

Local Implementation Plan



Bromley's Second Local Implementation Plan

Updated October
2013

Bromley's Approved LIP 2012

Updated approved version – November 2013

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Part 1 - Introduction

Background

This Local Implementation Plan (LIP) is a statutory document, prepared under Section 145 of the Greater London Authority Act 1999, which sets out how the Council proposes to implement the Mayor's Transport Strategy in its area, as well as contributing to other locally and sub-regionally important goals. It has been developed in accordance with Guidance on Developing Second London Local Implementation Plans (TfL May 2010).

Bromley's first LIP covered the period 2005/06 to 2010/11. This document is Bromley's second LIP. It covers the same period as the new Mayor's Transport Strategy (published in May 2010), and has been updated in summer 2013 to include delivery proposals for the period 2014/15 - 2016/17. It also takes account of South London Sub-Regional Transport Plan (SRTP), the transport elements of the Replacement London Plan, and other relevant policies. It sets out long terms goals and transport objectives for Bromley for the next 20 years, a more detailed three-year programme of investment starting in 2014/15, and the targets and outcomes we are seeking to achieve.

This LIP identifies how we will work towards achieving the MTS goals of:

- 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 and
- Reducing transport contribution to climate change and improving its resilience.

How this LIP has been prepared

In May 2010, the Mayor of London issued formal Guidance to boroughs which prescribed the general form and content of borough LIPs. This LIP aims to follow the format prescribed by the Guidance.

Elected Members (Councillors) provided guidance to the Council's officers during the development of a Draft LIP, via a Transport Statement Working Group which met on 13th July 2010, and a report on the Council's transport objectives, which was considered by the Council's Environment Policy Development and Scrutiny (PDS) Committee on 28th September 2010.

A Draft LIP was prepared by Council officers and was agreed by the Council's Executive Portfolio Holder for the Environment, Councillor Colin Smith, on 8th December 2010, following consideration by the Environment PDS Committee on 29th November 2010. As required by Guidance, the Draft LIP was submitted to TfL on 20th December 2010. At the same time, the Council started a period of consultation on the Draft LIP, which ended on Friday 11th February 2011.

The Government announced its Comprehensive Spending Review on 20th October 2010, and on 4th November TfL issued a note which revised the sums to be allocated to boroughs under the formula funding arrangements for Corridors, Neighbourhoods and Smarter Travel (later renamed Supporting Measures) in the financial years 2011/12, 2012/13 and 2013/14. This necessitated a further report to the Environment PDS Committee on 1st March 2011, recommending a revised three-year programme of expenditure.

While the Portfolio Holder subsequently approved the overall balance of the revised programme, by then it had emerged that the Mayor had announced to the London Assembly on 10th February 2011 that he intended to protect transport funding for boroughs at a higher level than previously announced, namely £147.8M a year over three years.

A Final LIP was considered by the Environment PDS Committee on 19th July 2011 and subsequently approved by the Portfolio Holder on 6th September 2011. Following further discussions with TfL, the LIP was approved by Isabel Dedring, Deputy Mayor for Transport, on behalf of the Mayor of London, on 9th January 2012.

An updated Final LIP with a new programme of investment, updated Delivery Plan and Performance Monitoring Plan was considered by the Environment PDS Committee on 1st October 2013 and subsequently approved by the Portfolio Holder following.

Consultation

The GLA Act 1999 places a duty on boroughs, when preparing a LIP, to consult with the following organisations:

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

The Mayor did not require any further persons or organisations to be consulted.

The Council undertook a public consultation exercise between 20th December 2010 and 11th February 2011. The consultation appeared on the Council's website, and was available for any member of the public to respond.

In addition, a total of 207 bodies were directly consulted, including the statutory consultees mentioned above. All direct consultees were written to, drawing attention to the consultation, where it could be found on the Council's website, and the closing date. The letter offered the alternative of a printed or CD-ROM version of the LIP, although no requests were received to provide the LIP in these formats.

The direct consultees fell into a number of broad categories as follows:

Statutory	Number Consulted
TfL	1
Police	1
Disablement groups	5
Local authorities	9
Non-statutory	
National agencies	5
Transport & environment groups and operators	23
Business groups	4
Community groups	9
Residents' groups and associations	150

There were 14 responses including TfL's response. Bodies and individuals responding to the consultation were:

- Transport for London
- Kent County Council
- Tandridge District Council
- London Borough of Bexley
- London Borough of Southwark
- Natural England
- English Heritage
- Bromley Mobility Forum
- The Association of British Drivers
- South London Freight Quality Partnership
- London TravelWatch
- Green Street Green Village Society
- Bromley Cyclists (2 responses)

A more detailed summary of the responses received and the Council's response to individual points raised can be found on the Council's website at http://www.bromley.gov.uk/transportandstreets/guide_to_local_implementation_plan.htm.

Strategic Environmental Assessment (SEA) and Equality Impact Assessment (EQIA)

The Council has a statutory duty to conduct a Strategic Environmental Assessment and an Equality Impact Assessment on its LIP. The LIP Objectives and programmes have been assessed for both purposes, and this process has not identified any necessary changes to the LIP. The SEA Environmental Report, including a non-technical summary, and a draft of the EQIA were available on the Council's website during the consultation period, but no comments were received. The Environmental Report and Environmental Statement, and the final EQIA remain on the website at this link: http://www.bromley.gov.uk/transportandstreets/guide_to_local_implementation_plan.htm.

Structure of Bromley's LIP

The rest of the document is laid out as follows:

- Section 2: Borough Transport Objectives
- Section 3: Delivery Plan
- Section 4: Performance Monitoring Plan
- Appendices: LIP Local Targets and Glossary.

Part 2 - Borough Transport Objectives

The London Borough of Bromley

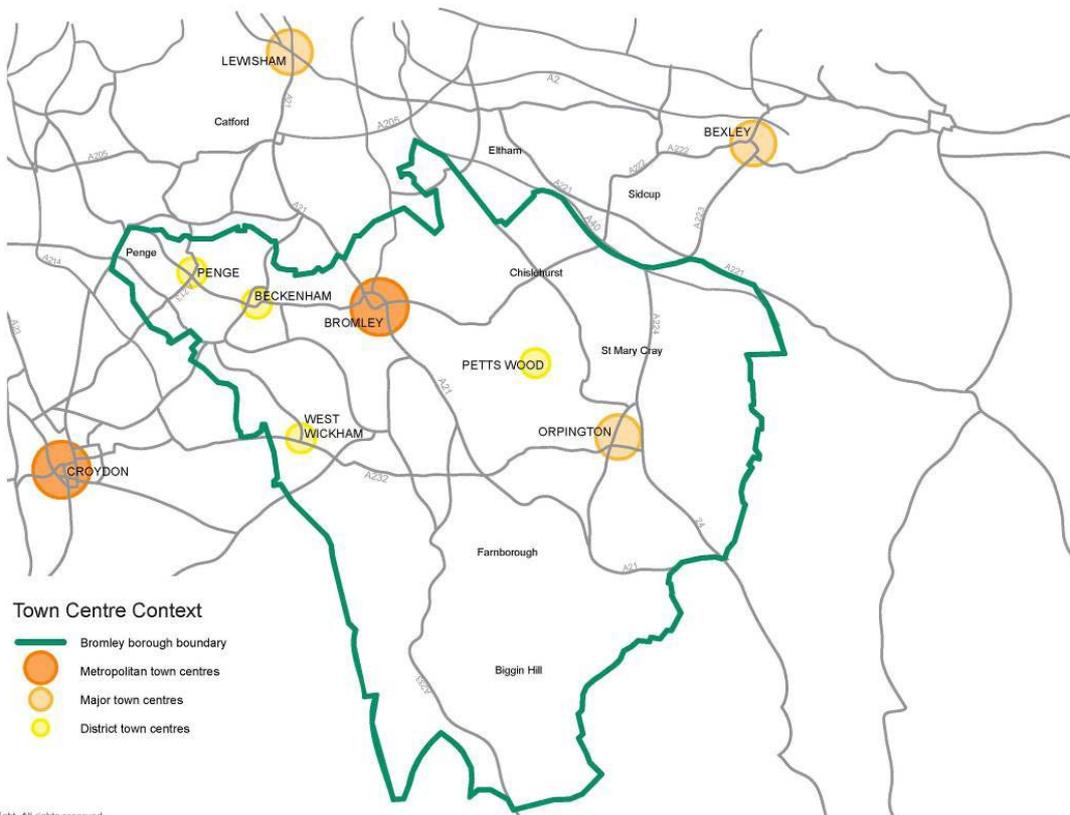
At 58.5 square miles / 148 square kilometres in area, Bromley is the largest London borough, located in the south east of the capital.

Bromley shares boundaries with the London Boroughs of Bexley, Greenwich, Lambeth, Lewisham, Southwark and Croydon and the Counties of Kent and Surrey. The Borough contains more than 35 square miles of protected countryside, woodland and parks. The mixture of rural space and suburban development defines much of the Borough's unique character.

The borough's main commercial centres are:

Bromley	Metropolitan Centre
Orpington	Major Town Centre
Beckenham	District Centre
Penge	District Centre
Petts Wood	District Centre
West Wickham	District Centre

Each of these centres has a rail connection and is well served by buses. Beckenham is also on the Tramlink network. These centres are shown on the diagram below, in the context of other important nearby centres.



In addition to the above, the Council has designated five centres as Local Centres, namely Biggin Hill, Chislehurst, Hayes, Locksbottom and Mottingham. Of these, Chislehurst and Hayes have a rail connection. Other commercial areas are located at Elmers End (Rail and Tramlink), Anerley (rail), Green Street Green, Cotmandene Crescent (St Paul's Cray), Coney Hall and Cray Avenue. There are also around 70 smaller centres and shopping parades serving local communities.

In 2006 the Borough had a population of 299,100.

The key demographic features of Bromley are;

- Low percentages of 20-35 year olds (Bromley: 10.8% London Average: 16.9%)
- High percentages of 50-80 year olds (Bromley: 16.3% London Average: 12.4%)
- Reducing proportions of people aged 16-30 years
- The age structure indicates an ageing population with the number of people over 60 exceeding those under 16 years of age.

By 2020 Bromley's population is currently forecast to have increased to around 307,000. The biggest population increases are expected to be in the Bromley Town and Cray Valley East areas. The number of households is also forecast to increase to 136,000. By 2020 the number of people aged over 75 years is forecast to rise to over 7% of Bromley's population.

Bromley has been classified as a Metropolitan Centre and it is a substantial retail centre. It has a substantial share of local employment in high value-added sectors, such as financial and business services, although retail and public sector service employment account for 37% of jobs.

Bromley's Transport Geography

The transport networks within Bromley reflect the borough's geography, with more densely developed areas having increased levels of access to public transport compared with the more tranquil rural areas.

Public transport within the borough includes, bus, trains, tram and the new East London Line (London Overground) at Crystal Palace, Penge West and Anerley Stations. The Underground does not serve the borough. Bromley is linked to the M25 via the A21 which, along with the orbital A232, is mostly a Red Route and part of the Transport for London Road Network (TLRN) for which TfL are the highway authority.

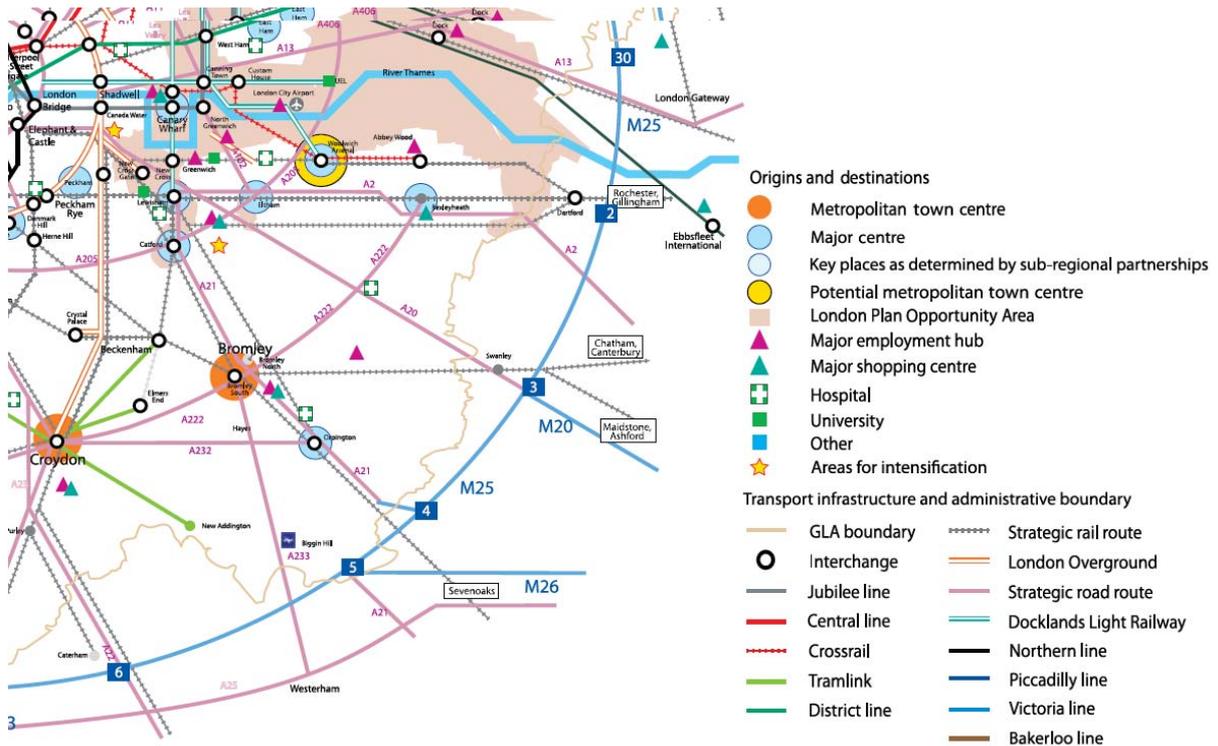
Bromley's varied geography is reflected in the travel patterns of our residents. The London Travel Demand Survey (LTDS) for the period 2005-2008 shows that on average residents in Bromley make 882,000 trips per day, the second highest in London after Barnet, and they travel a total of 3,615,000 miles / 5,818,000 km per day, the highest in London. Bromley residents make an average of 3.1 trips per person per day, the fifth highest in London, but the average journey length, at 12.8 miles / 20.6km, is the longest in London.

The table below shows key features of Bromley's existing Transport Geography.

Bromley's Transport Geography			
Level	Key Origin/Destinations	Multi-Modal Transport Corridors	Interchanges between Networks
London-wide	<p>Opportunity Areas: None</p> <p>Areas for Intensification: None</p>	<p>Rail: South Eastern, Southern</p> <p>Road: A21</p> <p>Rail Termini: London Bridge, Cannon Street, Charing Cross, Victoria. Waterloo East Blackfriars Lewisham (for DLR)</p>	-
<p>Sub-Region</p> <p>South (adjacent to East and Central Sub regions)</p>	<p>Metropolitan Town Centre: Bromley Town Centre</p> <p>Major Shopping centres: Intu (Bromley) , The Walnuts (Orpington) and Cray Avenue (Orpington)</p> <p>Key sub-regional services: Princess Royal University Hospital (Locksbottom), Bromley College and Orpington College.</p>	<p>Sub-regional strategic transport services</p> <p>TLRN: A21, A232, A20</p> <p>Major Borough Roads: A222, A224, A232, A234, A2015.</p> <p>Bus Corridors: A21, A222</p> <p>Cycling Corridors: 5 LCN+ Routes and 14 established borough cycling routes.</p> <p>Major Walking Routes: London Loop, Green Chain and the Capital Ring, along with 9 borough-defined healthy walks.</p>	<p>Railway Stations: 26 in total</p> <p>Bus Interchange: Bromley North, Orpington Station. Elmers End.</p> <p>Train/Tram Interchange: Beckenham Junction Elmers End</p> <p>Freight Distribution Centres: None</p>

<p>Local</p>	<p>District Centres: West Wickham, Beckenham, Penge, Petts Wood.</p> <p>Local Centres: Hayes, Mottingham, Biggin Hill, Chislehurst, St Mary Cray and St Paul's Cray, plus around 70 smaller local centres and shopping parades.</p> <p>Major Employers: Royal Bank of Scotland, Bank of America, Bromley Council, Bromley NHS Trust and Capita.</p> <p>Local Services: 74 Primary Schools 17 Secondary Schools 13 Independent Schools 4 Special Education Needs (SEN) Schools 1 Pupil Referral Unit</p> <p>Industrial Business Parks St Mary Cray</p> <p>Potential outer London development centre Biggin Hill</p> <p>Other industrial areas Kangley Bridge Road (accessed via roads in Lewisham)</p>	<p>Local transport corridors and services</p> <p>Roads and streets: 43 miles / 70km of principal roads, 458 miles / 737 km of local roads and 12 miles / 20km of Transport for London roads.</p> <p>Bus Routes: 61 routes service the borough</p> <p>Cycling: 93 miles / 150 km of cycle ways across the borough</p> <p>Walking: 870 miles / 1,400km of footway</p>	<p>Bus Stops Total: 1040 within the borough</p> <p>Bus Stops with Proposed Countdown Signs from 2012: 74</p> <p>No. of Rail/Tram Stations with Cycle Parking 25</p> <p>No. of Rail/Tram Stations with full or partial mobility impaired access Full: 8 Partial: 9 None: 11</p>
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The diagram below is an extract from MTS 2 which shows key links within Bromley as identified by MTS 2.



(It should be noted that the location of the Princess Royal University Hospital is incorrect on the original MTS diagram, and has been corrected here.)

The diagram below shows the new sub regions as in place from April 2011.



Source: GLA 2009 © Crown copyright. All rights reserved. Greater London Authority 100032379 (2009)

Car ownership

Bromley has the third highest car ownership level in London. Only the boroughs of Harrow and Hillingdon have fewer households without a car. The 2001 Census indicated that car ownership in Bromley is 0.496 cars per person, compared with a figure for Greater London of 0.365 cars per person. 31% of Bromley households have two or more cars and on average there are 16% more vehicles than households. Bromley currently awaits updated figures on car ownership from the Census 2011.

