	See Figures 42 & 43
Link between target, LIP Objectives, and Delivery Plan	<ul style="list-style-type: none"> ● <i>LIP Objectives:</i> 3, 6, 10, 14 ● <i>Delivery Plan:</i> <ul style="list-style-type: none"> — Most casualties in RBK occur on the strategic highway network. The Council is reviewing the borough’s strategic highway network, which includes consideration of safety concerns/accident history. Where there are safety concerns on a route and scope for improvement, transport initiatives will be feed into the POI. — Increasing the levels of walking and cycling in the borough is a key priority for the Council. Improving the safety of these vulnerable road users will be a key means of encouraging greater participation in walking and cycling (this is supported by funding levels allocated to these modes in the POI).
Evidence that the target is ambitious and realistic	<p><u>Total number of people killed or seriously injured (KSI’s)</u></p> <ul style="list-style-type: none"> ● RBK has achieved a 36% reduction in fatal and serious casualties (KSI’s) between 2002 and 2009 (86 KSI’s in 2002 and 55 in 2009; based on 3-year rolling averages). This is an annual reduction of 6.1%. ● RBK has achieved a 19% reduction in KSI’s between 2006 and 2009 (68 KSI’s in 2006; based on 3yr rolling averages). This is an annual reduction of 6.8%. ● The Council propose to set targets based on a 5.0% annual reduction in KSI’s until 2013 (e.g. 45 KSI’s in 2013). Then an 11.0% (total) reduction between 2013 and 2020 (e.g. 40 KSI’s in 2020). The 2020 target will be revised in the next Delivery Plan period, and targets will be set out to 2026. Of note is that a target of 40 KSI’s by 2020 achieves the DfT target of a 33% reduction in KSI’s by 2020 (based on 2004 – 2008 average). ● As of 2008 RBK had the third lowest rate of KSI’s in London (64 KSI’s based on a 3-year rolling average). This compares with neighbouring boroughs rates: Richmond (81), Wandsworth (139), Merton (67), and Sutton (76). ● As KSI rates get lower it becomes more difficult and costly to achieve ongoing reductions; as such it is not considered realistic to continue to achieve significant annual casualty reductions (i.e. at the rates seen since 2002). ● Given RBK’s low KSI rate when compared to other London Borough’s, the difficulties this presents for significant ongoing reductions, and likely funding reductions, a 5.0% annual reduction in KSI’s is seen as an ambitious and realistic target. <p><u>Total Casualties</u></p> <ul style="list-style-type: none"> ● RBK has achieved a 26% reduction in total casualties between 2002 and 2009 (577 casualties in 2002 and 427 in 2009; based on 3-year rolling averages). This is an annual reduction of 4.2%. ● RBK has achieved a 3.6% reduction between 2006 and 2009 (443 casualties in 2006; based on 3-year rolling averages). This is an annual reduction of 1.2%. ● The Council propose to set targets based on a 2.0% reduction in total casualties per year until 2013 (e.g. 394 casualties in 2013). Then a 10.0% (total) reduction between 2013 and 2020 (e.g. 354 casualties in 2020). The 2020 target will be revised in the next Delivery Plan period, and targets will be set out to 2026. ● As of 2009 RBK had the second lowest rate of total casualties in London (420 casualties based on a 3-year rolling average). This compares with neighbouring boroughs rates: Richmond (467), Wandsworth (913), Merton (512), and Sutton (545). ● As casualty rates get lower it becomes more difficult and costly to achieve ongoing reductions; as such it is not considered realistic to continue to achieve significant

	<p>annual casualty reductions (i.e. at the rates seen since 2002).</p> <ul style="list-style-type: none"> Given RBK's low casualty rate when compared to other London Borough's, the difficulties this presents for significant ongoing reductions, and likely funding reductions, a 2.0% annual reduction in total casualties is seen as an ambitious and realistic target.
Key actions for the Council	<ul style="list-style-type: none"> As casualties in RBK mainly occur on the strategic highway network, and there are no clear casualty 'hotspots' on Council operated roads, the best approach is to improve safety for users of the strategic highway network. The most effective way to approach this is to implement recommendations from the Council's main road corridor investigations. Improve safety on strategic walking routes; including ongoing audit program. Improve safety on strategic cycling routes. Improve pedestrian and cyclist safety at busy road crossings. Improve safety for vulnerable road users. Road safety education and awareness. Cycle training.
Principal risks and how they will be managed	<ul style="list-style-type: none"> Delays to the implementation of schemes to improve road user safety. The Council will manage this risk by ensuring the risks of delivering schemes are considered before they are included in the POI. The Council has a good history of delivering schemes on time. Funding reductions from TfL borough LIP allocation, and/or a reduction in funding from other potential sources (e.g. Major schemes funding, Council funding). Impact of risk cannot be fully managed; however the Council can ensure funding is prioritised towards schemes that will have the greatest contribution to improving safety (particularly vulnerable users). Unforeseen trends - for no specific reason there is a year (or more) of high casualty rates in RBK e.g. high rates of driver or pedestrian error not due to conditions. This risk will be managed by continuing ongoing road safety awareness activities. An increase in walking and cycling rates could increase the number of casualties in the borough, as these modes are more vulnerable to injuries (casualties) due to accidents. This can be partly mitigated by targeted infrastructure (e.g. segregated cycle lanes, pedestrian crossings) to protect vulnerable road users on busier roads and road safety education campaigns aimed at drivers and vulnerable road users. The increased uptake of electric vehicles could lead to a period of increased road accidents while road users are not accustomed to reduced noise levels. This can be partly mitigated by road safety education work to raise awareness of electric vehicles amongst all road users but particularly placing onus of responsibility on EV drivers to be aware that other road users will react to them differently than in traditional cars.
Keep progress against targets under review and address areas of over or under performance	<ul style="list-style-type: none"> Review casualty trends/numbers and causes annually. Investigate casualty plots for any 'hotspots', if such clusters exist then implement safety improvements in that location. Review the type of safety improvements and locations of safety improvements we are investing in e.g. cycle lanes on main roads, pedestrian crossings. Re-evaluate the level of funding allocated to safety improvements.

Figure 42: RBK Serious or Fatal Casualties (KSI's) – 3yr Rolling Average

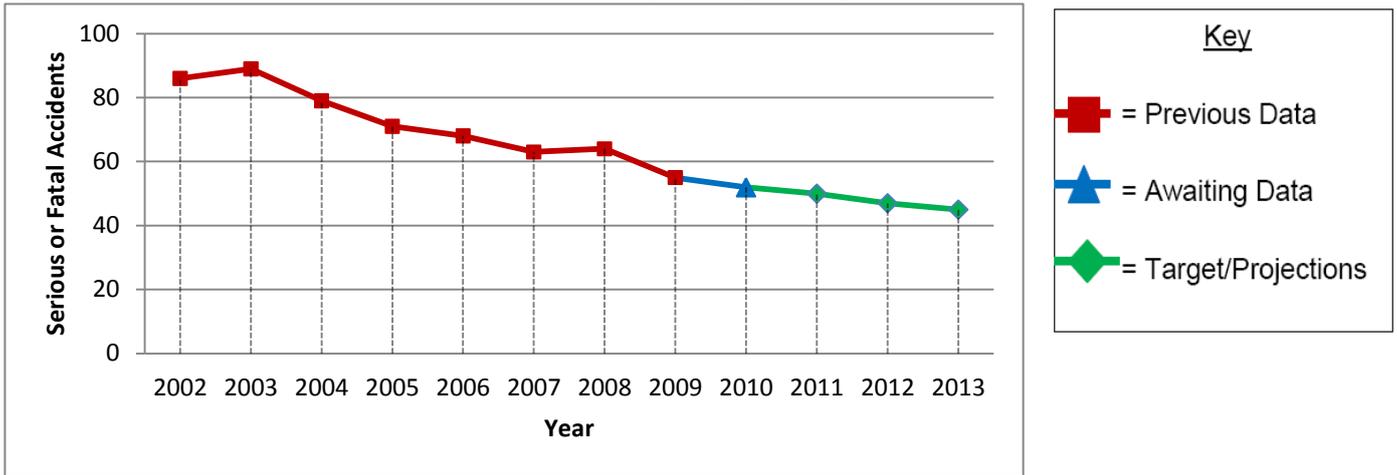
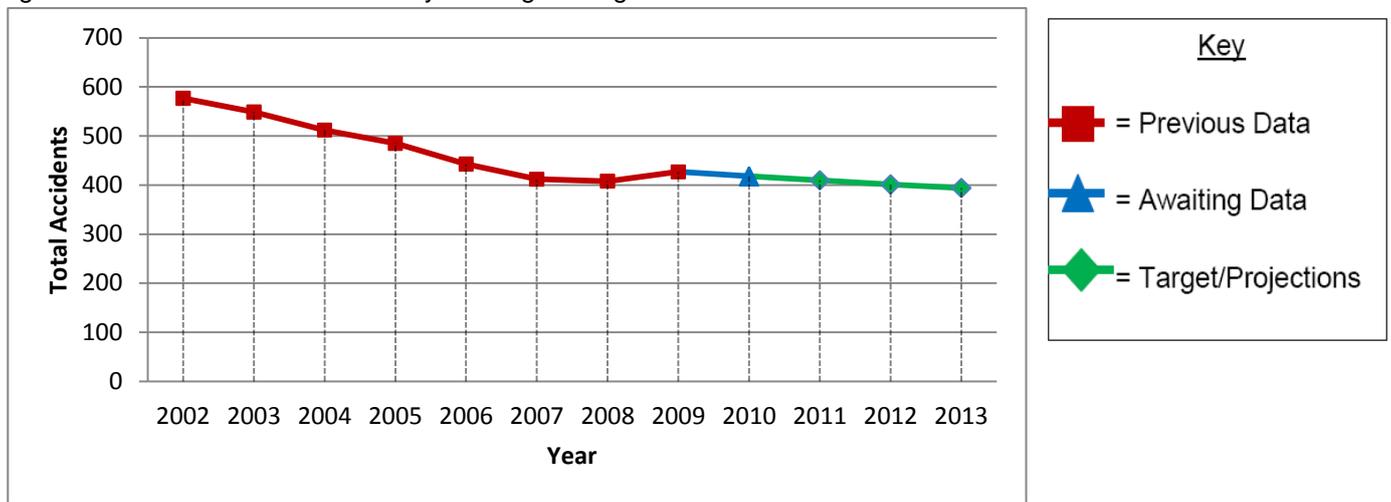