The Travel in London Survey indicates that between 2009/10 and 2011/12, 56% of trips per day in Bromley were made by car or motorcycle, compared to an overall average for Greater London of 37%. Trips by mode include the second highest rail use at 6%, yet the lowest bus share at 9%. Walking represents 28% of trips which is roughly average, with cycling at 1%. (Travel in London Supplementary Information 2011/12)

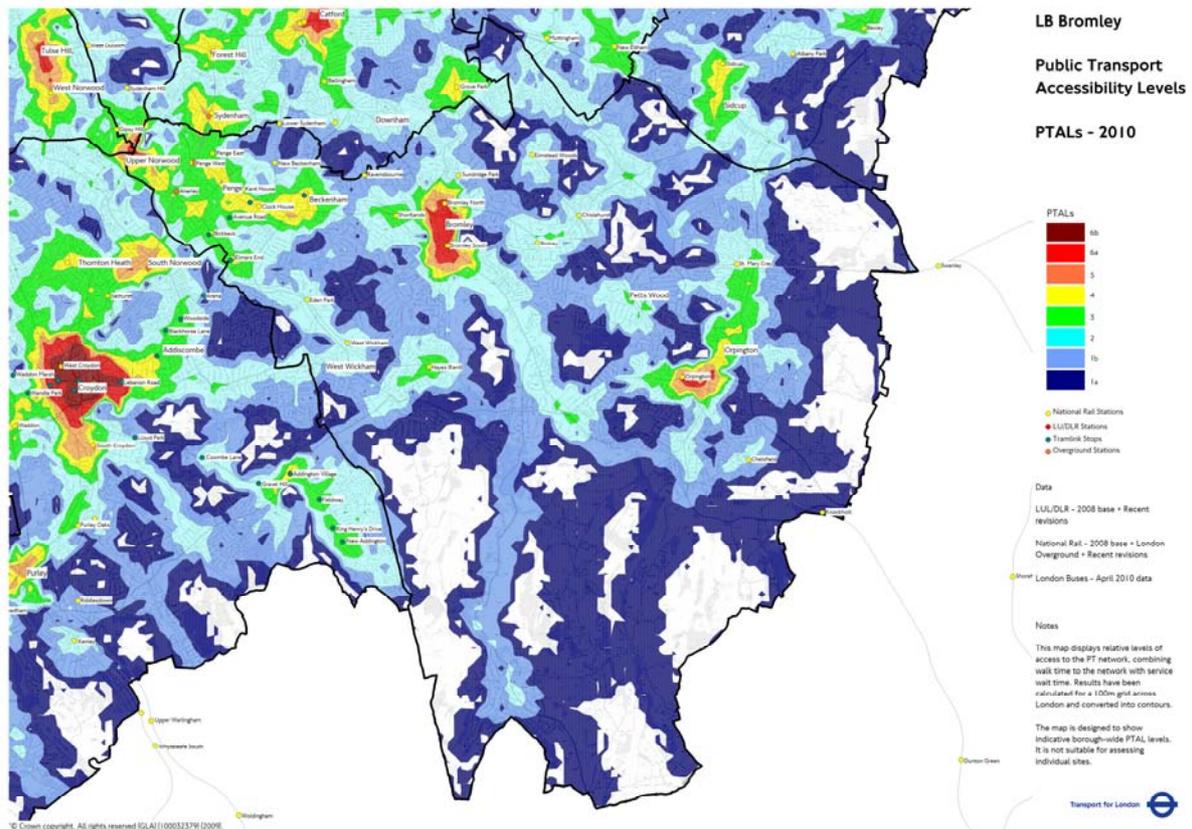
This high level of car ownership and usage is reflected in the transport pressures within Bromley which include congestion at peak times and low public transport accessibility in rural areas of the borough. The borough's outer rural terrain, with its longer distances and sometimes hilly character, has also been highlighted as a barrier against cycling.

Public transport

There are 26 surface rail stations in the borough and five Tramlink stops, three of which interchange with rail. Most work-related rail journeys relate to employment outside Bromley, in inner and central London.

Buses are a significant contributor to public transport in the Borough. There are 61 bus routes in Bromley, serving journeys within the borough and providing links to neighbouring boroughs. Buses provide for most of the orbital public transport journeys in Bromley. Some 90% of Bromley's population lives within 440 yards / 400 metres of a bus stop. The Borough's town centres and principal railway stations are relatively well served by buses, although services away from town centres and on Sundays leave something to be desired.

Accessibility to public transport across London is measured by Public Transport Accessibility Levels or PTALs. PTAL levels range from 1a (low) to 6b (high). A map showing PTAL levels in Bromley is shown below.



The road network

The Council's maintenance responsibilities as Highway Authority extend to a total of 43 miles / 70km of principal roads, approximately 458 miles / 737km of local roads, 870 miles / 1,400km of footways and 93 miles / 150km of cycleways. In addition to these, TfL is the Highway Authority for the A21 between Hewitts Roundabout and the Borough Boundary in London Road, and for the A232 westwards from the A21 at Locksbottom.

Roads in Bromley are classified by function in the Council's Unitary Development Plan (UDP). The categories of roads are defined as follows:

Strategic routes:

- The Transport for London Road Network (TLRN)
- Roads designated as Strategic Roads under the Traffic Management Act 2004

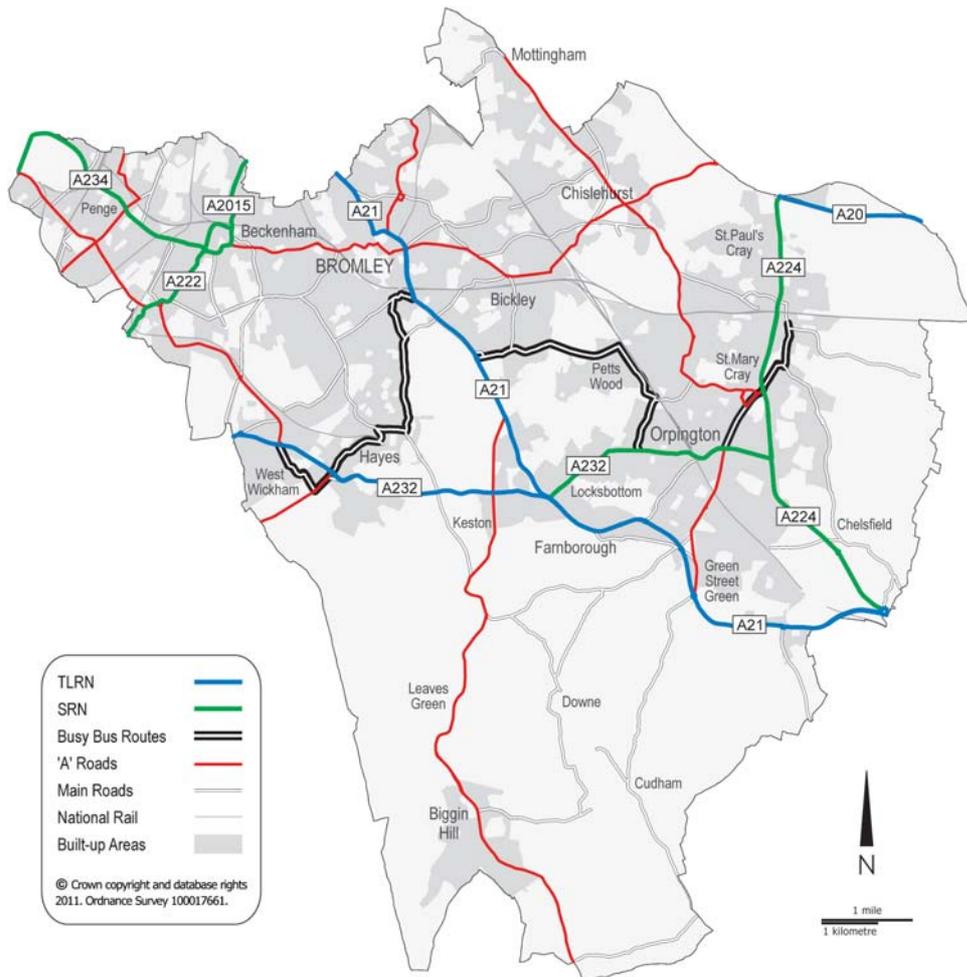
London distributor routes:

- Other A Roads and Principal Roads

Local distributor and access roads:

- Borough local distributor roads typically classified B or C roads
- Local access roads, typically unclassified roads: to serve frontage properties; to contribute to local amenity.

Key elements of the borough's road network are shown in the diagram below.



As at September 2010, 5.7% of the principal road network in the borough required consideration for structural repairs.

Air links

Bromley is also home to Biggin Hill airport, a small commercial airport which boasts an historical association with the Battle of Britain. Civilian flights began in the 1960's and it plays an important role in business aviation flights. The Airport serves businesses in Bromley, Bexley, Croydon, Greenwich, Lewisham and other areas of Kent and Surrey, offering air link connections to major airports within the UK and Europe. No commercial services are permitted under the terms of the airport's lease.

Transport pressures

The main transport pressures in the borough are:

- Peak time traffic congestion associated with work and education trips;
- High car dependency and high mobility amongst much of the population;
- Relatively low public transport accessibility (particularly for orbital journeys);
- Social exclusion amongst those without car access or unable to use public transport;
- Low levels of walking and cycling; and
- External impacts on the local economy (centralisation of shopping and services).

Road network congestion

Despite the figures given above on car ownership and travel to work, and the severity of peak time congestion at key locations, Bromley as a whole has the lowest level of vehicle delay per mile/km of main road of any London Borough. (Travel in London – Key Trends and Developments, Report No1, TfL 2009).

Local Problems, Challenges, and Opportunities

This section sets out Bromley's problems, challenges and opportunities in the context of the Mayor's transport goals and challenges for London over the course of the next 10-15 years. It identifies the main issues which need to be addressed within the borough in order to deliver the MTS goals:

- Supporting economic development and population growth
- Enhancing the quality of life of all Londoners
- Improving the safety and security of all Londoners
- Improving transport opportunities for all Londoners
- Reducing transport's contribution to climate change and improving resilience.

Bromley and the South London sub-region

The London Plan identifies five sub-regions within Greater London. Bromley has been placed in the South sub-region, which consists of the boroughs of Bromley, Croydon, Merton, Sutton, Kingston upon Thames, Richmond upon Thames and Wandsworth.

The Council nevertheless believes that the borough has a stronger alignment with the East sub-region. Many (but not all) of Bromley's strongest transport links are with the former South-east London sub-region, and these links were reflected in our role as lead authority for the former Seltrans partnership. For example, most of Bromley's rail stations are served by the Southeastern franchise. We have also identified a need to strengthen transport links with employment opportunities at Canary Wharf and in the City generally.

The re-casting of sub-regions across London has not changed Bromley's transport geography, and there will be a continuing need to engage in dialogue with, particularly, our former Seltrans partners Bexley, Greenwich and Lewisham, all of which are located in the new East sub-region. We will therefore use the intentionally "fuzzy" subregional boundaries to maintain an active engagement with the East sub-region.

South Sub-regional Transport Plan

In February 2010, TfL published a report identifying specific sub-regional transport "challenges and opportunities" in the South London sub-region, and the full South Sub-regional Transport Plan was published on 30th November 2010. Four specific South London sub-regional challenges have been identified. These are in addition to the Mayor's Londonwide goals, and have been developed through interpretation of the MTS, consultation with the boroughs and other key stakeholders, and through TfL analysis. The four challenges are as follows:

- Reduce public transport crowding
- Improve access and movement to, from and within key locations
- Improve connectivity to, from and within the sub-region
- Manage highway congestion and make efficient use of the road network.

The table below highlights aspects of the challenges identified by the "challenges and opportunities" report which specifically affect Bromley:

Issues identified in the South London sub-regional transport strategy “Challenges and Opportunities” report			
Challenge		Priority corridor	Crowding issues
Reducing Public Transport Crowding (C&O, Table 26)	Radial	Bromley-Victoria	Outer Services particularly crowded from Bromley South to Victoria
	To Metropolitan Centres	Bromley-Brixton	Inner Services crowded from Sydenham Hill
		Beckenham Junction - Croydon	Tramlink crowding particularly Blackhorse Lane to Sandilands and east Croydon
Challenge		Priority location	The Place
Improving access to, from and within key locations (C&O, Table 27)	Initial priority locations	Bromley Town Centre	Met Centre
	Additional borough locations – identified by boroughs’ workshop	Beckenham Town Centre	District Centre
Challenge		Priority corridor	Reason for further investigation of poor connections
Improve connectivity to, from and within the south sub-region (C&O, Table 28)	Met / Major centres to central London	Bromley-Canary Wharf	Met centre to Major town centre, Central Business District
		Bromley-Croydon	Two Met centres with both employment and population growth forecast
	Additional connections – identified by boroughs’ workshop	Bromley-Ebbsfleet	Met centre
		Croydon-Orpington	Major centre to Met centre
Challenge		Priority locations / corridor	Key road junction
Manage highway congestion and make efficient use of the road network (C&O, Table 29)	Additional locations – identified by boroughs’ workshop	Masons Hill	A21

Bromley’s Sustainable Community Strategy

Building a Better Bromley- 2020 Vision (March 2009), is the Borough’s Sustainable Community Strategy setting out Bromley’s long-term comprehensive strategy to preserve and enhance an environment in which people can improve their well-being. The ‘2020 Vision’ centres on eight key themes:

- A safe place in which to live
- A quality environment

- Helping Bromley's children and young people achieve their potential;
- Promoting independence and health;
- Future housing;
- A prosperous and thriving borough;
- Involving communities and citizens; and
- Quality public services.

2020 Vision highlights that many residents and local businesses are concerned about congestion, leading to extended journey times and insufficient parking provision. There are opportunities to work in partnership to make a real impact on reducing unnecessary car journeys. It also identifies the following transport-related matters as "issues to be tackled":

- maintain roads and pavements in good condition;
- promotion of cycling, walking and public transport to achieve less congestion at peak times and reduce fuel use and pollution;
- improve the road network for all users; and
- promote safe parking provision.

"Building a Better Bromley"

Feedback from residents, such as MORI satisfaction surveys and public research has been encapsulated in a statement of our public-facing "Building a Better Bromley" priorities:

- Safer communities;
- A quality environment;
- Vibrant, thriving town centres;
- Supporting independence;
- All children and young people having opportunities to achieve their potential; and
- An excellent Council in the eyes of Bromley residents

These priorities are clear and consistent messages as to what the public wants us to address. They form the drivers for our improvement plans for forthcoming years.

The Council will continue to pursue its commitment made in the former Local Area Agreement to focus on children's mode of travel to school.

The Unitary Development Plan and Local Development Framework

The Council's second statutory Unitary Development Plan (UDP) was adopted in July 2006. It is currently in the process of being replaced by a Local Development Framework or LDF. The UDP/LDF is the main vehicle for ensuring that the requirements of national planning policy and of the London Plan are consistently applied in Bromley.

The UDP contains a series of objectives on Transport, which are:

- To reduce the growth in the length and number of motorised journeys, especially by car, by integrating land use and transport planning decisions;
- To maximize the environmental and economic benefits of serving the Borough's travel needs by public transport in preference to the private car;

- To reduce reliance on the private car, and create conditions to encourage greater use of public and alternative means of transport by:
 - Promoting development in areas well-served or capable of being served by a choice of transport modes in support of the adopted transport hierarchy; and
 - Seeking improvements to public transport interchange; and
 - Seeking improvements to public transport service provision in the Borough; and
 - Seeking safe, convenient conditions and improvements for cyclists, pedestrians and other vulnerable road users; and
 - Adopting maximum parking standards[†] and allowing for reduced parking provision in areas of good transport accessibility;
- To improve access to transport for all, including people with disabilities;
- To improve the environment and reduce air and noise pollution by restricting nonessential traffic, particularly in residential areas;
- To improve access to town centres by means of transport other than the car, while providing parking for shopping and leisure visits at levels that would enhance the attractiveness of the centre and reduce congestion; and
- To seek road safety measures where opportunities arise through the land use planning process.

It should be noted that these policies are subject to review during the preparation of the LDF.

[†] The Council made representations on the Replacement London Plan seeking removal of the requirement to operate maximum parking standards. A subsequent re-issue of Planning Policy Guidance (PPG) 13 in January 2011 deleted the requirement to express maximum parking standards for new residential development. However, the final London Plan, published on 22nd July 2011, retains references to maximum parking standards.

The Bromley Town Centre Area Action Plan

The Bromley Town Centre Area Action Plan (AAP) is a key priority for the Council over the next fifteen years. The Plan was approved by an Inspector in August 2010, and was formally adopted by the Council on 25th October 2010.

Two of the AAP's eight objectives have direct relevance to this LIP. These are:

OBJECTIVE 7: Promoting sustainable development by minimising the impacts of town centre development on the environment and ensuring Bromley is an attractive place to live, work, visit and invest.

and

OBJECTIVE 8: Improving accessibility and travel choice, encouraging use of more sustainable forms of transport and making effective use of existing transport assets.

In addition, there are eleven specific AAP policies which directly relate to transport. These are listed here by heading only. Further details may be obtained from the Council's website:

<http://www.bromley.gov.uk/environment/planning/town+centre+action+plan/>

BTC 16 Noise

BTC 18 Public Realm

BTC 21 Transport Schemes

BTC 22 Public Transport
BTC 23 Land for Safeguarded Transport Schemes
BTC 24 Walking and Cycling
BTC 25 Parking
BTC 26 Phasing of Transport improvements
BTC 27 Traffic Management
BTC 28 Car Clubs
BTC 29 Freight

Integrating the LIP with Londonwide and local priorities

The Objectives of this LIP will be assessed against the Mayor's five goals, the four sub-regional challenges, and the following four local priorities:

- Safer communities
- A quality environment
- Vibrant, thriving town centres
- Supporting independence

Addressing the Goals and Challenges of the Mayor's Transport Strategy

MTS Goal: Supporting economic development and population growth

The Council has said in its responses to the draft MTS and the draft London Plan that we are concerned about the implications for Bromley of population growth in respect of housing and congestion (and, by implication, the effects of such growth on local services such as health facilities and schools). We remain concerned that, against this background of growth, the Mayor's goal to "improve transport opportunities for all Londoners" will be difficult to achieve, and that, despite substantial investment, transport networks will struggle to keep up with the challenges posed by growth.

MTS Challenge: Support sustainable population and employment growth

It is an underlying theme of the Borough's UDP to focus major new development in the town centres of Bromley and Orpington, which are the Borough's main public transport hubs. This is consistent with both the London Plan, which focuses development on town centres and other nodes of public transport.

On 25th October 2010, the Council adopted the Bromley Town Centre Area Action Plan to cover the next fifteen years. The Plan promotes a more intensive level of development in the town centre. Over the lifetime of the Plan this could amount to an additional 42,000 m² of retail floorspace, 7,000 m² of offices, 5,000 m² of leisure space, 2,000 new homes and over 2,000 new jobs.

Similarly, the Orpington Masterplan, which was the subject of public consultation in 2007, focuses additional retail development and housing in the town centre and seeks to relocate important public services such as a library into the centre where there are high Public Transport Accessibility Levels (PTALs). This shortens travel distances and makes best use of available public transport capacity. This theme will be carried through into the borough's LDF core strategy.

The London Plan has designated Biggin Hill as a potential strategic outer London development centre. There is scope for growth of economic activity and skilled employment at Biggin Hill Airport, although the Council is firmly opposed to any growth in capacity of the Airport itself (over and above the 125,000 movements permitted in the lease). Public transport access to Biggin Hill is by bus only, and local roads are relatively narrow. While any employment growth will potentially increase opportunities in the adjoining Tandridge District (in the county of Surrey), there could also be additional peak hour traffic on the narrow local roads. It will be important to ensure that arrangements for access to new employment uses are carefully considered.