Figure 43: RBK Total Casualties – 3yr Rolling Average



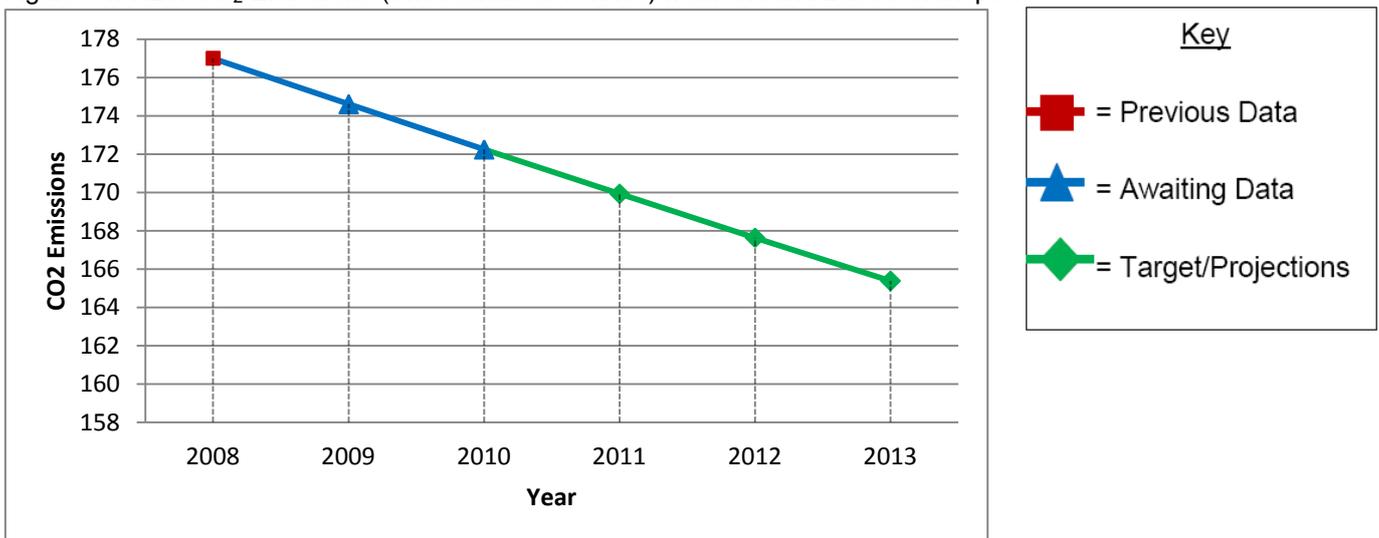
(4.1.7) CO₂ emissions

CO ₂ emissions from ground-based transport in RBK	
Target trajectory	See Figure 44
Link between target, LIP Objectives, and Delivery Plan	<ul style="list-style-type: none"> • <i>LIP Objectives:</i> 1 & 12. Initiatives to achieve objectives 3, 4, 5, 8, 9, 10, 14, 15, 16 will also help to reduce CO₂ emissions. • <i>Delivery Plan:</i> <ul style="list-style-type: none"> — There are many actions in the Delivery Plan that focus on encouraging sustainable modes of transport, and encouraging a shift towards low emissions vehicles. — LIP2 'project initiative prioritisation system' supports projects that promote sustainable transport modes, and as such many projects in the POI support the uptake of sustainable modes. — The POI allocates low levels of annual funding for electric vehicle charging point provision (although the majority of electric vehicle charging points will be provided through other means e.g. planning obligations). — The POI allocates annual funding for Smarter Travel initiatives
Evidence that the target is ambitious	The borough's total CO ₂ emissions from ground-based transport in 2008 were 177,000 tonnes. The Council has set a target of reducing CO ₂ emissions from ground-based