The Council's standards for car parking and cycle parking, the use of transport assessments for new developments, and the use of workplace travel plans for both new and existing developments will ensure, in general terms, that new developments minimise the impact of travel on the environment. However, the Council said in its response to the Draft London Plan that the car parking standards set out in the Draft Plan are insufficiently flexible to support the economic vitality of outer London town centres. This is partly because the standards are related to PTALs, and the Council's view is that the PTAL system does not adequately address accessibility issues in relation to outer London town centres. The final version of the London Plan retains

PTAL-related maximum parking standards for retail development, and states that forthcoming Supplementary Planning Guidance will set PTAL-related maximum residential parking standards. The Council will use the limited flexibility provided by these standards to ensure that, as far as possible, new developments do not generate additional intrusive or obstructive on-street parking as a result of inadequate on-site provision.

The Council promotes travel planning to local businesses through distribution of promotional literature at events, through welcome packs sent to new or relocated businesses, and through links on the Business section of the Council's website. This work was formerly carried out largely through the Seltrans partnership, which ceased to exist on 31st March 2011. The Council has retained a commitment to offer a travel planning service for 2011/12. However, it is currently uncertain how travel planning services will be delivered after March 2012.

The TfL Business Plan and Investment Programme, and the MTS Implementation Plan identify a number of planned infrastructure and other improvements which will specifically affect Bromley. These are described in more detail later in this section.

MTS Challenge: Improve transport connectivity

In general terms, Bromley and Orpington town centres and the more developed parts of the borough are well served by bus and rail, with some access by tram to Elmers End, Birkbeck and Beckenham in the north-west of the borough. However, rail links to central London stations (Victoria, London Bridge, Cannon Street and Charing Cross) are unacceptably crowded at peak times, and the borough lacks an easy link to the DLR and the employment opportunities in east London.

Public transport networks are less dense in the more rural southern areas, and this contributes to Bromley's relatively high levels of car ownership and use. Car travel is likely to remain the dominant mode for many journeys.

An example of poor connectivity in Bromley is the Princess Royal University Hospital (PRUH) at Locksbottom, where on-site parking is inadequate and is supplemented by the use of a neighbouring supermarket car park and by parking in nearby quiet residential streets. There remains a need for additional parking to be provided either on, or adjacent to, the hospital site, for example by providing an additional deck above existing surface level car parks. There is also a need for improved bus links, and requests for improved bus services to the hospital are the most common bus-related requests received by the Council.

We suggested in our responses to consultation on the MTS that there was a need for a fundamental review of bus routes across London, which we believe will be necessary to provide optimum service levels at a manageable cost. While we will continue to work with TfL and the bus operators to achieve genuine service improvements, we believe that the current piecemeal approach does not necessarily serve Londoners well. For example, in August 2010, the 320 service to Biggin Hill had its route extended from Bromley North station to Catford. Despite an increase in service frequency, delays on the extended route meant that service reliability in Biggin Hill, which has no rail links, deteriorated significantly. As a result, connectivity was reduced rather than improved.

Bromley's residents are heavily dependent on commuting outside the borough for employment, with only 25% working within the borough. Around 37% of working residents travel to jobs north of the river, in central and east London. In responding to consultations on the MTS, we drew attention to the need for improved rail and DLR capacity to central London and Docklands from the east of the borough.

Opportunities for effective orbital movement, by both public and private transport, around outer London and beyond remain a cause for concern to the Council. The MTS recognises this, and identifies Bromley town centre as requiring enhanced links for improved orbital connectivity. This includes orbital connectivity to destinations outside the Greater London boundary. The Council has highlighted the need for improved links to international rail connections at Ebbsfleet.

Like other outer London town centres, Bromley town centre, and to a lesser extent Orpington, Beckenham and Penge have high PTAL ratings because they are hubs for bus (and tram) services and also have direct radial rail connections to central London. However, the choice of destinations, the opportunity for interchange, and the connectivity with other centres (except, to a degree, central London) is much less than is typically the case in inner and central London.

The PTAL system measures the density of public transport provision close to a site, rather than the utility of the services or connectivity to places of interest. The Council believes that the PTAL system, as currently configured, tends to overstate connectivity (and hence does not adequately address accessibility issues) in relation to outer London town centres.

Current PTALs for Bromley are shown on a diagram in the "Bromley's Transport Geography" section above.

In terms of access to local jobs and supporting the needs of local business to grow, the Council aims where possible to encourage the retention and development of town centre and business area employment sites (which are inherently more accessible), and resist loss of employment land to other uses in those areas. The Town Centre Management service engages directly with businesses to understand their barriers to growth, including specific transport issues (such as loading or parking restrictions) and, where possible, seeks to resolve these issues in collaboration with the transportation service.

The MTS designates Bromley South station as a Priority Strategic Interchange, and MTS Proposal 11 assigns a high priority to delivering capacity enhancements at the most severely congested stations, including Bromley South. However, even after the implementation of committed rail enhancements in the south-east sector, the MTS forecasts that the Bromley rail corridor will be "moderately stressed" in 2017 and "highly stressed" in 2031 unless significant investment takes place.

In Bromley, as in much of outer London, rail plays a role in catering for relatively short local journeys within the borough, as well as for longer-distance travel. There is some potential for conflict between local needs and potential service changes aimed at improving commuter services or other longer-distance journeys.

Among the major medium-term improvements identified as being important to Bromley are the need to widen A21 south of Bromley town centre, and the development of Tramlink & DLR extensions to serve the borough.

While the Council will continue to use its own programmes, such as congestion relief, to improve connectivity, this is largely a challenge which manifests itself on a sub-regional and Londonwide basis, and where the levels of required investment will require intervention by the strategic transport authorities.

The MTS identifies a number of planned and possible infrastructure improvements on a Londonwide and subregional level which will partly address the need for further public transport capacity.

MTS Challenge: Deliver an efficient and effective transport system for people and goods

Bromley as a whole has the lowest average level of vehicle delay per mile/kilometre of main road of any London Borough (Travel in London – Key Trends and Developments, Report No1, TfL 2009). To a degree this reflects the semi-rural nature of parts of Bromley, and there are a number of locations where road congestion can be severe. Nevertheless, previous opinion surveys have identified congestion as a major concern of local residents.

The Council maintains a list of congestion “pinch points” on the road network as a means of identifying potential action to reduce congestion. We currently also have a programme of schemes specifically aimed at reducing the number and impact of pinch points through a targeted and prioritised programme.

We are developing a series of recommended routes for freight movements which will help ensure that movement of goods vehicles is focused on the most suitable roads, in terms of our road network hierarchy, avoidance of height or width restrictions and minimising intrusion in residential areas. Satnav providers will be asked to incorporate these routes in their databases. Our projects to revitalise our town centres and to review area-wide parking controls will take account of delivery and servicing needs.

Average excess wait time on high frequency (non-timetabled) bus routes in Bromley is 54 seconds (0.9 minutes), compared with the average for London of 66 seconds (1.1 minutes). This is a 45% improvement on reliability since 1999/2000 levels. Some 80% of low frequency (timetabled) bus services were ‘on time’ during 2009/10. The Council supports joint working by TfL and the bus operators to improve reliability still further.

Congestion on our network will impact on the ability of the economy to operate efficiently and the potential for people to work and live in the borough. For example, shoppers may choose other less congested destinations, and late deliveries or arrival at work may impact on the profitability of local businesses.

MTS Challenge: Deliver an efficient and effective transport system for people and goods - maintenance

As at May 2011, 6% of the principal road network in the borough required consideration for structural repairs. In addition, two bridges over the railway, at Chislehurst Road and Southborough Road, suffer from structural weakness and have had weight restrictions imposed, limiting the function of these roads as part of the network.

The Council will continue to maintain the borough's Principal Road Network, local roads and footways in a serviceable condition, with action prioritised on the basis of need, objectively identified by survey. We will work with TfL and Network Rail to restore the structural integrity of the bridges over the railway at Chislehurst Road and Southborough Road. We will also examine the possibility of road/rail incursion on our road network (where a vehicle leaves the road and intrudes upon or obstructs the operational railway) and identify any preventive or remedial actions which may be necessary.

MTS Goal: Enhancing the quality of life of all Londoners

MTS Challenge: Improve journey experience

It remains true that many journeys are made from necessity rather than choice, and individual travellers often have little real choice about how or when they travel. At peak times large parts of the road and public transport networks are congested, leading to delay, crowding and personal stress. These problems can be seriously exacerbated when the normal capacity of the networks is reduced through planned or unplanned events, such as maintenance, accidents or technical failure.

The Council is committed to working with other agencies, such as TfL and the public transport operators, to improve the whole journey experience for all transport users. Reliability, safety, comfort and consistent real-time information are among the many factors that contribute to the journey experience, and which may affect individual decisions about which mode to use for a journey.

Among the many issues which the Council and the other agencies are actively addressing, both jointly and separately, are:

- Reducing road congestion
- Maintaining and improving road and pavement surfaces
- Minimising disruption caused by planned and unplanned highway openings
- Lighting and light against crime
- Station internal improvements including full level access
- Station access (external improvements)
- Real time information – railway stations and bus Countdown
- Bus shelters and hardstanding
- Cycle stands – covered, secure and in the right place
- Ease of ticketing
- Facilities for the less able traveller
- Effective signage
- CCTV and help points
- Easier parking

MTS Challenge: Enhance the built and natural environment

A major scheme for improvement of the public realm in Orpington High Street was opened by the Mayor of London in July 2010. The scheme has removed clutter from the High Street and improved the pedestrian environment whilst retaining bus routes and parking in the centre of the town. Our decluttering programme will offer benefits in other local centres by reducing obstacles to the visually impaired.

The Bromley Town Centre AAP contains proposals for the improvement of the public realm in the northern part of the town, referred to as Bromley North Village or BNV. This was one of the successful schemes in the Mayor's Great Spaces initiative which provided funds to carry out initial consultation and bring forward designs for improving the public realm in the area. A Major Schemes bid for BNV was submitted to TfL in September 2010, and subsequently received "Step 2" funding for detailed design and consultation during 2011/12. It is expected that this will lead to implementation of a transformational project during 2013/14 and 2013/14.

During 2013/14, the Council also expects to undertake preliminary design work for public realm improvements in Beckenham town centre.

Policies in the UDP have a continuing theme of protecting and enhancing the built and historic environment, including improving the pedestrian environment in town centres and smaller centres throughout the Borough. These will be carried through into the Core Strategy.

Streets in our town centres and smaller shopping parades can suffer from unplanned clutter of street furniture and signs as a result of previous well-intentioned but piecemeal interventions to deal with local issues. We will use our decluttering programme to make these streets more user-friendly where this cannot be achieved as part of other planned works.

This theme has a close link with the Mayor's High Profile Outputs for "Better Streets" and "Street Trees", which are dealt with elsewhere in this LIP.

Among the Council programmes which contribute to addressing this challenge are:

- Highway maintenance (Principal and local roads)
- Street lighting improvement and maintenance
- Light against crime
- Decluttering
- Pedestrian crossing and minor walking schemes
- Walking through green spaces and recreational walking
- Cycle parking
- Transportation input to the development control process
- Routine enforcement action against highway obstructions and graffiti.

MTS Challenge: Improve air quality

In 2007 under the provisions of the Environment Act 1995, the Council was required to declare an Air Quality Management Area (AQMA) covering the North and North West of the borough. Subsequently it has been identified through source apportionment (i.e. the determination of the contribution of various pollution sources to a given location) that the majority of pollutants are due to road traffic. This has formed the basis of the Council's mandatory air quality action plan (AQAP) which was published in mid 2010.

To support the AQAP and monitor progress there is an automatic air pollution monitoring station located at Harwood Avenue. The data collected from Harwood Avenue is supplemented with additional NO_x diffusion data from an additional 10 locations targeted at major road junctions within the AQMA.

Given that road transport, and diesel engined heavy vehicles in particular, represent the most significant source of pollutants within the AQMA, the success of numerous initiatives within this LIP will have a direct impact on the outcome of the AQAP.

More generally, the measures proposed elsewhere in this LIP to reduce congestion and eliminate highway pinch points, to restrict non-essential traffic in residential areas and to encourage sustainable delivery practices, will contribute to reductions in kerbside pollution levels.

MTS Challenge: Improve noise impacts

In general, transport noise is not a major issue in Bromley and there are few complaints. However, improvements to vehicle design and effective maintenance of the road surface will tend to reduce noise disturbance near busier roads so long as the volume and composition of traffic remains largely unchanged.

In new commercial developments, the Council will use the development control process to seek to minimise the impact of noise from deliveries and servicing through good design and the use of Delivery and Servicing Plans (DSPs), rather than simply relying on timed restrictions on deliveries (although these may remain necessary in some cases). In Bromley town centre, we will consider the use of a formal Construction and Logistics Plan to limit the impact of construction traffic while the proposed major developments are being built.

The Bromley Town Centre Area Action Plan contains a number of policies on noise of which the following are directly relevant to transport:

- supporting new technologies and improved practices to reduce noise at source, especially in road, rail and air transport; and
- reducing the impact of traffic noise through highway management and transport policies.

MTS Challenge: Improve health impacts

Bromley has relatively low walking and cycling rates when compared with other boroughs (*London Travel Demand Survey - Report number 2*), an outcome which undoubtedly reflects the Borough's geography.

Residents in Bromley undertook an average of 246,468 walking trips and 8,037 cycling trips per day between 2007 and 2009. This represents 27.6% and 0.9% of overall trips respectively.

Based on school travel plan data collected in 2010, 43.7% of children travel to school by foot whilst 3.7% travelled by cycle. From the inception of the school travel planning programme in 2004/05, walking has increased by 5.22% of all pupils and cycling by 1.23%.

The Council devotes considerable resources to encouraging walking and cycling, and in promoting these modes to young people who are more likely to be receptive to long-term influences on their lifestyle. Among our delivery actions will be:

- continuing to work with schools to maintain and update their School Travel Plans to keep them up-to-date and relevant;
- continuing an active programme of cycle training aimed at children and adults, which builds confidence and encourages the use of bicycles for more journeys;
- continue to promote walking and cycling as a real choice for both "transport" and leisure activities; and
- continuing the promotion of rural walking including its promotion to young people.

It should be noted that these commitments can only be achieved with continued LIP funding.

Bromley was granted “Biking Borough” status by the Mayor of London in early 2010. TfL provided funds to undertake a stakeholder engagement process and enable development of the borough’s local Biking Borough strategy in summer 2010.

In February 2011, TfL announced a £4M Biking Boroughs fund to support cycling initiatives in outer London over the following three years, and invited the 13 boroughs with Biking Borough status to bid. Following the award of £271,000 funding to Bromley on 4th May 2011, the following project deliverables will be taken forward.

Deliver a cycling hub:

- Infrastructure improvements to improve town centre permeability
- Increased cycle parking at Bromley North station
- Workplace Travel Awareness Events

Develop cycling communities:

- Residential cycle parking at Housing Association locations
- Re-cycling programme for stolen and unwanted bikes
- Adult cycle training
- Community Travel Awareness Events

Raise the profile of cycling:

- Cycling information pack
- Promoting London Cycle Challenge
- Local media marketing campaign

Biking Borough funding is in addition to the core LIP formula funding, and Biking Borough projects are additional to the other work already programmed to support cycling. The additional funding profile is as follows:

Project area	2011/12	2012/13	2013/14
Cycle Hub	£54,000	£24,000	£49,000
Cycling Communities	£32,500	£42,500	£42,500
Raising the Profile	£12,500	£7,000	£7,000
Total per year	£99,000	£73,500	£98,500

MTS Goal: Improving the safety and security of all Londoners

MTS Challenge: Reduce crime, fear of crime and anti-social behaviour

As part of the Safer Bromley Partnership, the Council's CCTV Control Room actively supports police initiatives across the Borough's six town centres monitored by CCTV, to reduce crime and anti social behaviour at bus stops and bus termini within those areas. An example of this is the monitoring of large groups of school children waiting at identified bus stops, alerting the police to outbreaks of anti social behaviour or fights between factions from different schools. This enables the police to provide a targeted response and use resources more effectively.

The Council also supports the local Police Safer Transport Teams and TfL Revenue Inspectors when they carry out operations to deal with fare evasion by monitoring the operation and providing the police control centre with live CCTV links of what is taking place. Cameras covering railway stations are also used to give local police and British Transport Police an early warning against crime and anti social behaviour by being able to provide live images of those areas.

As part of the Council's CCTV improvement plan, cameras have recently been upgraded to give better image quality and improved storage capability, allowing all on street footage to be in "real time" so providing police with superior evidential quality footage which allows better identification of suspects.

The Anti Social Behaviour Team also works in partnership with the police safer transport team on the Earn Your Travel Back Scheme (EYTB) where young people have their free travel cards removed because of bad behaviour.

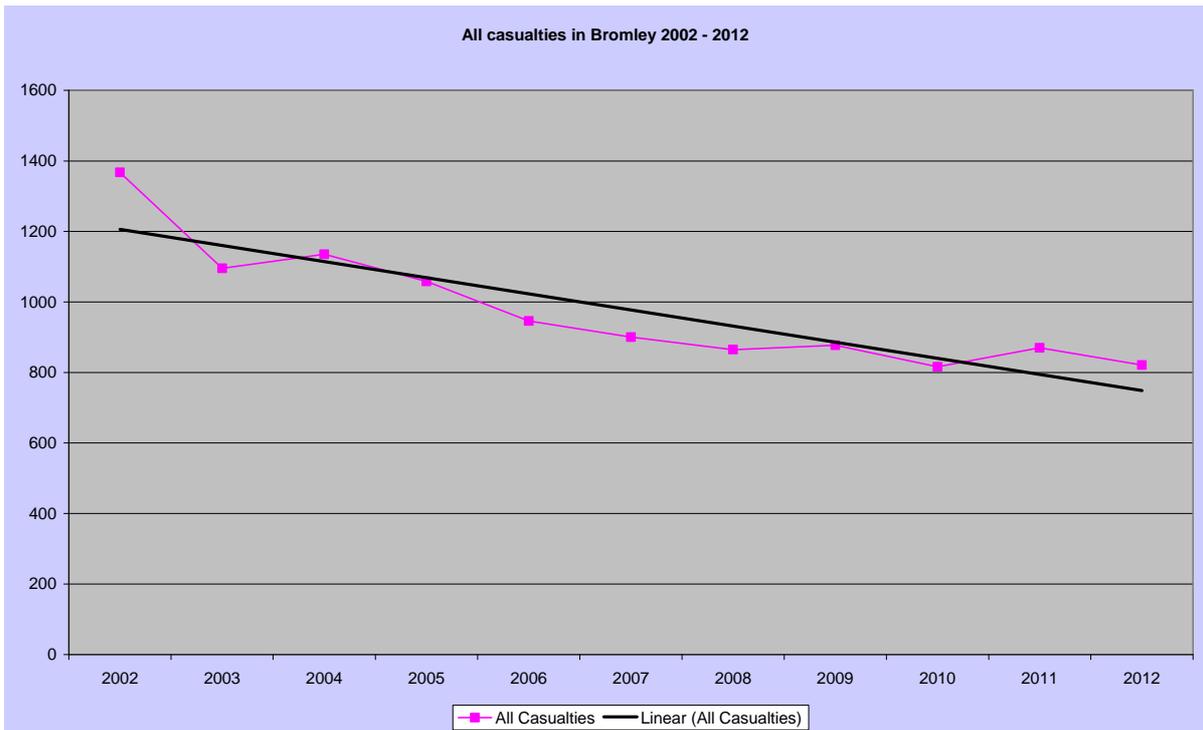
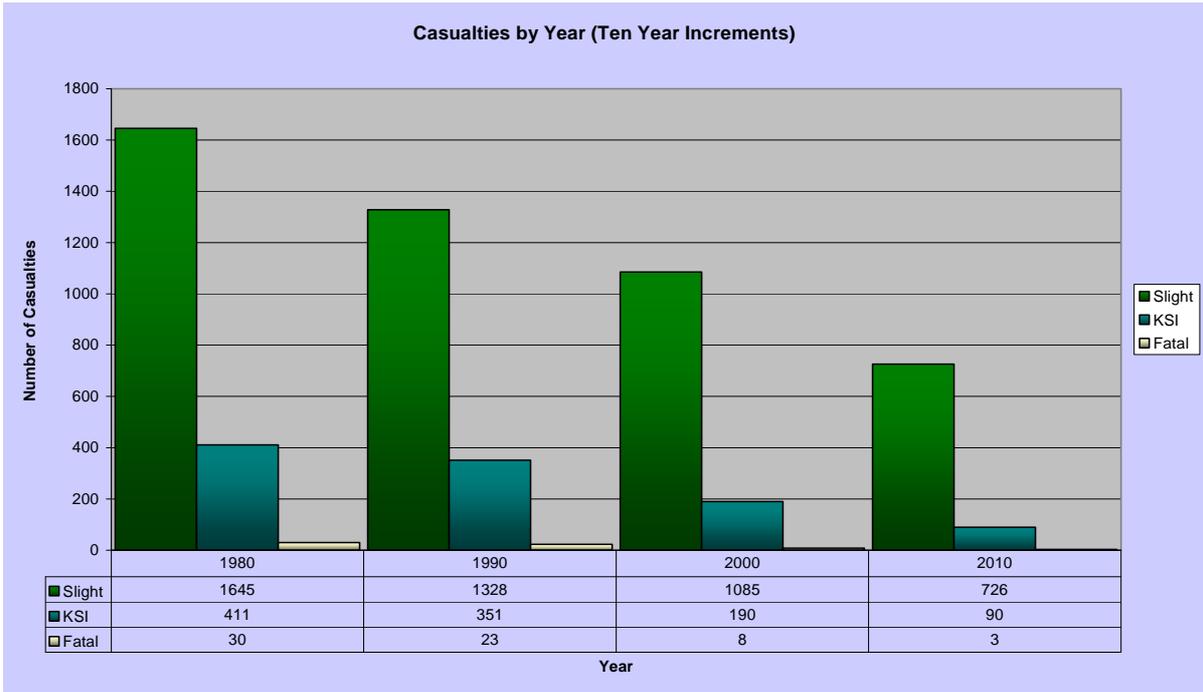
Starting in 2010/11, the Council initiated a "light against crime" programme which aims to target small scale interventions in places where improved street lighting can help reduce the risk of crime. The effectiveness and value for money of this programme will remain under review.

MTS Challenge: Improve road safety

Bromley has achieved significant and consistent reductions in the number of road casualties recorded since a national baseline average for 1994-98 was set some years ago. Compared with this baseline, the overall numbers killed and seriously injured (KSI) have reduced by 63% overall. Within this overall figure, pedestrian KSIs have reduced by 71%, cyclist KSIs by 44% and motorcyclists 49%. These figures meet previous targets set by the Mayor of London.

The reduction in slight casualties was 41%, significantly exceeding the target for London.

The diagrams below show the trends in numbers killed and seriously injured in Bromley, in ten year increments, and also the trend over the last ten years:



The original baseline average is now significantly out of date, and the Performance Monitoring Plan in this LIP sets a new baseline based on the five years 2008-2012 with a target of reducing all KSIs to a total of no more than 85 by 2020, against a baseline of 106.

The Council continues to investigate road accidents, and maintains a rolling programme to identify, prioritise and implement casualty reduction schemes at locations with higher than expected casualty numbers for the traffic flow. This process also identifies places where possible casualty reduction can be achieved in

combination with other objectives such as congestion relief, or by bringing forward works from the highway maintenance programme. The Council has also been implementing a mass action programme to provide anti-skid surfacing at sites where skidding is a factor in accidents.

Among other actions to deliver this MTS goal in Bromley, we will:

- Continue with our Police Stops programme, which involves Bromley Road Safety officers joining Local Safer Neighbourhood Teams on the borough's roads and providing road safety education to drivers who have been pulled over for traffic offences such as speeding, not wearing seatbelts, using mobile phones etc.
- Promote our range of driving courses including our Complete Driving Course, our Powered Two Wheeler course in schools and our Advanced Motorcycle Training course.
- Continue offering our traffic education programme to local schools in the borough and providing cycle training to children and adults.

MTS Goal: Improving transport opportunities for all Londoners

MTS Challenge: Improve accessibility (including physical accessibility and access to jobs and services)

There are 432 accessible bus stops out of a total of 1040 within the borough (42%). Eight rail stations and tram stops out of a total of 28 have full access for people with impaired mobility, and nine have partial access. A project is in active development by Network Rail which would provide lift access to the platforms and an improved ticket hall at Bromley South station in time for the Olympics and Paralympics in 2012.

Via the former Seltrans partnership, a station access audit has been undertaken for all rail stations in Bromley. This information has already been used as input to major station access projects at St Mary Cray and Ravensbourne, and to a number of smaller improvements. This has resulted, for example, in improvements to footway surfaces, provision of dropped kerbs, new disabled parking bays and better direction signs. The audit will continue to inform our works programme in the future.

When developing physical projects, we consult with organisations representing people with physical and sensory impairment. A good recent example of this is the public realm improvement scheme in Orpington High Street. During the public exhibition, members of the public from all user groups were able to walk on the proposed surfaces and provide feedback, which resulted in a balance between the needs of wheelchair users and the visually impaired. A similar approach will be adopted during the development of the Bromley North Village project, which is currently in development.

The Council continues to provide disabled parking bays on the basis of fair need in car parks, in local shopping streets and, subject to criteria, at people's homes.

Bromley's geography and southern rural areas make access to employment by public transport difficult. Bromley is ranked 30th across London for access to employment and is therefore in the bottom quartile. Improving access to jobs and services has been largely dealt with in the section above on improving transport connectivity.

Access to other services by non-private modes of transport is summarised in the following table, which also illustrates Bromley's ranking compared with other boroughs.

Service type	Rank in London (1 = largest mode share)
Primary Schools	31
Secondary Schools	30
FE Colleges	30
GPs	32
Food Shopping	25
Open Spaces	23

Of particular concern is access to GPs and schools. These figures highlight the need for inward investment to public transport services in the Borough.

MTS Challenge: Support regeneration and tackle deprivation

The London Plan, published in July 2011, diagrammatically identifies six regeneration areas in Bromley. These are Anerley, Mottingham, Bromley Common, St Pauls Cray, St Mary Cray and Ramsden. These areas are to be targeted for neighbourhood-based action and investment that bring together regeneration, development and transport proposals. The policy has been welcomed by Bromley Council, and the areas will be identified in the Council's Core Strategy.

In general terms, access to local employment will be served by maintaining the health of Bromley's town centres and the jobs that they offer. Outside the town centres, there is only limited scope to expand employment uses, with Kangley Bridge Road and its neighbouring industrial estates, the Cray Avenue corridor and Biggin Hill being the main areas where there is some scope for growth of economic activity.

Access to opportunities further afield will depend on improved connectivity, as explained elsewhere in this LIP.

MTS Goal: Reducing transport’s contribution to climate change and improving its resilience

Bromley recognises that potential climate change has the capacity to affect the borough both now and in the future and is taking appropriate measures to mitigate its carbon dioxide emissions and improve the resilience of the borough and its services to disruptive weather events.

Bromley has relatively high road transport-related emissions. In 2008 transport emissions were 22% of the borough’s total emissions (comprising transport, domestic and commercial emissions). The borough’s large size and relatively low population density leads to a reliance on road transport, which is a barrier to reducing emissions.

Transport Issue / Barrier	Effect on Emissions
Bromley has one of the least dense populations of any London Borough	Low population density means the distance to public transport is generally greater than average, leading to greater car use
Bromley is London’s largest borough and has a road network of more than 500 miles (the largest in London)	Significant distances are travelled, especially by car, leading to higher emissions
Bromley has among the highest car ownership levels in London	More vehicles (per household) are likely to lead to more CO ₂ emissions.
Increasing centralisation of facilities and the growth of out-of-town retailing (e.g. Bluewater)	Leads to greater car use, in absence of alternative travel modes
Bromley lacks a secondary public transport network such as a tram, underground or DLR service enjoyed by many other London Boroughs, particularly for orbital journeys.	Means that residents have necessarily become more reliant on car use for longer journeys

MTS Challenge: Reduce CO₂ emissions

Bromley is assessed on its performance in reducing borough-wide carbon emissions including from transport through former NI 186: this information has been collected by AEA since 2005.

In 2008, out of 33 London Councils, Bromley had the twelfth highest transport-related emissions at 337,000 tonnes CO₂.

Between 2005 and 2008 (the latest year for which information is available), Bromley’s transport-related CO₂ emissions fell from 369,000 tonnes (1.2 tonnes CO₂ per capita) to 337,000 tonnes (1.1 tonnes CO₂ per capita).

Recent Bromley policy and practice to reduce transport-related emissions includes:

- The Carbon Management Programme (with the Carbon Trust) which seeks to reduce carbon emissions associated with council operations by 25% by the end of 2012/13 (grey fleet, green fleet and commuting emissions are included as well as property and street lighting).
- LBB aimed to reduce borough-wide carbon emissions (NI 186) by 8.5% by the end of 2010 (transport emissions are one of three components); however we will

not have this data until autumn 2012. Our 2008 data shows the Council is on track to achieve this target.

- The Bromley Environment Partnership was formed in June 2010 and brings together senior management representatives from the larger public and private sector organisations in Bromley (e.g. Intu, the PRUH, RBS Insurance, Bromley College, Affinity Sutton, the Fire Brigade and Police). The group aims to take joint action to reduce environmental impacts in Bromley including those from transport.
- Bus priority measures and improved facilities for bus passengers where appropriate.
- Provision of cycle routes and cycle parking across the borough where appropriate.
- Station access schemes and information on walking and cycling to railway stations.
- A requirement that significant new developments submit a Transport Assessment. (Developers are expected to prepare travel plans as part of this process - 36 were in place by June 2011).
- 31 voluntary workplace travel plans.
- All Bromley maintained schools have travel plans.

Other sections of this LIP describe the actions the Council is taking to reduce congestion, and to enable people to choose to travel on foot, by cycle or on public transport. The Performance Monitoring Plan sets a number of targets in relation to mode share, bus service reliability, the proportion of car trips in Bromley town centre, school travel and CO₂ emissions.

To help deliver the MTS goal of “reducing transport’s contribution to climate change and improving resilience”, in Bromley we will need to:

- continue to deliver on the NI 186 Strategy & Implementation Plan, with a view to driving down emissions.
- continue to take action on the Council’s Carbon Management Programme, to reduce transport related carbon emissions from the Council’s green and grey fleet.
- continue to work with partner organisations from across the borough to reduce emissions.
- develop conditions that allow travellers to make real choices about how they get around the borough including school and workplace travel planning, promotion of cycle routes and parking, station access schemes and improved conditions for bus passengers where appropriate.
- improve the resilience of our services to disruptive weather events.

MTS Challenge: Adapting for climate change

Because there is a risk of climate change, the Council is taking steps to assess the resilience of its services and the borough as a whole (including our partners and contractors). This work will address issues such as highways drainage and maintenance, and includes an assessment of the risks associated with failing to adapt our transport infrastructure to a changing climate and implement control measures, as appropriate, to reduce such risks.

The TfL Business Plan and Investment Programme

The TfL Business Plan identifies a number of planned improvements within the London Borough of Bromley, These include:

- the update of the real time Bus information “Countdown” system;
- equipping more traffic signal sites with dynamic traffic signal control (SCOOT) technology to increase junction efficiency;
- carrying out signal timing reviews to reduce the stop/start delays at traffic signals; and
- Removing unnecessary traffic signals.

The MTS Implementation Plan includes a large number of other schemes which have a Londonwide impact and will also affect Bromley. In addition, it includes a number of schemes which are likely to have a more direct impact on Bromley, and these are listed below.

Scheme	Description	Scheme cost	Anticipated completion			MTS Proposal
			2010 - 2012	2013 - 2020	Post 2020	
Rail						
London Overground	Programme of expansion and enhancement of services, including new orbital services through Inner London and new, longer trains by 2012	M				14
London Overground	Further train lengthening	L				8 & 14
South central London	Ten-car capability on inner suburban (HLOS CP4)	M				7
South central London	Twelve-car capability and additional fast services (HLOS CP4)	L				7
South central London	Further capacity increases	M				8
Southeast London	Train lengthening on services to Cannon Street / Charing Cross (HLOS CP4)	M				7
Southeast London	Further capacity increases	M				8
Tube						
Bakerloo line	Potential Bakerloo line southern extension	H				22
DLR						
Further DLR network enhancements	Potential extensions and/or capacity increases	M				15
Tramlink						
Tramlink further enhancements	Potential extensions and/or capacity increases	L/M				16

We have taken these initiatives into account in preparing our LIP.

The 2009/10 – 2017/18 TfL business plan published in November 2008 stated that passengers would see tangible benefits over the coming years including “a trial of orbital express buses in Outer London.” This is also referred to in the LIP guidance

published in May 2010. Bromley therefore finds it disappointing that there is no mention of such trials in the Mayor's latest update of the business plan, and that documentation published on the TfL web site indicates that no such trials will now take place. This is particularly regrettable, as it is often quicker to complete relatively short "orbital" journeys on public transport, by travelling via central London. In turn, this is often still significantly slower than making the journey by car.

Works on the TLRN

TfL annually publishes a programme giving details of significant planned works, to be undertaken by them on the TLRN. These interventions are taken into account when planning our own work, in order to minimise the disruption to road users.

Bromley's LIP Objectives

Following consideration of the MTS and the other policy influences described above, the Council has adopted the following LIP Objectives.

- B1. To reduce congestion on the road and public transport networks.
- B2. To maintain and enhance the economic and social vitality of Bromley's town centres, and in particular to support the implementation of the Bromley Town Centre Area Action Plan over the next fifteen years.
- B3. To enable a genuine choice of travel mode for all journeys, appropriate to the purpose and length of the journey being made.
- B4. To promote the safe use of cycling, walking and public transport to improve access to services, facilities and employment, reduce peak time congestion, improve journey times, and limit emissions.
- B5. To improve in-borough and orbital connectivity, and to secure extensions of the Docklands Light Railway and Tramlink into the borough.
- B6. To enable multimodal journeys by improving integration and interchange.
- B7. To ensure that Bromley's streets and other public places are accessible, safe, clean, uncluttered and comfortable spaces for people.
- B8. To improve accessibility to all forms of transport for people whose mobility is impaired for any reason.
- B9. To reduce the number and severity of road casualties, with particular focus on collisions that lead to death or serious injury.
- B10. To improve the environment and reduce air and noise pollution.
- B11. To maintain the borough's transport assets in a safe and serviceable condition.

It is intended that all these objectives will be delivered during the lifetime of the Mayor's Transport Strategy i.e. by 2031.

The relationship between these objectives, the MTS Goals and the Sub-regional Challenges is set out in the table below.

Bromley's LIP Objectives		MTS Goals					Sub-regional Challenges				Bromley (Building a Better Bromley)			
		Economic Devt. & Pop. Growth	Quality of Life	Safety & Security	Opportunities for All	Climate Change & Resilience	Reduce PT crowding	Improve access to key locations	Sub-regional connectivity	Manage congestion	A Quality Environment	Vibrant, Thriving Town Centres	Safer Communities	Supporting Independence
B1	To reduce congestion on the road and public transport networks.	✓	✓			✓	✓	✓	✓	✓	✓			
B2	To maintain and enhance the economic and social vitality of Bromley's town centres, and in particular to support the implementation of the Bromley Town Centre Area Action Plan over the next fifteen years.	✓	✓					✓	✓	✓	✓	✓		
B3	To enable a genuine choice of travel mode for all journeys, appropriate to the purpose and length of the journey being made.		✓			✓		✓	✓	✓	✓			
B4	To promote the safe use of cycling, walking and public transport to improve access to services, facilities and employment, reduce peak time congestion, improve journey times, and limit emissions.	✓	✓		✓	✓		✓		✓	✓			
B5	To improve in-borough and orbital connectivity, and to secure extensions of the DLR and Tramlink into the borough.	✓			✓		✓	✓	✓		✓			
B6	To enable multimodal journeys by improving integration and interchange.	✓			✓			✓	✓		✓			
B7	To ensure that Bromley's streets and other public places are accessible, safe, clean, uncluttered and comfortable spaces for people.		✓	✓				✓		✓	✓	✓		
B8	To improve accessibility to all forms of transport for people whose mobility is impaired for any reason.		✓		✓			✓					✓	
B9	To reduce the number and severity of road casualties, with particular focus on collisions that lead to death or serious injury.			✓								✓		
B10	To improve the environment and reduce air and noise pollution.		✓			✓				✓	✓	✓	✓	
B11	To maintain the borough's transport assets in a safe and serviceable condition.	✓							✓	✓	✓	✓		

Part 3 - Delivery Plan

This section sets out our Delivery Plan for achieving the objectives of this LIP. It includes:

- A list of potential funding sources for the period 2014/15 to 2016/17;
- Delivery actions for this time period and beyond, showing how these actions will deliver our LIP objectives;
- A high level programme of investment for the period 2014/15 to 2016/17;
- A section on potential future investment for the rest of the 20-year time horizon of the MTS; and
- A section on risk management.

Potential funding sources

The table below identifies potential funding sources for implementation of our LIP, including LIP funding allocation from TfL, contributions from the Council's own funds, and funding from other sources.

The key source of funding is our LIP allocation from TfL. Figures provide by TfL indicate that the Council will receive £2.418M in 2014/15 in formula funding for Corridors, Neighbourhoods and Supporting Measures. Funding for 2015/16 and 2016/17 was not confirmed at the time of publication, with the expectation that the Comprehensive Spending Review of Spring 2013 will lead to a reduction in allocations. The Council also receives a variable sum each year to support major schemes costing over £1M, and the maintenance of principal roads, bridges and structures.

In addition to the above, the Council will be bidding for Borough Cycling Programme funding as part of the Mayor's Cycling Vision for London.

On 10th February 2011, the Mayor announced to the London Assembly that he intended to protect Londonwide transport funding for boroughs at a higher level than that announced in November 2010, namely £147.8M for each of the three years 2011/12 to 2013/14. The Council expects the Mayor of London to offer the same level of protection for funding over the period 2014/15 to 2016/17. Without this funding, the aspirations contained within this document will prove impossible to implement.