<p>and realistic</p>	<p>transport to 165,370 tonnes by the end of 2013, and 96,820 tonnes by 2025.</p> <p>RBK achieved a 1.35% annual reduction in CO₂ emissions between 2005 and 2008. The boroughs target of 165.37 tonnes in 2013 is based on the continuation of the 1.35% annual reduction in CO₂ emissions. This is seen as an ambitious target for the following reasons:</p> <ul style="list-style-type: none"> • It is based on past performance. • Reduction in CO₂ emissions will be achieved through 2 key mechanisms: 1) reductions in total vehicle kilometres and 2) reductions in vehicle emissions. <ul style="list-style-type: none"> — Kingston is the smallest London borough, yet according to the TfL LIP Benchmarking Tool 2010 RBK has 14th highest vehicle kilometres in London. This is due to a number of factors including relatively poor rail based transport and high volumes of through traffic (mainly due to the A3). The poor rail based transport and CO₂ emissions from through traffic are beyond the Council's control. — It is likely that total vehicle kilometres in RBK will increase during the Monitoring Plan period (until 2013/2014) due to: 1) funding reductions will result in decreased investment in sustainable modes of transport. 2) RBKs population is predicted to increase by 5-6% by 2018. — RBK does not fully reap the benefits of LEZ restrictions on vehicle emissions as the LEZ does not cover large and highly trafficked areas of the borough. This exasperates the concerns regarding total vehicle kilometres. — Given the points above, RBK will be primarily reliant on the uptake of low emission vehicles to achieve reductions in CO₂ emissions. The uptake of these vehicles is largely beyond the Councils control, being heavily dependent on wider public and private sector initiatives to advance clean vehicle technologies and encourage uptake. It is unlikely that there will be a switch to cleaner vehicles during the initial Monitoring Plan period that will enable considerable reductions in CO₂ emissions from the vehicle fleet. However, the Council is optimistic that low emission vehicles will become cheaper and more accessible in the longer term, which will enable greater reductions in vehicle emissions to be achieved between 2014 and 2025. As such the longer term targets set by the Mayor (2025) are seen as more achievable. — RBK has one of the smallest LIP funding allocations from TfL in London; therefore initiatives the Council can influence, such as the installation of electric charging infrastructure, will be constrained.
<p>Key actions for the Council</p>	<ul style="list-style-type: none"> • Promote sustainable transport modes (walking, cycling, and public transport) e.g. public realm improvements, cycle lanes, bus priority, train station access, travel plans. • The extension of the LEZ (proposed by the Council) would help reduce CO₂ emissions. • Provision of electric vehicle charging points (and if applicable charging/fuelling infrastructure for other alternative fuelled vehicles). • Increase Car Club bays and membership • The Council will lobby TfL to ensure bus routes servicing RBK are priorities for the roll out of low emission buses (<i>this is important given RBK's reliance on the bus network</i>). • The Council will promote and raise awareness of fuel efficient driving techniques (e.g. through workplace travel plans and general promotional activities). • Encourage remote accessing of work (through travel plans).

	<ul style="list-style-type: none"> • Implement emissions based parking charges.
Principal risks and how they will be managed	<ul style="list-style-type: none"> • Funding restrictions and further reductions from TfL borough LIP allocation, and/or a reduction in funding from other potential sources (e.g. Major schemes funding, Council funding), resulting in delays/ limitations in implementation of schemes to achieve modal shift, reduce traffic levels, and increase the uptake of low emission vehicles. This risk of reduced funding is beyond the control of the Council. However risk can be managed by prioritising funding towards schemes that will have most impact on achieving targets (although schemes that only address climate change and not other transport objectives will receive lower priority e.g. electric charging points). • The uptake of low emission vehicles is slower than expected (i.e. factors outside the control of the Council such as lack of private sector, government, and other authorities' efforts to promote low emission vehicles). This risk is beyond the direct control of the Council it can be managed to some extent by prioritising schemes that achieve modal shift and reduce vehicle kilometres. • The Mayor's policies with regards to the LEZ restrictions and boundaries will effect CO₂ emissions in the borough. This risk cannot be controlled by the Council; however, the Council can work with TfL to extend the LEZ boundaries within RBK. • An increase in the borough's total vehicle kilometres. This risk is largely beyond the control of the Council but can be controlled to some extent through managing the demand for car travel by promoting sustainable transport modes and ensuring new development is located in areas with good public transport accessibility.
Keep progress against targets under review and address areas of over or under performance	<ul style="list-style-type: none"> • Review CO₂ emissions data annually. • Review the levels of walking, cycling, and bus use annually; are levels achieving performance targets? How can we increase uptake of these modes? • Review the mode share of cars and vehicle kilometres annually; is it increasing? Why? • Review the uptake and preferences towards alternatively fuelled vehicles. Is electric vehicle charging point provision satisfying demand/desires? • Re-evaluate the level of funding allocated to initiatives to reduce CO₂ emissions. • Consider the type of initiatives being used to reduce CO₂ emissions.

Figure 44: RBK CO₂ Emissions (Thousands of Tonnes) from Ground Based Transport



(4.1.8) Core Indicator Summary

Table 15: Core Indicator Summary

Core Indicator	Definition	Year Type	Units	Base Year	Base year Value	Target Year	Target Year Value	Trajectory Data				Data Source
								2010/11	2011/12	2012/13	2013/14	
Mode share of residents by borough of origin	% of trips by walking	Financial	%	2006/07 to 2008/09 average	32.6%	2011/12 to 2013/14 average	33%	2010/11	2011/12	2012/13	2013/14	LTDS
								32.7%	32.8%	32.9%	33%	
Mode share of residents by borough of origin	% of trips by cycling	Financial	%	2006/07 to 2008/09 average	1.9%	2011/12 to 2013/14 average	2.4%	2010/11	2011/12	2012/13	2013/14	LTDS
								2.1%	2.2%	2.3%	2.4%	
Bus service reliability	Excess waiting time in minutes	Financial	Minutes	2009/10	1.1mins	2013/14	1.2	2010/11	2011/12	2012/13	2013/14	iBus
								1.2mins	1.2mins	1.2mins	1.2mins	
Asset condition – principal roads	% length in need of repair	Financial	%	2009/10	2.4%	2013/14	2.4%	2010/11	2011/12	2012/13	2013/14	DVI data supplied by TfL
								2.4%	2.4%	2.4%	2.4%	
Road traffic casualties	Total number of people killed or seriously injured (KSI's)	Calendar	Number	2007 to 2009 average	55	2011 to 2013 average	45	2010	2011	2012	2013	London Road Safety Unit
								52	50	47	45	
Road traffic casualties	Total casualties	Calendar	Number	2007 to 2009 average	427	2011 to 2013 average	394	2010	2011	2012	2013	London Road Safety Unit
								418	410	401	394	
CO ₂ emissions	CO ₂ emissions (Tonnes)	Calendar	Thousands of Tonnes/year	2008	177.0	2013	165.37	2010	2011	2012	2013	LEGGI – from TfL
								172.25	169.93	167.63	165.37	

Please note: The effect that proposed Major Schemes in RBK will have on these targets is outlined in the Delivery Plan (Section 3.4.5).

(4.2) LOCAL TARGETS AND INDICATORS

Local Targets and Indicators are designed to supplement the Core Targets. Whereas the Core Targets primarily assess progress towards achieving the high level outcomes of the LIP, such as reductions in CO₂ emissions or road casualties (i.e. themes and objectives); the Local Targets and Indicators are focused on demonstrating the boroughs progress towards delivering policies/actions (which ultimately help achieve the LIP Objectives and Core Targets). For example, the Council has a policy to install electric vehicle charging points as one way to achieve the core target of a reduction in CO₂ emissions from ground-based transport. If the Council failed to achieve the core target for reducing CO₂ emissions, Local Indicators (such as electric vehicle charging points installed) can be used to determine whether: a) the Council is effectively implementing policies to achieve the indicator, b) the Council is focusing on the best policies to deliver the core target, c) the failure to achieve the core target is due to factors outside of the control of the Council e.g. national policies do not adequately encourage uptake of low emission vehicles.

(4.2.1) Local Target (Non-mandatory) – Bus Service Reliability (Selected Routes)