The Council also uses its own resources and resources from developers to pursue our objectives and ensure that our road network remains in a safe and serviceable condition. The potential funding for LIP delivery over the period 2014/15 to 2016/17 is shown in the table below.

It should be noted that, in most years, the sums available from developers via section 106 agreements are relatively low. The table intentionally does not show sums which might become available should any of the major developments envisaged by the Bromley Town Centre Area Action Plan come to fruition within this period. A separate table showing indicative funding for the range of interventions envisaged by the AAP can be found later in this section, as can an outline of potential longer-term interventions after 2017.

Potential funding for LIP delivery

Funding Source	2014/15	2015/16	2016/17	Total
	£000	£000	£000	£000
Integrated Transport				
LIP Allocation (needs-based formula)	2,418	2,418*	2,418*	7,254
LIP Allocation (Local Transport Funding)	100	100	100	300
Borough Cycling Programme	TBC	TBC	TBC	TBC
Council Funding – Traffic & Road Safety ⁺	51	51	51	153
Developer funding – walk & cycle access	120	30	30	180
Total	2,689	2,599	2,599	7,887
Maintenance				
LIP Allocation – Principal Roads	1,019	TBC	TBC	TBC
LIP Allocation – Bridges and Structures	994	336	589	1,919
Council Funding – Local Roads ⁺	3,691	3,691	3,691	11,073
Total	5,704	4,027	4,280	14,011
Street Lighting				
Council Funding – SL Improvements ⁺	4,250	0	0	4,250
Council Funding – SL Maintenance ⁺	720	720	720	2,160
Total	4,970	720	720	6,410
Major Schemes				
<i>Bromley North Village (final allocation)</i>				
LIP Major Scheme funding	90	0	0	90
Other external funding	0	0	0	0
Council Funding	1,500	0	0	1,500
Total	1,590	0	0	1,590
<i>Beckenham Town Centre</i>				
LIP Major Scheme funding	150	160	2,000	150
LIP Allocation (needs-based formula)	0	0	0	10
Council Funding ⁺	0	0	1,000	10
Total	150	160	3,000	3,310

⁺ These are indicative levels of Council funding based on budgets at the time of writing. All Council budgets are subject to review and Member approval.

How realistic are the programmes in this LIP?

The GLA Act 1999 (s151) says that a borough council “shall implement all the proposals” contained in its LIP. The Mayor’s Transport Strategy correctly points out that it is up to individual boroughs to seek the financial resources to fund its LIP proposals to implement the MTS (para 711). There is no legal requirement on the Mayor or TfL to provide transport funding to boroughs, only an empowerment.

If the funding available from all parties continues at or near the current level, the programmes in this LIP are realistic and deliverable. A separate section deals with detailed risks which have been identified as potentially affecting the programmes and projects contained in this Draft LIP.

This lack of clarity on future LIP funding is a significant source of uncertainty for the Council. Indeed, it undermines the credibility of the LIP process for boroughs to be unable to set out how they will take forward the Mayor's strategy as a result of the allocations for Years 2 and 3 remaining unknown.

The programme set out in this Approved LIP will only be realistic and deliverable in the context of the levels of funding received from TfL remaining unchanged. Should TfL funding be further reduced, aspects of this programme will be reduced or cancelled.

Delivery Actions

This section identifies the type of interventions which we are proposing to use to deliver our LIP objectives.

It should be noted that some of the Council's proposed projects and programmes will function as delivery actions for more than one LIP objective, and hence may appear more than once in the sections below.

Timescales for delivery

The Council envisages that most of the delivery actions described below will continue in one form or another throughout the period of the LIP and that all these actions will be delivered during the lifetime of the Mayor's Transport Strategy i.e. by 2031. The relative priority of these actions, and the resources devoted to each, will be the subject of evidence-based reviews from time to time.

Where actions have a clear delivery target or timescale, this is indicated separately.

Refreshing the Delivery Plan

The Council will refresh the Delivery Plan at intervals of no more than three years.

Objective B1

To reduce congestion on the road and public transport networks.

On the **road network**, the Council aims to make best use of existing infrastructure through effective management measures. These include:

- A programme aimed at reducing the number of congestion-generating “pinch points” on the borough’s road network.
- Active management of highway openings via the London Permit Scheme (LoPS) and use of legal action where necessary.
- Effective control of parking on yellow lines, and ensuring that necessary loading does not cause an obstruction.
- Supporting in principle the removal of traffic signals, and the experimental introduction of “left turn on red” throughout the day at safe locations, “flashing amber” where signals do not operate fully during off-peak hours, and “peak-time only” signals where this would not jeopardise safety.

For **public transport**, we will continue to assist effective bus operation on the road network, while supporting moves by other agencies to increase public transport capacity. Measures will include:

- Keeping the operation of bus lanes under review.
- Improving access to bus stops in conjunction with other ongoing programmes of work.
- Working with TfL and the rail operators in support of their projects to increase passenger carrying capacity and to reduce potentially hazardous platform crowding at stations, for example Bromley South, where works to provide lift access and improved circulation space are now completed.

Objective B2 –

To maintain and enhance the economic and social vitality of Bromley’s town centres, and in particular to support the implementation of the Bromley Town Centre Area Action Plan over the next fifteen years.

The Bromley Town Centre Area Action Plan (AAP) is a key priority for the Council over the next fifteen years. Following an Examination in public, the Plan was formally adopted by the Council on 25th October 2010. The Plan envisages a 15-year implementation period, divided into three roughly equal phases. The main transport interventions in each phase of the AAP are described below.

Phase 1 – up to Year 5 (approximately 2010 – 2015)

Full interchange improvements at Bromley North Station

The AAP envisages improved signs and accessibility, together with an upgrade of the station forecourt to improve access and enhance the setting of the listed station building. In practice this is likely to be taken forward in two ways, as part of the Bromley North Village project identified as a major scheme elsewhere in this LIP, and in conjunction with proposed developments at the station (Site A of the AAP).

First stage interchange improvements to Bromley South Station

Works to deliver lift access to platforms and an improved concourse area were completed in summer 2013, to provide DDA compliance and further improvements to the public realm of the forecourt area. Improved wayfinding is also proposed for future delivery in the area.

Bromley North Village street scene improvements

Aside from some short-term decluttering activity, this intervention is encompassed in the Bromley North Village project.

Variable message signing (VMS) for Bromley Town Centre

As owner of the Westmoreland Road car park site (Site K in the AAP), the Council entered into a development agreement in autumn 2010 to secure the development of this site. The development required the closure of the existing car park. In early 2013, the Council installed, with the use of LIP funding, a VMS system to guide drivers to the remaining car parks.

Phase 2 – up to Year 10 (approximately 2015 – 2020)

Traffic Management including a UTMC/VMS scheme and junction improvements

This envisages the possible extension of VMS to incorporate additional public parking provided in conjunction with developments, and a number of “free text” signs at the approaches to the town centre to provide traffic information. It is also intended to introduce real-time bus and train information at a number of locations in the town, including within shopping centres.

There is significant congestion at the junctions of Westmoreland Road with Masons Hill/High Street and Masons Hill with Kentish Way (A21). The AAP safeguards land in the vicinity of these junctions to allow capacity improvements to be implemented as development proceeds.

Full interchange improvements required at Bromley South Station

In addition to the improvements proposed for Phase 1, more work will be needed to improve wayfinding for people arriving by train, enhance the pedestrian environment around the station, increase cycle parking and provide more convenient and better quality bus interchange. Land (at Site J) is being safeguarded in the AAP to assist with improving Bromley South’s gateway role.

Town Centre-wide Car Club and cycle hire roll out

It is intended that the expansion of residential provision in the town centre should provide the springboard for an operationally sustainable level of car club provision. The Council has experienced some difficulty with development-led car clubs because of the reluctance of operators to provide spaces without a network of other vehicles in the local area. However studies were undertaken during 2011/12 which would lead to the creation of on-street car club spaces in the north-west of the borough, hopefully when the economic environment improves. The rolling-out of town-wide cycle hire will depend to a degree on the success of the central London hire scheme,

a separate feasibility study and the availability of funding. In the meantime a local cycle hire scheme, Brompton Dock, is to be implemented at Bromley South station.

Full implementation of the town centre wide Travel Plan

Discussions with town centre businesses have commenced, and development of the travel plan will initially be taken forward using TfL formula funding, with new developments also contributing as they come on stream.

Phase 3 – up to Year 15 (approximately 2020 – 2025)

Comprehensive town centre Car Club and cycle hire

This would be a further expansion of the projects discussed above, following a review of effectiveness and an assessment of future need.

A21 Widening

A safeguarding line already exists for widening the A21 from Hayes Lane to the southern end of Kentish Way. Capacity will also be increased in Masons Hill between the High Street and Kentish Way. It is expected that these schemes will be required prior to opening of retail development at Site G in Phase Three of the AAP. The balance which these schemes provide between enhanced public transport priority and additional traffic capacity will be a matter for further technical work and is also likely to depend *inter alia* on the extent to which the “Ten in Ten” AAP target to reduce the proportion of car trips to the town centre by 10% in ten years is achieved.

Timescales for the Area Action Plan

Each phase of the AAP is scheduled to last approximately five years, and indicative dates have been given above in relation to each phase. However, delivery of many of the major improvements in the town centre will hinge on developers and others being willing to invest. The Council only has limited influence over when development proposals may come forward, and it will be necessary to take a flexible approach to delivery of the AAP.

Other town centres

During 2010, the Council completed a major public realm improvement project in **Orpington** High Street, funded jointly by the Council and TfL. Orpington railway station is some distance from the High Street and the Council welcomes Network Rail and the train operating company's (currently Southeastern) decision to improve facilities on railway land including parking, bus interchange and pedestrian linkages to the town centre.

Following the implementation of the Bromley North Village project due for completion in 2014/15, the Council envisages that **Beckenham** town centre would be the subject of a further Major Schemes bid. This is envisaged by the inclusion of sums for scheme development in the "Potential funding for LIP delivery" table earlier in this section.

West Wickham High Street is a TfL road (A232) and was the subject of a TfL-funded improvement study some years ago. However, no funds were ever allocated for implementation. The Council believes that TfL should actively programme a project to bring the public realm West Wickham High Street up to the same standard that the Council is seeking to promote in Orpington, Bromley North Village and Beckenham. We believe TfL should aim to programme these improvements to start around 2014.

The Council will continue to use its other programmes to improve conditions in the District Centres of **Petts Wood** and **Penge**, and in its other lesser town centres and small shopping parades. The intention of this approach is to maintain the availability, viability and convenience of local shops and other facilities, and also to ensure that those who wish to make local journeys to these centres on foot or cycle are not deterred from that choice by inadequate facilities.

Objective B3

To enable a genuine choice of travel mode for all journeys, appropriate to the purpose and length of the journey being made.

The Council believes in providing the widest possible choice for journeys made in, to or from Bromley. Enabling choice in this way has spin-off benefits in reducing road traffic congestion, and in the case of walking and cycling, promoting healthy outcomes. Among the measures which the Council is taking are:

- Working with TfL, the railway industry and private sector partners to deliver real time travel information at interchanges, bus stops, stations and potentially in shopping centres and through "free text" variable message signs. It is hoped that this will be substantially in place by the end of phase 2 of the Bromley town centre AAP in 2020.
- Working with the police and public transport operators to improve safety and security for all transport users.
- Actively promoting travel planning at schools and workplaces, including a requirement for travel plans (where justified) as part of the Development Control process, and the application of travel planning principles on a town-wide basis in Bromley town centre.
- Promoting congestion relief measures on the road network, to the benefit of all road users.

- Actively pursue the availability of car club bays (currently at High Street, Orpington and Sherman Road, Bromley) in areas of proven demand or where justified by new developments.
- Promoting the safe use of cycling, walking and public transport as set out under Objective B4.

Objective B4

To promote the safe use of cycling, walking and public transport to improve access to services, facilities and employment, reduce peak time congestion, improve journey times, and limit emissions.

Among the measures used by the Council to promote this objective are:

- Securing added value funding for cycling through the Borough Cycling Programme
- Working with TfL and stakeholders on developing “Quietways” in the borough as set out in the Mayor’s Cycling Vision for London
- An ongoing programme of providing cycle parking based on need. As well as provision in town centres and other local shopping parades, we work actively with the rail industry to deliver new and improved cycle parking at stations, whether in the highway, on other Council land or with the curtilage of the station. The travel planning process (see B3 above) identifies potential cycle parking at schools and workplaces, while cycle parking in new developments is secured through the use of cycle parking standards based on the London Plan.
- An active programme of cycle training for both children and adults.
- A condition-based footway maintenance programme.
- Through the decluttering programme, and as part of other projects, we will look to replace time-expired, misleading and unnecessary pedestrian direction signing with consistent and accurate signs. We will review the applicability of Legible London type signs to local needs.
- An ongoing review of bus stop accessibility in any schemes where stops are affected.
- A bus route maintenance programme to contribute to the comfort of bus journeys.
- Working with the rail industry to improve access to stations by all modes
- Actively promoting travel planning as set out under Objective B3.

Objective B5

To improve in-borough and orbital connectivity, and to secure extensions of the Docklands Light Railway and Tramlink into the borough.

The Council will continue to press the case for external investment to improve orbital links, both by road and by public transport.

In the absence of a fundamental review of bus routes across London, (which we believe will be necessary to provide optimum service levels at a manageable cost), the Council will continue to work with TfL and the bus operators to achieve genuine service improvements. The Council welcomes the London Assembly’s initial investigation in summer 2013 into this matter.

Previous studies of Tramlink options demonstrated that there was a good preliminary business case for an extension from Beckenham Junction to Bromley town centre.

This work needs to be developed to demonstrate engineering feasibility, and to examine options for the routing of a tram service within the town centre.

The rail link between Bromley North station and Grove Park is an underused resource with the potential to provide improved connectivity to Canary Wharf, Docklands, London Bridge and the City, particularly in light of the proposed expansion of Bromley Town Centre. The Council's preferred option is to see the Docklands Light Railway extended to Bromley North with a motion being agreed at Full Council on 1st July 2013 recording the Council's overwhelming support and backing to the extension. To date, TfL have conducted a pre-feasibility study and a planning assessment into this option. The Council will continue to press TfL to secure funding for this extension.

We are aware that preliminary studies for the southward extension of the Bakerloo Line have identified Bromley North as a potential terminus in addition to a TfL-preferred option to use the Hayes Line as the southernmost section of the extension.

While the Council will consider alternative non-DLR options for improving service levels to Bromley North, we believe such consideration would be best undertaken in a way which compared all options on a "level playing field", rather than through individual operators each conducting separate and unco-ordinated studies. It should be noted that the Council is unlikely to support any extension of the Bakerloo Line service to Hayes which results in the loss of direct services to Charing Cross, Cannon Street or London Bridge.

We have identified the need for improved linkages to the Eurostar station at Ebbsfleet, and this is reflected in the South London sub-regional transport plan.

Objective B6

To enable multimodal journeys by improving integration and interchange.

The Council has sought wherever possible to improve interchange at railway stations, partly through the use of TfL funding available through the former station access programme. Key examples of this have been the projects at St Mary Cray and Ravensbourne stations. We will continue to work with the rail industry to identify and implement small-scale improvements in walking and cycling facilities in and around stations, and to identify opportunities for further ad-hoc joint working. Comprehensive station access audit information collected by the former Seltrans partnership will help with this process.

The draft work programme for 2014/15 to 2016/17 includes a commitment to continue station approach improvements, as successfully delivered at Kent House station. Work also continues on securing an extension to the heavily-used Lennard Road car park adjacent to New Beckenham station. We will continue to keep under review the levels of car parking near other local stations, and the opportunities to extend off-street parking, while remaining mindful of the need to discourage inappropriate railheading. The Council welcomes Southeastern and Network Rail's commitment to add a deck to the car park at Orpington station.

Objective B7

To ensure that Bromley's streets and other public places are accessible, safe, clean, uncluttered and comfortable spaces for people.

While transport interventions will play an important role in achieving this Council objective, they sit alongside the planning system, the street cleansing service and the interventions of the police in fully addressing this issue.

Objective B2 covers the Council's proposals for significant public realm improvements in our main town centres.

The Council continues its programme of decluttering aimed at rationalising street furniture and signs in our town centres and local shopping parades.

We will continue our ongoing programmes of carriageway, footway and street lighting maintenance as resources permit, and enforcement activities to deal with unauthorised signs, highway obstructions and graffiti.

In terms of personal security, we established a Light against Crime programme in 2010/11 and have delivered a number of schemes to improve lighting around known crime hotspots. 2012/13 schemes have focused specifically on lighting improvements around key transport interchanges. This initiative is to be subsumed into the public transport interchange and access programme for this delivery planning period.

Objective B8

To improve accessibility to all forms of transport for people whose mobility is impaired for any reason.

The Council has a duty to promote equality for people with a disability. In terms of transport, the Council will continue to engage with organisations representing disabled people when preparing schemes. We will also:

- Continue to improve access to bus services by ensuring that buses can approach the kerb closely enough to use their access ramps.
- Work to improve or adapt conditions in the footway, and to ensure unobstructed level access to bus stops as our work programmes progress.
- Work with the rail industry to co-ordinate improved access in the highway with improved access within the railway estate, for example when lifts or ramps are provided at stations.
- Continue to identify and act on the need for on-street disabled parking spaces.

Objective B9

To reduce the number and severity of road casualties, with particular focus on collisions that lead to death or serious injury.

The Council notes the new Road Safety Action Plan, 'Safe Streets for London'. It will work with TfL and other partners to improve road safety delivery through the targeting of investment. This Plan includes a target of a 40% reduction in KSI casualties by 2020 based on 2008-12 baseline.

Physical transport projects are the subject of a safety audit to ensure that potential new risks are eliminated and existing risks reduced. In addition, the Council has a number of ongoing programmes which are specifically aimed at identifying the location and causes of road traffic accidents and implementing measures to reduce their frequency and severity. Previously these programmes were identified as:

- Casualty reduction – individual locations
- Casualty reduction – mass action
- Joint casualty reduction / congestion relief schemes
- Accident prevention - education, training and publicity

It is envisaged that the activities covered by these programmes will continue into this delivery planning period and for the life of this LIP. However, as the number of casualties is successfully reduced, it is increasingly difficult to identify common causal factors which are susceptible to relatively simple engineering remedies. The Council will continue to review the effectiveness of these programmes and the way in which physical casualty reduction measures interact with other programmes, such as road safety education and cycle training, which seek to promote awareness and safer behaviour.

Our road safety education programme currently includes:

- Curriculum-based activities delivered in schools
- A smarter driving programme and advanced motorcycle training
- Cycle training for both children and adults
- A programme which works with retailers to ensure that child car seats are properly fitted.

We will continue to target educational activities at user groups – such as young male drivers – who are identified as being at particular risk.

Objective B10

To improve the environment and reduce air and noise pollution.

The Council operates a road network hierarchy to ensure that roads and streets are used for the purpose to which they are best suited. This aims to ensure that local streets are used for local access, and that larger vehicles and vehicles on longer journeys do not find local streets attractive as “rat runs”. This principle is applied to the design of all local traffic management and safety schemes.