Bus service reliability (iBus) – selected routes - (2011/12 – 2013/14)	
Target trajectory	See Table 16
Link between target, LIP Objectives, and Delivery Plan	<ul style="list-style-type: none"> • <i>LIP Objectives:</i> 1, 3, 4, 8, 12, 14, 15 • <i>Delivery Plan:</i> There are many actions in the Delivery Plan that focus on encouraging bus use. Also the LIP2 'project initiative prioritisation system' supports projects that encourage bus use, and as such many projects in the POI support measures to improve the reliability of bus services in the borough. There are also investigations into potential initiatives proceeding on 3 of the 4 of the 'sections of highway' that have been identified to measure bus reliability.
Evidence that the target is ambitious and realistic	<ul style="list-style-type: none"> • All targets set require an improvement or maintenance on existing performance of the bus route. This ensures the borough will continue to perform in accordance with TfL Business Plan projections for EWT. • The targets are realistic as 3 of the 4 'sections of highway' selected are subject to investigations or works between 2011/12 and 2013/14. • The targets are summarised in Table 14 below; for a full explanation of the targets please refer to Appendix 24.
Key actions for the Council	<ul style="list-style-type: none"> • Investigate and implement opportunities to improve bus priority along the chosen routes/roads. • Investigate and implement opportunities to smooth traffic flow along the chosen routes/roads. • Investigate opportunities to reinstate bus lay-bys (if they will improve bus reliability).
Principal risks and how they will be managed	<ul style="list-style-type: none"> • Delays to the implementation of schemes. The Council will manage this risk by ensuring the risks of delivering schemes are considered before they are included in the LIP 3-year POI. The Council has a good history of delivering schemes on time. • Increases in car use/congestion. To overcome this risk the Council is focussing on promoting sustainable modes of transport, and will look at options to smooth traffic flow and/or improve bus priority measures on congested routes. • Funding reductions from TfL borough LIP allocation, and/or a reduction in funding from other potential sources (e.g. Major schemes funding, Council funding). Impact of risk cannot be fully managed; however the Council can prioritise funding towards schemes that will have the greatest contribution to improving bus reliability. • Significant increases in passenger numbers and bus crowding will increase passenger loading/unloading times. This risk can be managed by working with TfL

	to ensure bus services are provided at frequencies that ensures adequate passenger capacity.
Keep progress against targets under review and address areas of over or under performance.	<ul style="list-style-type: none"> • Progress against targets will be monitored by analysing iBus data for the relevant sections of highway. • Where under performance occurs the Council will investigate the causes (e.g. temporary causes such as road works). • Where causes of underperformance can be addressed the Council will progress initiatives to improve bus reliability along the section of road (e.g. bus priority etc).

Table 16: Bus Reliability (Local Target)

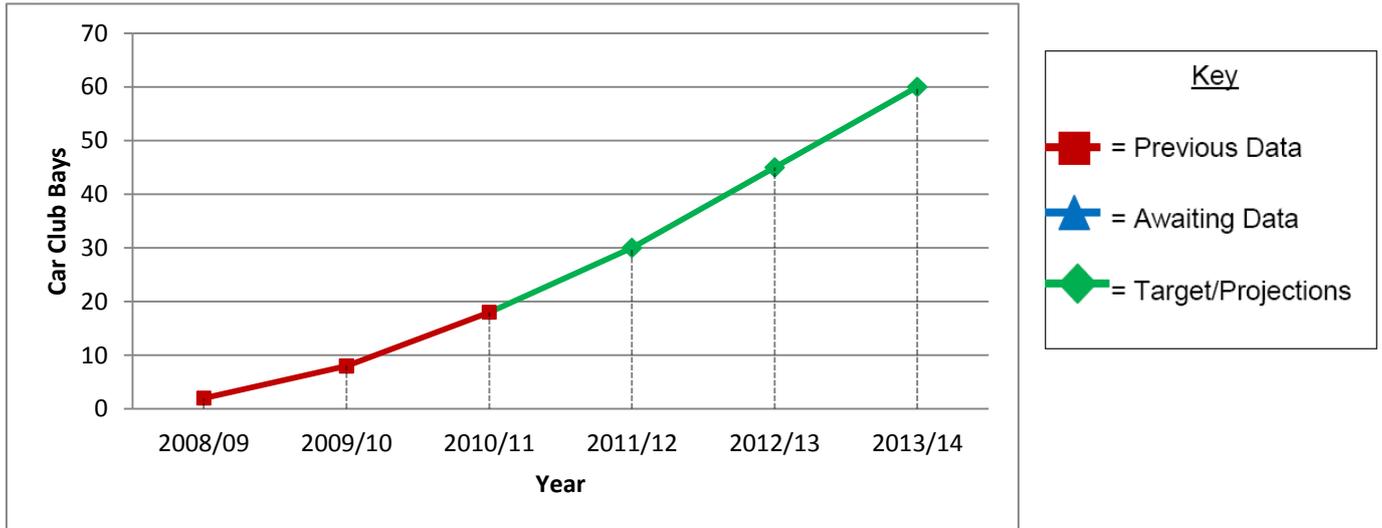
<p><u>Key:</u></p> <ul style="list-style-type: none"> • ADSAT = Average difference between scheduled bus arrival times and actual bus arrival times • SD = Standard Deviation (between scheduled bus arrival times and actual bus arrival times)
<p><u>Notes:</u></p> <ul style="list-style-type: none"> • The time period (Monday – Friday) that was performing the worst for each bus route was chosen as the baseline to set targets against. If the worst period of the day improves then it is likely all other periods will also improve. If this is not the case other time periods can be considered once satisfactory improvements in the worst time period have been achieved. Where the worst time period was before 0700 or after 1900 this time period was not selected as it was deemed to be issues with the bus operation as opposed to issues with the road infrastructure. • On some routes ADSAT was deemed the most appropriate performance indicator, and on some routes SD was deemed the most appropriate. • Bus reliability data (iBus) data will be compiled annually based on March results; as such March 2010 has been used as the baseline.

Bus Route	Section of Highway	Performance March 2010	Time Period (Mon – Fri)	Target March 2011	Target March 2012	Target March 2013	Target March 2014	Target March 2020	Other Bus Routes
265	Start: Tolworth Roundabout (4510) End: Tolworth / King Charles Road (BP1645)	ADSAT = 0.6mins	0700-1000	0.6	0.6	0.6	0.6	0.6	K1, K2, 281, 406, 418, (965 - infrequent operation)
	Start: Tolworth / King Charles Road (BP1645) End: Tolworth Roundabout (18698)	ADSAT = 0.4mins	1000-1300	0.4	0.4	0.4	0.4	0.4	
213	Start: Cambridge Avenue (33078) End: New Malden / The Fountain (1789)	ADSAT = 1.2	1600-1900	1.2	1.2	1.2	1.2	1.2	K1
	Start: New Malden / The Fountain (1790) End: Sycamore Grove (33077)	ADSAT = 1.3	0700-1000	1.3	1.3	1.3	1.3	1.3	
213	Start: New Malden / The Fountain (1789) End: Worcester Park Station (2023)	SD = 1.8	1600-1900	1.8	1.8	1.6	1.4	1.4	X26 K1 (part) K5 (part) 265 (part)
	Start: Worcester Park Station (2022) End: New Malden / The Fountain (1790)	SD = 1.4	0700-1000	1.4	1.4	1.3	1.2	1.2	
131	Start: Vicarage House (10041) End: Rookwood Avenue (9156)	SD = 2.2	1600-1900	2.2	2.2	1.8	1.8	1.8	X26 (part) K5 (part) 152 (part) 265 (part), N87, N77
	Start: Rookwood Avenue (9157) End: Vicarage House (BP1528)	SD = 2.7	0700-1000	2.7	2.7	2.1	2.1	2.1	
65	Start: Tudor Drive (9796) End: Kingston Station (BP491)	SD = 1.3	1600-1900	1.3	1.3	1.3	1.3	1.3	691, 971, 801 (all school buses)
	Start: Kingsgate Road (FW1) End: Tudor Drive (9797)	SD = 0.6	1000-1300	0.6	0.6	0.6	0.6	0.6	

(4.2.2) More Local Indicators and Targets

Car Club Bays- (2011/12 – 2013/14)	
Target trajectory	See Table 17 & Figure 45
Link between target, LIP Objectives, and Delivery Plan	<ul style="list-style-type: none"> • <i>LIP Objectives:</i> 1,4 ,8,12,14,16 • <i>Delivery Plan:</i> Directly measures progress against implementation of Policy SV2 (Smarter Vehicles- Car Clubs)
Evidence that the target is ambitious and realistic	<p>Please note this target relates to the provision of on-street car club bays.</p> <ul style="list-style-type: none"> • Car club membership in RBK has grown quickly over the last few years to over 1000 members. TfL car club demand analysis has shown that there is significant further potential for growth in car clubs with a potential borough wide membership of around 25,000. • The strongest areas for potential growth are in the areas with good public transport links around Kingston, Surbiton and New Malden Town Centres. However, there is low potential for growth in the South of the Borough which borders Surrey and has poor public transport. • The strong potential for car club growth in some parts of the Borough has to be balanced with the Borough's small population size and outer London location, which to some extent limits the number of car club bays that can be accommodated across the Borough in comparison with some larger inner London Boroughs. • Therefore the targets, which seek to approximately treble the number of car club bays to 60 in the 3 years to 2013/14 are considered to be ambitious but realistic.
Key actions for the Council	<ul style="list-style-type: none"> • Implement additional on street car club bays in appropriate locations. • Work with car club operators to promote and raise awareness of car clubs.
Principal risks and how they will be managed	<ul style="list-style-type: none"> • Delays to the implementation of schemes, particularly as a result of objections to TMO's requiring the application return to the Council's Committee for reconsideration. The risk will be managed by ensuring that the Committee approval and TMO process is started at an early stage in the financial year. • Political risk of new bay locations not being approved by Council Committees. Impact can be managed by engaging with Councillors about bay locations at an early stage. • Risk of car club operator being unable to comply with contract or going into administration. Impact cannot be fully managed but can be mitigated by regularly liaising with car club operator to identify any potential problems at an early stage.
Keep progress against targets under review and address areas of over or under performance.	<ul style="list-style-type: none"> • Annually record the number and location of new car club bays installed. • The number and location of car club members and the utilisation rates of cars will also be monitored to give an indication of the success of the car club network.