This Council also notes the set up of the Mayor’s Roads Task Force which is specifically tasked with advising on the challenges facing the road network in the short, medium and long term and the potential options for improvements. The nine street type definitions developed can be used to help understand and articulate the challenges at any particular location or corridor.

Our programmes for reducing congestion, eliminating pinch points and smoothing traffic flow will reduce roadside noise and the additional pollution that derives from stop-start driving. Surface noise from vehicles is limited to a degree through effective carriageway maintenance. The Council continues to support the London Lorry Control Scheme which restricts access by heavy vehicles at night and at weekends.

As explained in Section 2, we will continue to use the development control process to minimise the impact of noise from deliveries and servicing through good design and the use of Delivery and Servicing Plans (DSPs), and a possible Construction Logistics Plan to cover the major developments planned for Bromley Town Centre.

Objective B11

To maintain the borough's transport assets in a safe and serviceable condition.

The Council has a number of on-going programmes which aim to protect our transport assets and keep them available for safe and convenient use by the public. They are:

- Principal Road maintenance
- Bridges & structures
- Local road and footway maintenance
- Bus route resurfacing
- Street lighting maintenance

Individual projects within these programmes are prioritised on the basis of need and best practice.

The condition of Bromley's roads and pavements has been consistently identified by residents as a particularly important issue, and their maintenance continues to be a priority for the Council.

The Council successfully completed the £4.5M renewal of Chislehurst Road Bridge in 2012 and continues with a programme of planned repairs to the borough's roads and pavements.

The Council published a Network Management Plan in 2008. Our Highway Asset Management Plan (HAMP) is currently being redrafted through work shared with the South London Alliance (Bromley, Bexley, Croydon, Greenwich, Kingston upon Thames, Lewisham, Merton and Sutton). This work is generating iterations of highway valuation (to CIPFA guidelines), levels of service, benchmarking, asset deterioration and potential joint procurement.

The Council operates a **Winter Service policy**, based on the principles recommended in the DfT document *Well-Maintained Highways, Code of Practice for Highway Maintenance Management*, which was most recently reissued in July 2013.

The aim of the service is to minimise the risk to safety and the non-availability of the highway network through ice and snow, taking account of available resources. It involves treating the highway in order to:

- Prevent ice from forming, (pre-treatment - "precautionary" salting);
- Melt ice and snow already formed, (post-treatment); and
- Clear snow physically.

A network of priority routes has been defined from a hierarchy of carriageways and footways to take account of both strategic and local needs.

Prioritisation – how the Council decides what to do and when to do it

The programmes and projects described in this LIP are part of a pattern of service delivery which has evolved over many years to meet changing needs. The selection of programmes and of individual projects within them, and the way budgets are allocated to each programme, is a process which reflects a number of considerations.

It is relatively easy to decide within individual programmes which potential projects should be given highest priority. Investment decisions for, say, road surface maintenance or casualty reduction schemes can be based on an assessment of road condition or by considering the number and severity of accidents at different locations.

However, deciding the balance of funding between different programmes requires a qualitative rather than a quantitative judgement. This judgement is based on the Council's policy priorities, and to a degree on what has worked well in the past.

The overall allocation of TfL formula funding is decided on an annual basis by the Council's Environment Portfolio Holder, following consideration of a report by the Environment PDS Committee. Broader aspirations for the Transportation service are encompassed in the Council's Environment Portfolio Plan, which is a Member-led process which identifies the main priorities for each financial year.

Other factors which influence these decisions include the following. This is not necessarily an exclusive list.

- Overall Council policy statements such as the Community Strategy and UDP/LDF.
- Manifesto commitments by the majority party on the Council.
- Requirements imposed by legislation.
- The availability of Council funds, and/or the availability of external funding support (for example through TfL's Major Schemes process), and any time limitations which might apply to these funds.
- The priorities and availability of funding for the Council's delivery partners (such as Network Rail and the train operating companies in relation to station improvements).
- The outcome of public consultation on specific proposals: this may reduce or increase the scheme budget which in turn can affect which other projects may be brought forward or delayed.
- Assessment of the effectiveness of past schemes, and feedback by users and stakeholders.

The Mayor's High Profile Outputs

The Mayor's Transport Strategy has identified six High Profile Outputs, as follows:

- Cycle Superhighway schemes
- Cycle parking
- Electric vehicle charging points
- Better Streets
- Cleaner local authority fleets
- Street trees.

The sections which follow describe how the Council is approaching these outputs, and identify how our interventions will help to deliver them.

Cycle Superhighways

As part of the Mayor's "cycling revolution for London", 12 radial cycle superhighway routes were proposed with four launched by 2013.. A programme of the other 8 routes has been identified up to 2015. Cycle Superhighways are more direct, continuous and clearly marked cycle routes providing improved cycle access to central London.

The Council will work with the Mayor and TfL to deliver Route CS6 from Penge to The City via Elephant & Castle. This route is one of the final ones to be launched. It has a relatively short length within the borough, encompassing Newlands Park, Lennard Road (short length) and Parish Lane, terminating at the junction with Green Lane. The provision of an extension to Beckenham will also be discussed with TfL officials. A number of complementary smarter travel initiatives operate in the Borough, cycle parking improvements and cycle training provision. These measures will support the delivery of the Cycle Superhighways programme.

Cycle parking

The Council aims to ensure that an adequate supply of cycle parking is provided across the Borough, and that its quality and level of maintenance is such as to encourage its use. There are currently over 2,000 publicly available cycle parking spaces in the Borough, although the majority of these are not on highway land, such as stations, supermarkets, leisure centres, libraries and so on.

On-street cycle parking

There are currently about 500 on-street cycle parking spaces in Bromley. The Council has an ongoing programme of providing comprehensive street cycle parking across the Borough, using Sheffield stands featuring tapping rails as standard. Cycle stands provided within town centre regeneration schemes (such as Bromley and Orpington Town Centres) are of a different appearance, to be consistent with the overall desired 'look' of the streetscape of the area; however they generally conform with the design characteristics of Sheffield stands.

An on-going audit of current stock and new stock ensures that we always have a programme to install replacement and new stands throughout the year.

Cycle parking in parks and open spaces

There are currently approximately 100 cycle parking spaces available in Bromley's

parks. The Council has identified various parks where there is a need for new or improved cycle parking facilities, such as Crystal Palace Park. Some other parks have cycle routes through them such as Norman Park, Jubilee Park and Priory Gardens in Orpington. There are many new green areas being opened up such as Goddington Park along the Cray Valley Greenway, with many other new opportunities for cycle parking.

Long stay cycle parking

Long stay parking in the form of lockers, and supervised parking and workshop facilities, is provided at locations such as public transport nodes and rail stations and on housing association housing estates where keeping cycles in flats is difficult. Much of this is done by direct engagement with our partners like Network Rail and developers. Our Biking Boroughs programme included a project to introduce further secure residential cycle parking into housing association developments across the borough. This is envisaged to continue as we move into the newly titled Borough Cycling Programme.

Cycle parking at schools and workplaces

Cycle parking at existing schools and workplaces is routinely sought as part of negotiated workplace and school travel plans. 44 schools in Bromley have had cycle parking installed through the school travel planning process. Workplace travel plans have resulted in the installation of 88 stands (176 spaces) at nine businesses.

Minimum Cycle Parking Standards

The Council requires the provision of a minimum number of cycle parking spaces for any new developments. All planning applications are reviewed to obtain the best provision possible, and arrangements have now been put in place to monitor the quantity of cycle parking provided in new developments.

Proposed new provision, 2014/15 to 2016/17

The Council hopes to increase the supply of public cycle parking as follows:

New cycle parking	Spaces to be provided					
	2014/15		2015/16		2016/17	
	On-street	Off-street	On-street	Off-street	On-street	Off-street
Council programme	30	10	30	10	30	10
Borough Cycling Programme	100	60	100	70	100	80
Third party	-	30	-	30	-	30
TOTAL	130	100	130	110	130	120

Electric vehicle charging points

The Council is broadly supportive of the Mayor’s proposal to introduce 25,000 electric vehicle charging points across London. However, the Mayor’s strategy suggests that publicly available charging points should be no more than 1km (0.62 miles) apart, and it is not considered that this will be appropriate or practically achievable in some of the more rural areas of the Borough.

As of July 2013, Bromley has seventeen publicly accessible charging points (those registered on Source London) at nine different locations. These are as follows:

Address 1	Address 2	EVCPs	Easting	Northing
The Glades shopping centre	Bromley	2	540379	169175
Civic Centre MSCP	Bromley	2	540613	169193
The Hill MSCP	Bromley	2	539954	169433
The Mall	Bromley	2	540446	168931
Nissan Ancaster	Bromley	2	540997	169977
St George's car park	Beckenham	1*	537564	169675
Waitrose	Beckenham	4	537382	169906
The Spa	Beckenham	1*	536504	169561
Penge East station	Penge	1*	535344	170715

*Provision for two charge points although only one bay marked for EVs.

The Council's focus will be to concentrate initially on securing charging points in its car parks situated in the main town centres of Bromley, Orpington, Beckenham, Penge and West Wickham. This will be combined with a programme of promotion and advertising to residents within the borough to ensure people are aware of the facilities available to them.

The London Plan has established new standards for the provision of charging points in new developments, which will be applied as appropriate through the development control process.

The Council considers that the longer distances associated with car journeys in outer London may discourage the adoption of electric vehicles until the technology improves, and therefore other sites will be considered when there appear to be existing or imminent local levels of demand which would justify the infrastructure.

Better Streets

The MTS defines "better streets" in a number of ways. In respect of town centres, Proposal 83 of the MTS says that this includes removing clutter and improving the layout and design of streets; enhancing and protecting the built and historic environment; increasing the permeability of streets; and creating clear and easily understandable routes and spaces to make it easier for cyclists, pedestrians and disabled people to get about.

In July 2010, the Mayor of London officially opened the public realm scheme in Orpington High Street, which was jointly funded by Bromley and TfL at a cost of £2.2M. In September 2010, the Council submitted a major schemes "Step 1" bid to TfL to progress a public realm scheme in Bromley North Village (BNV), a project which had already received support at the feasibility stage from the Mayor's Great Spaces initiative.

The BNV scheme was subsequently accepted onto TfL's Major Schemes programme from 2011/12. £300k has been provided for design and consultation for the first year, with around £4.5M programmed for implementation in years two and three.

Studio Egret West was appointed as the main urban design consultant and FM Conway as the main contractor. Implementation started in July 2013 and is expected to take up to 18 months to complete.

The Council will look to Beckenham town centre as the location for a further revitalisation scheme. An unsuccessful “Step 1” bid was submitted to TfL in September 2012. A further bid is due to be submitted in September 2013.

West Wickham High Street has also been identified as being in need of investment: however, this is a TfL road, and proposals prepared on TfL’s behalf some years ago have been shelved. The Council is currently working with TfL to develop revised plans for West Wickham and expect implementation in the new delivery planning period.

More generally, the Council uses its highway maintenance and street lighting budgets to maintain the quality of its street-based spaces. At the time of writing this LIP, the Council also had a number of individual programmes which, in whole or in part, are also aimed at improving the quality of the public realm. These programmes include:

- Decluttering
- Pedestrian crossing and minor walking schemes
- Cycle parking
- Public Transport Interchange & Access

Other programmes, which are principally aimed at other objectives, such as congestion relief or casualty reduction, can also offer spin-off benefits, such as local footway resurfacing or improved lighting.

The Council also began a £8.5M major ‘invest to save’ project to replace 8,000 columns, and a further 4,000 lanterns in residential roads by 2015.

On a day-to-day basis, the Council maintains an active programme of identifying and removing intrusions into the street scene, such as A-boards, unauthorised tables and chairs, flyposting, street trading and graffiti. Five high streets – in Bromley, Orpington, Beckenham, Penge and West Wickham, require licences for the distribution of free literature.

The Council does not have a separate programme to remove unnecessary pedestrian guardrail. However, this is reviewed in conjunction with other projects and, subject to a safety audit, any appropriate guardrail is removed.

Cleaner local authority fleets

Bromley Council operates a fleet of 110 motor vehicles; this includes 7 standard cars, 5 city cars, 25 mini buses, 23 LCV’s, 6 MPV’s, 9 4x4’s, 23 accessible buses, 10 gritters, 1 specialist snow clearing vehicle, 4 mobile exhibition/outreach units and 1 mobile library. Of these larger vehicles, all but one currently conforms to emissions standards set out in the Mayor’s Low Emission Strategy, introduced in 2008 and subsequently 2012. A replacement for the non-compliant vehicle (a specialist snow clearing vehicle) is due this year. This will conform to Euro 5 emission standard using

ad-blue technology. 3 vehicles were suitably adapted to gain LEC certification to comply with the current standard.

Whilst the borough's fleet is predominantly made up of diesel powered vehicles, it also currently includes one hybrid car, one electric truck and one LPG dual fuel van. It is the Council's intention to consider introducing more of this technology into its fleet when renewing the car and LCV provision contract towards the end of 2014.

In addition to the on-road vehicles operated by the Council, there are two electric buggies used on the 12-acre Civic Centre site to carry goods and waste between buildings.

The Council has installed a new fuel storage tank, which is able to deliver varying blends of ultra low sulphur diesel and bio diesel. Currently all the diesel vehicles run on a 5% bio diesel blend. It is the Council's intention to increase the blend to 10% - 15%, for vehicles operated under the new fleet LCV contract towards the end of 2014.

In London the majority of emissions come from road transport, and the benefits of the higher blend of bio diesel will help reduce emissions and improve air quality. While not all bio diesel comes from sustainable production methods, the Council sources its supply of bio diesel from producers who use sustainable methods, and the bio diesel currently used is produced from used cooking oil.

In addition to the Bromley fleet, the Council has five main contractors operating fleets in the borough. These are May Gurney, which holds the street lighting contract, Veolia, the waste collection and disposal contact, F M Conway, the major works contract, O'Rourke's Construction & Surfacing Ltd, the non-major works contract, and Kier Support Services Ltd, the street cleansing contract. A breakdown of the composition of the fleets is contained in the table below:

Fleet Operator	Electric	Pre Euro	euro 1 / Euro I	euro 2 / Euro II	euro 3 / Euro III	euro 4 / Euro IV	euro 5 / Euro V	Total
LB Bromley	1	1	-	2	15	68	23	110
Veolia	-	-	-	-	33	-	22	55
F M Conway	-	-	-	-	2	7	5	14
May Gurney	-	-	-	-	-	8	-	8
Kier Support Services	-	-	-	1	1	50	1	53
O'Rourke's Construction & Surfacing	-	-	-	-	25	8	-	33
Total	1	1	0	3	76	141	51	273

Street Trees

The Borough has approximately 36,000 street trees. These are managed through the Confirm database, and any changes in the number of trees can be monitored through this system.

Currently the Council spends £55,000 annually on street tree replacement. Replacement locations are chosen from the Confirm database, which can indicate any locations where trees have been felled. In addition, there is a tree replacement database where residents can request trees. Requests are subject to an inspection to verify that the location is suitable and what species should be planted there.

In 2012/ 2013 the Council planted 375 new street trees. 341 of these were new trees planted as part of the Mayor of London's programme for new street trees. and 34 were planted as replacements for felled trees.

In the 2012/13, the Council felled 306 street trees of the following size categories for the following reasons:

Tree Size and Category	Diameter at breast height (cm)	Trees Felled 2012/13	
		Health and Safety	Other reasons*
Cat A (small)	0 - 20	TBC	TBC
Cat B (medium)	21- 40	TBC	TBC
Cat C (large)	41 - 60	TBC	TBC
Cat D (extra large)	61 - 80	TBC	TBC
Cat E (extremely Large)	81+	TBC	TBC
	Sub-total	271	35
	Total	306	

*All the trees felled for "other reasons" were felled as mitigation against insurance claims for subsidence and direct root damage to property.

Programme of investment

Programme of investment for the period 2014/15 to 2016/17

The table below summarises, at a programme level, the Council's proposals for the use of TfL borough funding in the period 2014/15 – 2016/17.

LONDON BOROUGH OF BROMLEY TfL BOROUGH FUNDING 2011/12 TO 2013/14	Programme Budget 2014/15 allocated	Programme Budget 2015/16 indicative	Programme Budget 2016/17 indicative
	£k	£k	£k
CORRIDORS, NEIGHBOURHOODS AND SUPPORTING MEASURES			
Congestion Relief	573	570	583
Casualty Reduction	335	335	335
Network infrastructure	230	260	260
Parking	135	115	115
Cycling & Walking Schemes	320	313	300
Public Transport Interchange and Access	250	250	250
Scheme Development & Review	90	90	90
Road Safety Education & Training	485	485	485
ALL FORMULA FUNDED SCHEMES	2,418	2,418*	2,418*
BOROUGH TRANSPORT PRIORITIES	100	100	100
BOROUGH CYCLING PROGRAMME[†]	212	202	212
BRIDGE STRENGTHENING	994	336	589
PRINCIPAL ROAD RENEWAL	1,002	TBC	TBC
MAJOR SCHEMES	90	TBC	TBC

* Subject to the Central Government funding settlement for TfL for 2015/16 and following years.

† Subject to success of Borough Cycling Programme bid.

The specific investments set out in the programme of Investment and in 'Proforma A – Spending Submission for 2014/15 to 2016/17' will be delivered within the three years of the programme. No scheme or project is anticipated to be delivered after this period.

Programme of bridge strengthening investment for the period 2014/15 to 2016/17

The table below summarises the Council's bid to LoBEG for investment to bridge strengthening and structures in the period 2014/15 – 2016/17.

Bridges and Structures	Further Details		Funding £000		
	LBB Structure?	Treatment	2014/15	2015/16	2016/17
Leamington Avenue Bridge	✓	S	105	0	4
Long Meadows Close Retaining Wall	✓	S	142	0	3
Sevenoaks Way Retaining Wall	✓	S	150	0	5
Parapet Strengthening	✓	M	20	15	10
Maintenance Safety	✓	M	15	50	50
Waterproofing	✓	M	60	60	60
Bishops Avenue Culvert	✓	S	166	0	5
Brooklyn Road Culvert	✓	I	2	2	2
Lych Gate Footbridge	✓	I	15	1	0
Kingsway Bridge	✓	M	50	1	0
Aldersmead Road Bridge	✓	M	50	1	0
Crystal Palace Subway NE Ret. Wall	✓	I	43	0	0
Anerley Station Bridge	x	A	2	0	0
Bridge Road Bridge (508)	x	A	6	0	0
Bridge Road Bridge (509)	x	A	15	0	0
Crofton Lane Bridge	x	A	44	0	0
Crofton Lane Footbridge	✓	A	30	0	0
Red Lodge Road Bridge	x	A	3	0	0
Sackville Avenue Culvert	✓	S	5	55	450
Wendover Road Bridge	✓	S	40	150	0
Wendover Road Footbridge	✓	A	30	0	0
Plaistow Lane Bridge	x	I	1	1	0
Total			994	336	589

Programme of Principal Road Renewal investment for the period 2014/15 to 2016/17

The table below summarises the Council's list of maintenance schemes for principal roads in the period 2014/15 – 2015/16.