Figure 45: RBK Car Club Bays



Cycle Training Delivered (2011/12 – 2013/14)	
Target trajectory	See Table 17
Link between target, LIP Objectives, and Delivery Plan	<ul style="list-style-type: none"> • <i>LIP Objectives:</i> 1, 3, 6, 8, 10, 12, 13, 14 • <i>Delivery Plan:</i> Directly measures progress against implementation of Policy C4 (Cycle Training)
Evidence that the target is ambitious and realistic	<p>Please refer to Table 17 for targets and trajectories.</p> <p>Cycling potential and cycling market segmentation information provided by TfL shows that there is significant potential to increase cycling trips in RBK. TfL research has identified that a high proportion of adults in outer London would like to cycle more but that a fear of cycling in traffic is a significant barrier. School Travel data shows that there is significant potential for an increase in cycling levels at many of the Borough's Secondary Schools. There is therefore high potential demand for cycle training amongst adults and secondary school children in the Borough.</p> <p>The Council runs an in house cycle training programme and already delivers advanced Bikeability level 2 and 3 training to older children and one to one adult cycle training. An objective of the LIP is to significantly increase the amount of cycle training delivered to these groups and the targets set reflect an approximate doubling of the amount of cycle training delivered to these groups in 2010/11. These targets are considered to be both realistic and ambitious, particularly given funding restraints.</p>
Key actions for the Council	<ul style="list-style-type: none"> • Deliver high quality adult and level 3 bikeability cycle training to the national standard. • Offer and promote adult cycle training to employees at workplaces with a travel plan, particularly via existing travel plan networks in Kingston, Surbiton and Chessington. • As part of School Travel Planning work offer and promote level 3 bikeability training to pupils of all Secondary Schools in the Borough, focussing on those Schools with highest potential for mode shift to cycling. • Actively promote cycle training to residents in the Borough, particularly in the Surbiton and Kingston areas that have been identified in the biking borough report as have high levels of residents that are likely to cycle.
Principal risks and how they will be managed	<ul style="list-style-type: none"> • The cost of cycle training being unaffordable to both the Council and to individuals which may act as a barrier to uptake of training. The Council can seek to manage the cost of cycle training for individuals by subsidising some or all of the cost. However, funding reductions from the TfL LIP allocation/ other sources and/ or an

	<p>increase in the cost of delivering cycle training may impact on the Council's ability to subsidise cycle training cost, impacting on uptake of training. Impact of risk cannot be fully managed, however the Council can ensure funding is prioritised towards cycle training provision.</p> <ul style="list-style-type: none"> • A lack of qualified cycle training instructors to deliver cycle training. The Council can seek to manage the risk by recruiting and training additional cycle training instructors. It should be noted that RBK is one of a few nationally accredited cycle instructor training providers, so can train new instructors in house at minimal cost. • A year(s) of particularly adverse weather may impact on the delivery of cycle training. Risk cannot be fully managed, but can be partly managed by promoting the benefits of all year round cycling including promoting use of high visibility clothing, lights etc.
<p>Keep progress against targets under review and address areas of over or under performance</p>	<ul style="list-style-type: none"> • Annually record the amount of cycling training we are providing and to whom (e.g. School Children, Employees, Residents etc). • Conduct follow up surveys of a sample of trainees to assess the effectiveness of the cycle training and whether improvements to cycle training could be made. • Travel Plan modal split data from Schools and Workplaces will also be used to give an indication of the effectiveness of the cycle training.



Table 17: Local Targets and Indicators

Indicator/Target Name	Definition/ Method	Objectives/Policies measured		2011/12	2012/13	2013/14
Cycle Training	Number of secondary school children and adults that have received cycle training per year	Directly measures progress against implementation of Policy C4 (Cycle Training)	Child (advanced) Baseline 2010/11 = 93	200	250	250
			Adult Baseline 2010/11 = 63	100	150	150
Cycling Numbers (Output Indicator)	Average daily cycle trips recorded at RBK counters annually. As the Council is changing the locations and type of cycle counters in 2011, it is not possible to set a target for this indicator. It is intended to begin setting targets from 2014/15 onwards. Despite this it is useful to record trends at cycle counters over the next 3 years, as the information will help the Council to understand cycling trends and provide another level of information to support TfL cycling mode share performance results for RBK.	Directly measures progress against Policy C2 (Cycle Parking)				
On- Street Car Club Bays	Total number of car club bays in Borough (cumulative)	Directly measures progress against implementation of Policy SV2 (Smarter Vehicles-Car Clubs)	Baseline 2010/11 = 18	30	45	60