Principal Road Renewal		Funding £k		
Name	Extent	2014/15	2015/16	2016/17
A222 Bromley Road, Chislehurst	Centre Common Road to Prince Imperial Road	250		
A222 Widmore Road	Widmore Green to Freelands Road	150		
A222 Beckenham Lane	Farnaby Road to Ravensbourne Avenue	150		
A2212 Burnt Ash Lane	Southover to Briary Gardens	100		
A214 Elmers End Road	Mackenzie Road to Beck Lane	150		
A214 Station Road	Links Road to Glebe Way	100		
A233 Westerham Road	Brockdene Drive to Croydon Road	100		
A233 Main Road	Church Road to Edward Road	102		
A232 Crofton Road	Poplar Avenue to Burlington Close	150		
A222 Bromley Road, Chislehurst	Centre Common Road to Prince Imperial Road	250		
A222 Widmore Road	Widmore Green to Freelands Road	150		
Main Road	Churchill Way to end of dualling		118	
Summer Hill	Islehurst Close to footbridge		96	
Cray Avenue	Railway bridge to Kent Road		227	

Sevenoaks Road	Jctn with r/about High St to Jctn with r/about Farnborough Hill		249	
Sevenoaks Road	Jctn with r/about High St to Jctn with r/about Farnborough Hill		126	
Sevenoaks Road	Jctn with r/about High St to Jctn with r/about Farnborough Hill		63	
Centre Common Road	Royal Parade to Prince Imperial Rd		150	
St Paul's Cray Road	Manor Pk Rd to Bull Lane		104	
Manor Road	High St to Wickham Rd		78	
		1,252	1,211	

Schemes for 2016/17 have yet to be developed and will be submitted to TfL at a future date for approval.

Investment for the Bromley Town Centre Area Action Plan

The table below summarises the complete range of transport interventions envisaged by the AAP's Transport Strategy document. The table represents a broad strategic overview, and some elements represent an order of magnitude rather than fully planned and detailed projects.

The programme incorporates elements which would be implemented via the Council's annual investment programmes (funded by the Council itself or via TfL borough funding), elements which would depend very substantially on funding by TfL or other transport providers, and elements which will depend on developers coming forward with appropriate planning applications.

The table represents the entire 15-year period of the AAP, 2010 - 2025. A general indication of the possible projects under each phase may be found under the discussion of LIP Objective B2 above.

The Table was drawn up at a time when it appeared that progress towards adoption of a Community Infrastructure Levy (CIL) was more assured than has subsequently been the case. It remains the case that elements identified in the table as CIL funded are likely to be funded by developers through another mechanism. Both the s106 and CIL funding identified are dependent on the volume of major developments which may come to fruition within this period.

Potential Bromley Town Centre Schemes: Indicative programme costs 2014-2026	Funding source £'000s			
	LBB-TfL	s106	CIL	Total
Annual Programmes (Incorporating street lighting, traffic signals, bus priority measures and walking and cycling improvements).	6,200	1,000	0	7,200
Variable Message Signs and Traffic Information (Phase 2)	200	310	260	770
Public Realm and Environmental Improvements	2,060	400	1,920	4,380
Improvements to public car parking and the provision of public car parking on and off street	750	4,600	1,150	6,500
Rail & Bus Improvements funded by partners	1,400	600	1,500	3,500
Promotional Programmes, Travel Plans and Delivery & Servicing Plans	300	1,500	2,000	3,800
Car Clubs	n/a	tbc	n/a	n/a
Major Projects and investment in the highway network (Including Park & Ride, A21 widening, investigation of Tramlink and DLR extensions).	12,050	0	13,300	25,350
Total of all sections:	£23.21m	£8.41m	£20.13m	£51.75m

Potential longer term investment up to 2031

Earlier in this section, it was explained that the Council expects that many of our proposed programmes, for example street lighting maintenance and road safety education, will continue in one form or another throughout the period of the LIP, although their scope will be reviewed from time to time.

However, in the longer term the Council believes that a number of significant, but currently unfunded, investments will be required to ensure Bromley's economic and social vitality. These are shown in the table below with indicative funding and indicative but uncommitted timescales.

Project	Approx. date	Indicative cost	Likely funding source	Comments
New Car Park at Orpington Station	2010-2014	£2.0m	One or more of Southeastern, Network Rail, LB Bromley, TfL	Existing parking at the station is heavily used. A second parking deck would encourage rail use and discourage railheading to less suitable stations. Southeastern in partnership with Network Rail secured funding and submitted planning application in Summer 2013.
New Car Park at Locksbottom	2014-2017	£3.3M	One or more of developer, Kings College Hospital, LB Bromley, TfL	Significant shortfall of parking capacity associated with the Princess Royal University Hospital, spilling over into nearby streets and private car parks. Discussions ongoing with Kings College Hospital who are acquiring this hospital in late 2013.
The Hill Multi-Storey Car Park	2015-2017	£1.2M	LB Bromley	Required to restore full capacity to car park as the level of activity in Bromley town centre increases.
Bromley South station area - public transport hub improvements	2015-2020	£1.0M	Developer, LB Bromley, TfL	Included in the Bromley Town Centre Area Action Plan.
Oakley Road / Bromley Common	2015-2020	£1M	TfL	Highway network pinch point on TfL Road Network. Delays in exiting Oakley Road. Previous TfL scheme for realignment and signalisation of junction should be re-visited. Junction on TfL's 'Better Junctions' review which includes cycle safety improvements too.
Croydon Road (TLRN) / Oakley Road / Westerham Road	2015-2020	£1M	TfL	Highway network pinch point on TfL Road Network. Significant peak delays on Westerham Road northbound. Land acquisition is a potential problem.
Highway network pinch points on TFL and Strategic road networks	2015-2025	£5M	TfL, LB Bromley	A number of identified highway network pinch points are too significant to be likely to be funded via formula funding alone. Scheme selection and prioritisation would depend on feasibility studies and in some cases on land acquisition.
Permanent park & ride for Bromley town centre	2020-2025	£3.5M	TfL and developers	Included in the Bromley Town Centre Area Action Plan. Feasibility investigated and no suitable site

Project <i>continued</i>	Approx. date	Indicative cost	Likely funding source	Comments
				located. Operation of potential service not commercially viable.
A21 widening	2020-2025	£21M	TfL and developers	Included in the Bromley Town Centre Area Action Plan.
Junction improvement at High Street / Southend Lane / Rectory Road / Albemarle Road (Beckenham)	2020-2030	£5M - 10M	TfL, LB Bromley	Highway network pinch point on Strategic Road Network. Solution probably means duplication of narrow bridge over railway.
Junction improvement at Crofton Road / Farnborough Common (A21) / Crofton Road (A232) ('Fantail' junction)	2020-2030	£5M	TfL	Highway network pinch point on TfL Road Network. Heavy delays at peak hours on A21. Land acquisition likely to be required
Beckenham Lane / Bromley Road / Shortlands Road	2020-2030	£10M	TfL, LB Bromley	Highway network pinch point on local road network. Delays on A222 especially at peaks. Carriageway width limited by Rail bridge.
Tramlink extension to Bromley town centre	2022-2030	£130M	TfL or joint venture	A previous high level feasibility studied has demonstrated a positive business case for this project although continues to remain unfunded.
DLR or Transit extension to Bromley North	2022-2030	£800M	TfL, LB Bromley and LB Lewisham	Pre-feasibility study and planning assessment carried out in 2013. The Council continues to lobby for this extension as a key transport priority for the borough.
Rail based park and ride at the M25	2025-2030	Very significant	Network Rail, DfT, TfL	A suitable programme could reduce car traffic on major radial routes into London, with benefits to the environment and the required scale of road-based investment.

Risk management

The table below show the principal risks associated with delivery of the LIP together with possible mitigation actions.

It will be seen that the major risks to the achievement of the LIP programme stem from the availability of funding to the Council, to TfL and to other major investors in transport infrastructure such as Network Rail. At a time of significant funding uncertainty, the appearance of programmes and projects in the LIP cannot be a guarantee that these programmes and projects will be implemented in the manner currently envisaged, or to the suggested timescale, or indeed brought to fruition at all. These risks apply across the whole of London and are not unique to Bromley.

There is thus an inherent risk that, across London, Mayoral objectives and targets may not be achieved, with consequent adverse effects on economic vitality, road congestion, public transport overcrowding and the overall condition of transport assets.

Bromley LIP Risk Assessment

Risk	Likelihood			Potential Mitigation Measures	Impact if not Mitigated
	H	M	L		
Financial					
Further reduction in general funding levels available from TfL, the Council's own resources, or from third parties.		✓		Consider re-prioritisation of remaining funding and/or lower cost solutions where possible. Consider extending planned delivery period for LIP programme as a whole.	Mitigation may have limited effect as some aspects of LIP programmes may well not proceed if re-prioritisation is necessary.
Increases in programme or individual project costs.		✓		Use effective project management techniques to keep effective control of project costs. Where costs are unavoidable, reduce project scope or reprioritise funding from other projects or programmes	Project or programme may not fully meet objectives. Some aspects of LIP programmes may well not proceed if re-prioritisation is necessary.
TfL declines to support individual Major Schemes under the "step" process.		✓		Explore reasons for refusal and amend design if appropriate to obtain approval. Alternatively, consider reprioritisation of other funding and seek to implement as much as possible.	Project may not proceed.
Statutory / Legal					
Council is required to "implement" its LIP under s151 of the GLA Act without sufficient external funding support.			✓	Explore possibility for legal challenge, if possible jointly with other affected bodies.	Unknown, as this provision has never been challenged. In the worst case there could be a severe impact on other Council services.
Third Party					
Partners or stakeholders do not implement projects for which they hold the lead responsibility.		✓		Engage in lobbying activity, jointly with other local authorities and others. Consider re-prioritisation of borough funding to support lower cost projects.	LIP and Mayoral objectives may not be achieved, with potential adverse impact on economic vitality, road congestion, public transport overcrowding etc.

Public/Political					
Individual schemes do not receive public support at the consultation stage.		✓		Ensure adequate engagement at the earliest possible stage. Consider scheme redesign to overcome objections.	Scheme may not proceed. Impact will depend on original objectives of scheme.
Individual schemes are not approved by Bromley Members.			✓	Ensure adequate engagement at the earliest possible stage. Consider scheme redesign to overcome objections.	Scheme may not proceed. Impact will depend on original objectives of scheme.
Programme & Delivery					
Reduction in staff resources to plan and deliver the LIP programme	✓			Possibly use agency staff, charged direct to individual projects.	Delivery period for the LIP programme may be extended, or projects may not proceed.
Projects and programmes do not deliver expected outputs		✓		Scheme benefits need to be reviewed and confirmed at each stage of project or programme. Consider scheme or programme modifications if there is “early warning” of failure to deliver outputs.	LIP or Mayoral objectives may not be achieved.
Delays to individual projects caused by Members which impacts upon the delivery of the programme, can add considerable staff cost and affect morale.	✓			To introduce a limit on the number of overall iterations to scheme design by each Ward Member (maximum 2 per scheme) and to set a time limit of 6 weeks for reply.	Delivery period for the LIP programme may be extended, or projects may not proceed.
Delays to individual projects or programmes for reasons other than those listed separately above.		✓		Reprogramme expenditure to bring forward other LIP projects to fill the “gap”.	Depending on length of delay, programmes may still be achieved within the LIP period. Otherwise LIP delivery period will be extended.

Part 4 - Performance Monitoring Plan

Introduction

The monitoring of LIP objectives, the Delivery Plan and the outcomes of the Mayor's Transport Strategy at a local level is measured through a number of targets and indicators. Through this, the success of the LIP can be ascertained.

Targets and indicators have been identified into three categories as follows:

- **Core targets** - locally specific targets set inline with the five Strategic Indicators as outlined in the Mayor's Transport Strategy.
- **Local targets** – additional targets as part of Bromley's local priorities and initiatives.
- **Monitoring Indicators** – Former National Indicators and local performance indicators that measure and monitor progress on the listed core and local targets. Each of these is already being and will continue to be monitored by the Council.

The table below provides a summary of all targets and indicators and identifies a clear link between the LIP objectives and the MTS goals.

Further information on each target including baseline data, base year, target outcome, target year and anticipated target trajectory data can be found in Proforma B in the Appendix.

Target setting

The summary table is followed by a series of pages illustrating how each of the targets have been developed, taking into account evidence from previous years, assessing the principal risk to each (particularly given funding availability) and the actions required from both the Council and its partners.

Summary of local targets and indicators for monitoring delivery of LIP outcomes

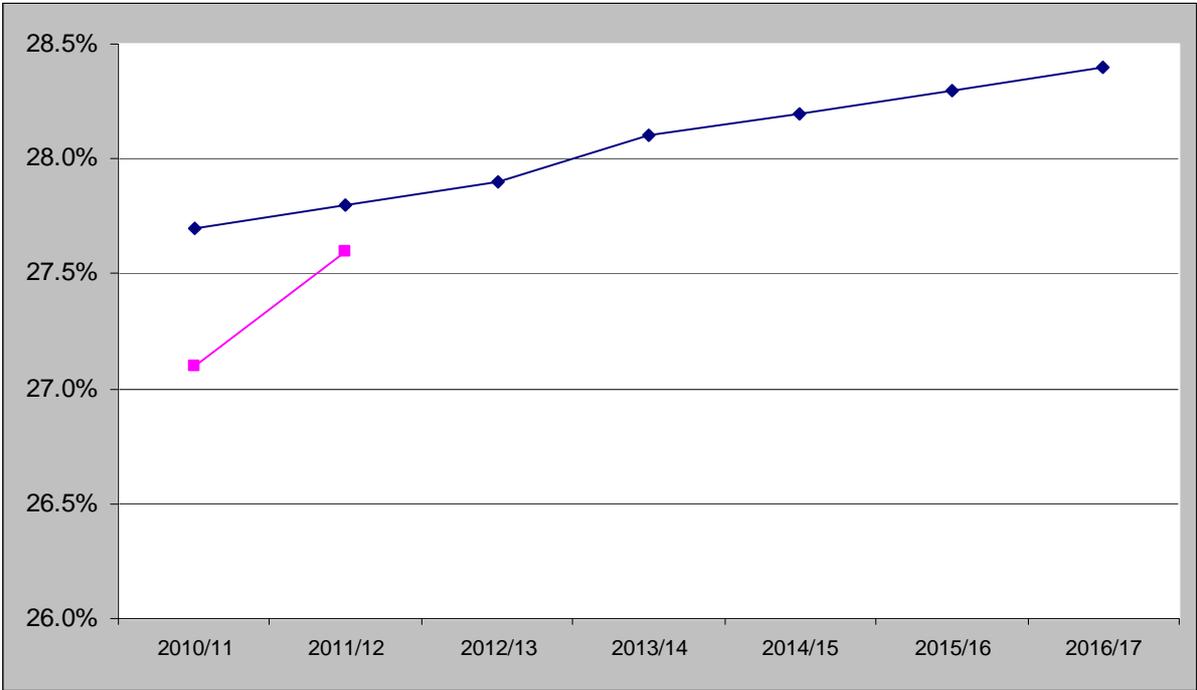
		Category	MTS goals					LIP objectives
Mode share	Increase walking mode share from 27.6% (2006/07 to 2008/09 average) to 28.4% by 2016/17	Core target						B1, B2, B3, B4
	Increase cycling mode share from 0.9% (2006/07 to 2008/09 average) to 1.4% by 2016/17	Core target						B1, B2, B3, B4
	Reduce proportion of car use by 10% over ten years in Bromley Town Centre - "10 in 10"	Local target						B1, B2, B3, B4
	Maintain the number of school children travelling by car at 31% annually	Local target						B1, B2, B3, B4
	Proportion of school children travelling by car (formerly NI 198)	Monitoring indicator						B1, B2, B3, B4
Bus reliability	Maintain Excess Wait Time (EWT) annually at less than or equal to 1.0 minutes	Core target						B4, B6
Asset condition	Maintain the percentage of principal road length in need of repair at no more than 6% annually	Core target						B11
	Reduce congestion caused by utilities companies by maintaining inspections at no less than 40% of streetworks	Local target						B1, B11
	Maintain public satisfaction of road and pavement maintenance at 52% annually	Local target						B11
	Condition of principal roads (NI 168)	Monitoring indicator						B11
	Condition of non-principal roads (NI 169)	Monitoring indicator						B11
	Condition of footway surface	Monitoring indicator						B11
Road traffic casualties	Reduce the number of people killed or seriously injured in road collisions from 133 (2006 - 2010) to 100 by 2017	Core target						B9
	Reduce the number of people killed or seriously injured in road collisions from 106 (2008 - 2012) to 93 by 2017	Local target						
	Reduce the number of total casualties injured in road collisions from 881 (2006-10) to 665 by 2017	Core target						B9
	Reduce the number of total casualties injured in road collisions from 850 (2008-12) to 744 by 2017	Local target						
	People killed/seriously injured in road accidents (NI 47)	Monitoring indicator						B9
	Children killed or seriously injured in road accidents (NI 48)	Monitoring indicator						B9
CO₂ emissions	Reduce CO ₂ emissions from ground-based transport sources from 283 kilotonnes in 2008 to 213 kilotonnes in 2013	Core target						B1, B4, B10
	CO ₂ reduction from Council operations (NI 185)	Monitoring indicator						B1, B4, B10
	CO ₂ reduction per capita (NI 186)	Monitoring indicator						B1, B4, B10
MTS Outputs	Cycle superhighway schemes	High profile indicator						B1, B2, B3, B4
	Cycle parking	High profile indicator						B1, B2, B3, B4
	Electric charging points	High profile indicator						B10
	Better Streets	High profile indicator						B2, B7, B10, B11
	Cleaner local authority fleets	High profile indicator						B10
	Net increase in street trees	High profile indicator						B7, B10

Mode share core target: Walking	
LIP long term target	29.1% walking mode share by 2025/26
Short term target	28.4% walking mode share by 2016/17
Data source	London Travel Demand Survey
Link to LIP objectives	B1, B2, B3, B4
Evidence that the target is realistic and ambitious	<p>Walking trips in Bromley make up 27.6% (2009-12) of all journeys originating in the Borough. The size of the Borough and its outer rural terrain can create barriers to this mode of travel. That said, Bromley does have higher percentages of trips by foot than neighbouring borough Bexley at 25%.</p> <p>The Mayor proposes a step change in the walking experience across London through a number of local and regional improvements and initiatives. An increase to 28.4% of all modes is still considered realistic by 2025/26.</p>
Key actions for the Council	Walking trips will be supported and encouraged through the Council's needs-based footway maintenance programme, pedestrian signage improvements, development of town centre schemes such as Bromley North village, regular review of the applicability of Legible London type signs to local needs, and school/work-based travel planning programmes.
Key actions for local partners	Local health services, schools, workplaces and local town centres play key roles in influencing attitudes and promoting the benefits of walking.
Principal risks and how they will be managed	Modal change programmes are subject to tight budget allocations and can often be most vulnerable with reducing budgets. Modal change projects will be safeguarded wherever possible.

Interim milestones

	2010/11	2011/12	2012/13	2013/14
Target	27.7%	27.8%	27.9%	28.1%
Actual	27.1%	27.6%	TBC	TBC

Base (2006/07 to 2008/09)	2014/15	2015/16	2016/17
27.6%	28.2%	28.3%	28.4%

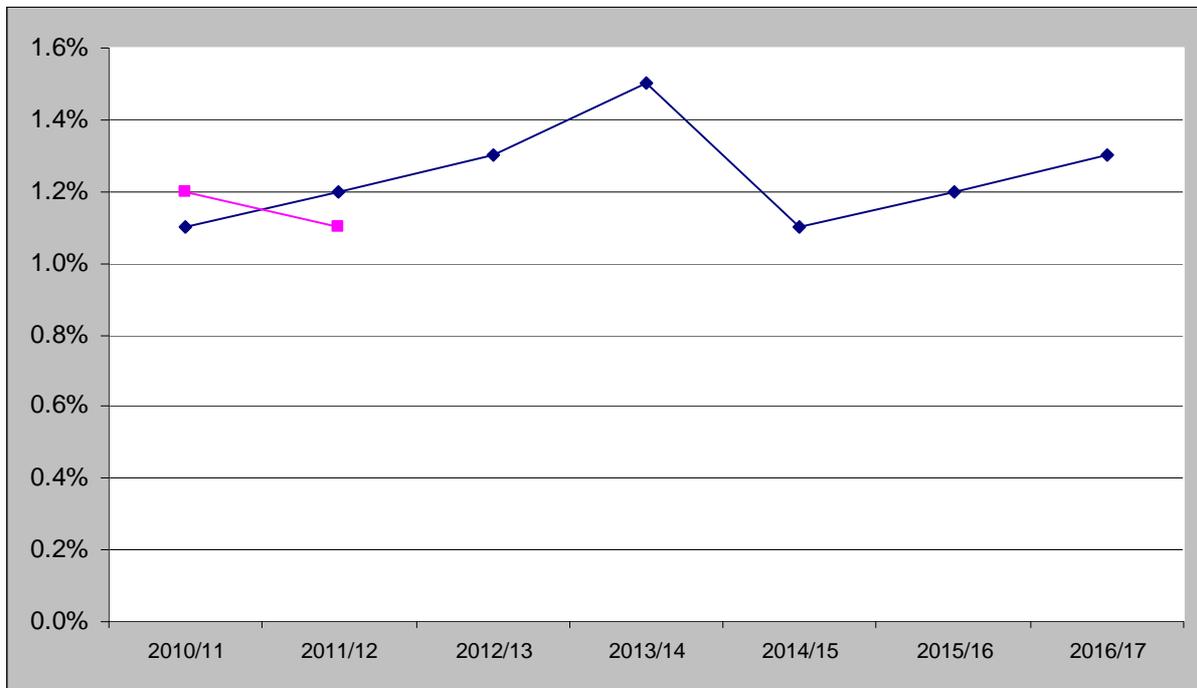


Mode share core target: Cycling	
LIP long term target	3.3% cycling mode share by 2025/26
Short term target	1.4% cycling mode share by 2016/17
Data source	London Travel Demand Survey
Link to LIP objectives	B1, B2, B3, B4
Evidence that the target is realistic and ambitious	<p>Cycling trips in Bromley make up 1.1% (2009-12) of all journeys originating in the Borough. The size of the Borough and its outer rural terrain create barriers to cycling. That said, Bromley does have a slightly higher percentage of trips by bicycle than neighbouring borough, Bexley (0.6%).</p> <p>Through TfL's Cycling Potential research published in 2010, 32% of trips in Bromley by mechanised modes have been identified as potentially cyclable. The London-average of trips potentially cyclable is 35%. It is important to note that this does not take into account market segmentation and, given the demographic of Bromley residents, a lower than London average increase in cycling has been set in the long term.</p> <p>The Mayor proposes a cycling revolution to increase cycling by 400% by 2026 (compared to 2000 levels). Outer London boroughs have been identified as having nearly two-thirds of London's potential cycle journeys. The Mayor's 'Biking Boroughs' initiative seeks to support Outer London boroughs in identifying appropriate projects and target segments to promote cycling. Bromley has been successful in securing funding to deliver a programme of interventions up to 2013/14.</p>
Key actions for the Council	The Council will continue to devote considerable resource to encouraging cycling. This includes its active programme of cycle training aimed at children and adults; infrastructure improvements; and travel planning activities as funded through the LIP. It also has submitted a bid to the Borough Cycling Programme.
Key actions for local partners	Local health services, schools, workplaces and Bromley Cycle Clubs play key roles in influencing attitudes and promoting the benefits of cycling.
Principal risks and how they will be managed	Increased cycling trips could risk increased road casualties involving cyclists. To date, Bromley has a good safety record for cyclist KSI's with an improvement from 1994-98 to 2006-08 of 48%. Cycle safety will remain a priority through our cycle training programmes and the overall work of the Road Safety Unit.

Interim milestones

	2010/11	2011/12	2012/13	2013/14
Target	1.1%	1.2%	1.3%	1.5%
Actual	1.2%	1.1%	TBC	TBC

Base (2006/07 to 2008/09)	2014/15	2015/16	2016/17
0.9%	1.2%	1.3%	1.4%

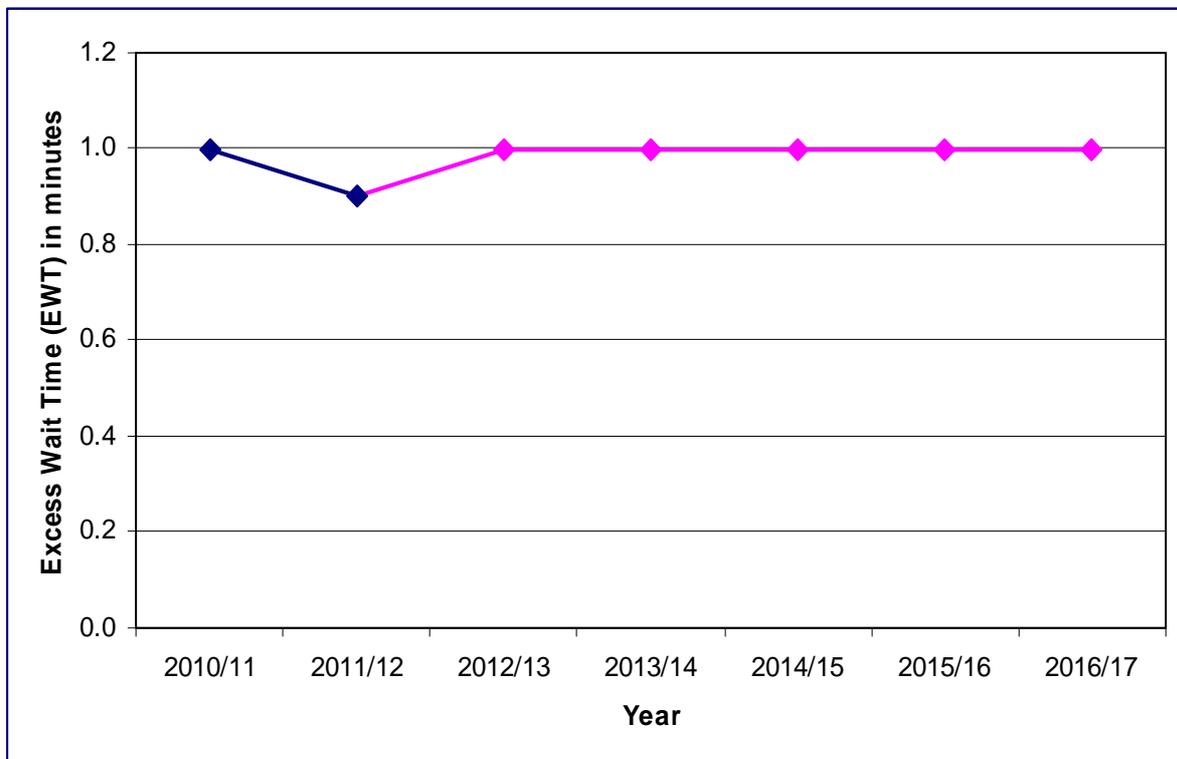


Bus reliability core target	
LIP long term target	1.2 EWT minutes by 2017/18
Short term target	Maintain EWT annually at less than or equal to 1.0 minutes
Data source	Quality of Service (QSI) Indicators
Link to LIP objectives	B4, B6
Evidence that the target is realistic and ambitious	<p>Bromley's Excess Wait Time (EWT) average currently stands at 0.9 minutes Improvements to EWT have seen a 45% decrease in waiting times between 1999/00 and 2008/09.</p> <p>As set out in the Mayor's Transport Strategy, an aspiration to maintain bus service reliability at 2006 levels of 1.1 has been made. Therefore, a target to maintain Bromley's EWT at current levels of 1.0 has been considered reasonable.</p>
Key actions for the Council	As part of the Council's congestion relief programme, improvements at indicated pinch points would be expected to contribute towards improved EWTs. Work is also being carried out on reducing congestion caused by utility companies.
Key actions for local partners	Bus operators and TfL can contribute towards improved reliability through 'quality incentive contracts', driver training to consolidate reliability improvements and also through the iBus system allowing better control over services.
Principal risks and how they will be managed	<p>With limited control of bus service reliability by the Borough, the principal risks lie with TfL and the 'quality incentive contracts' that exist between them and the operators.</p> <p>Bromley Council can seek to reduce risk of disruptions by congestion/roadworks through its congestion-relief programme and through its monitoring and enforcement of utility companies.</p>

Interim milestones

	2010/11	2011/12	2012/13	2013/14
Target	1.0 min	1.0 min	1.0 min	1.0 min
Actual	1.0 min	0.9 min		

Base	2014/15	2015/16	2016/17
1.0 min	1.0 min	1.0 min	1.0 min



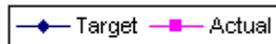
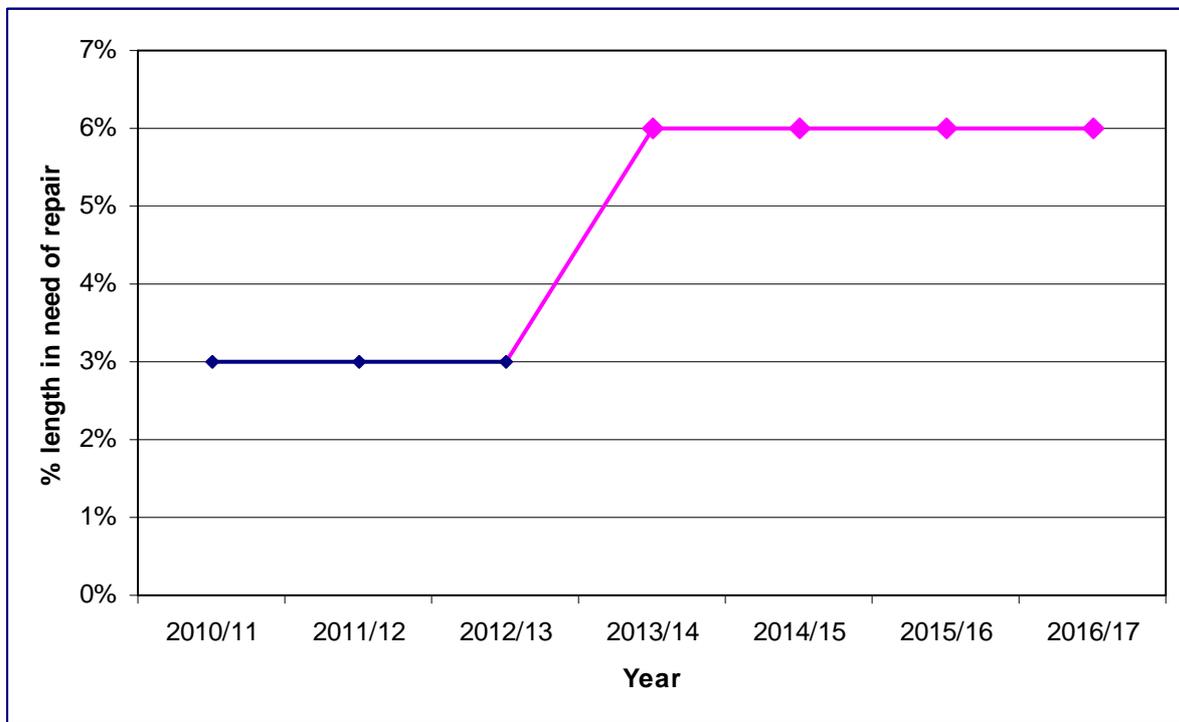
◆ Target ■ Actual

Asset condition – principal roads core target	
LIP long term target	8.2% by 2017/18
Short term target	Maintain annually at 6% or less
Data source	Detailed Visual Inspection data (LB Bromley)
Link to LIP objectives	B1, B11
Evidence that the target is realistic and ambitious	<p>The current proportion of Bromley’s principal road length in need of repair stands at 3% (2012/13). In light of the successive severe weather conditions in recent years further deterioration of the Borough’s asset condition will have occurred.</p> <p>Despite the target being exceeded each of the previous three years, consideration needs to be given to funding pressures on LIP maintenance allocations. A realistic target of maintaining condition at 6% has therefore been set for the next three years.</p>
Key actions for the Council	<p>To continue the following programmes:</p> <ul style="list-style-type: none"> • Principal Road maintenance • Bridges & structures • Local road and footway maintenance • Bus route resurfacing • Street lighting maintenance.
Key actions for local partners	Utility companies and the Council’s highway contractors working on the Borough’s roads have a responsibility to ensure high standards of workmanship when carrying out maintenance.
Principal risks and how they will be managed	<p>Risks to asset condition and maintenance will include possible funding shortfalls as part of the LIP allocation for ongoing maintenance and also further periods of severe weather conditions causing abnormal deterioration to the network.</p> <p>Each of these will be managed through prioritisation methods of the highway to address areas of worst deterioration first.</p>

Interim milestones

	2010/11	2011/12	2012/13
Target	6%	6%	6%
Actual	3%	3%	3%

Base	2013/14	2014/15	2015/16	2016/17
5.7%	6%	6%	6%	6%



Road traffic casualties (Killed or Seriously Injured - KSI) core target	
LIP long term target	Reduce KSIs (from 2006-10 average) by 35% by 2020 86 KSIs by 2020
LIP short term target	100 KSIs by 2017
Data source	Modal Policy Unit, Surface Transport
Link to LIP objectives	B9
Evidence that the target is realistic and ambitious	<p>The previous target of a 40% reduction on the 1994-98 baseline was met by 2010 (90 KSIs in 2010). The Road Safety Action Plan published in 2013, titled, Safer Streets for London proposes a 40% reduction target by 2020 from a baseline of the 2005-2009 average.</p> <p>Whilst we continue with the original target set as part of this LIP, 35% reduction by 2020 on 2006-10 levels, Bromley believes that more ambitious targets for KSIs can be set following the reduction in KSIs year on year since 2010. Based on this, a LBB local target using a 2008-12 baseline has been set. The long-term local target proposed is to achieve, by 2020, a 20% reduction in injuries compared to the 2008-2012 baseline.</p> <p>Bromley has a good record on pedestrian, cyclist and motorcyclist KSIs and this can be attributed to the successful road safety campaigns the Borough has delivered over the years.</p> <p>The LBB local KSI target is considered to be ambitious and realistic.</p>
Key actions for the Council	<p>The Council will continue to deliver the following programmes:</p> <ul style="list-style-type: none"> • Casualty reduction – individual locations & mass action • Joint casualty reduction / congestion relief schemes • Education, training and publicity.
Key actions for local partners	The Road Safety Unit will continue to work with close partners including the Police, Fire Brigade, Health Authorities, and many other stakeholders as referred to in the Road Safety Plan to deliver the above programmes in partnership with the Council.
Principal risks and how they will be managed	Risks to programmes due to funding constraints will be dealt with through prioritisation. Modal change programmes will encourage further walking and cycling. This could create a risk of further pedestrian and cyclist casualties and will be addressed in the Annual Road Safety Plan.

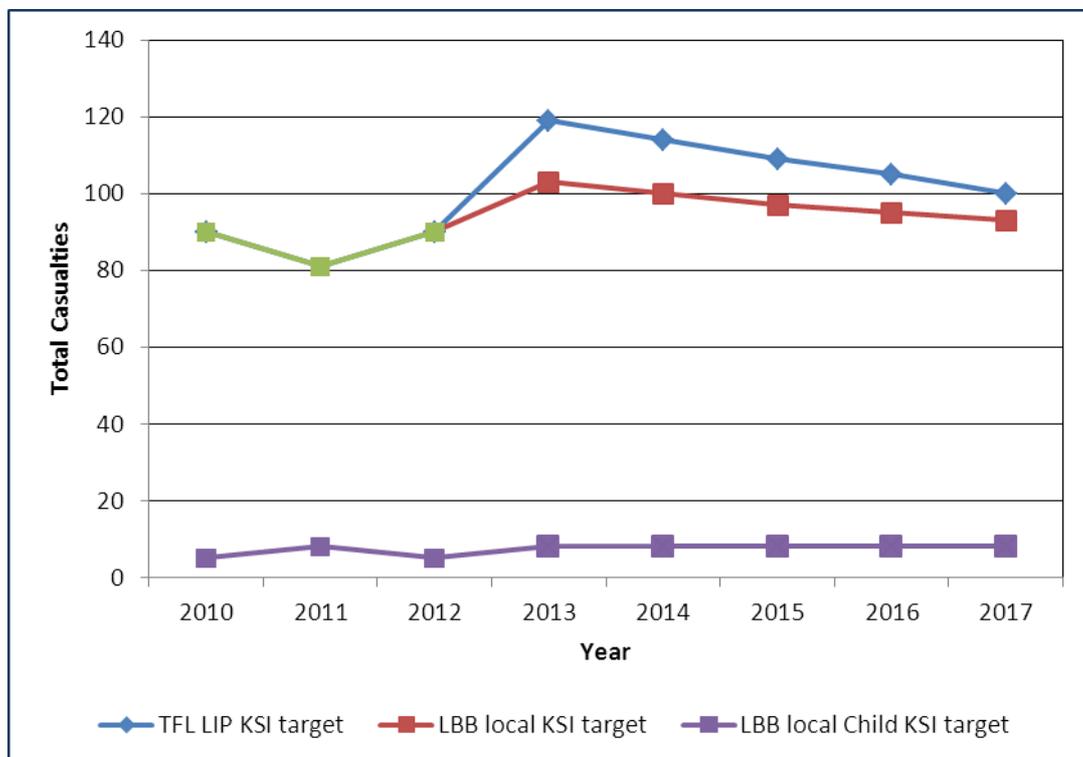
Interim milestones

KSI's	2010	2011	2012
TfL LIP target	90*	128	123
Actual	90	81	90

Child KSI's	2010	2011	2012
TfL LIP target	5*	11	11
Actual	5	8	5

*Actual KSI's for 2010

	2013	2014	2015	2016	2017
TfL LIP KSI target	119	114	109	105	100
LBB local KSI target	103	100	97	95	93
LBB local Child KSI target	8	8	8	8	8

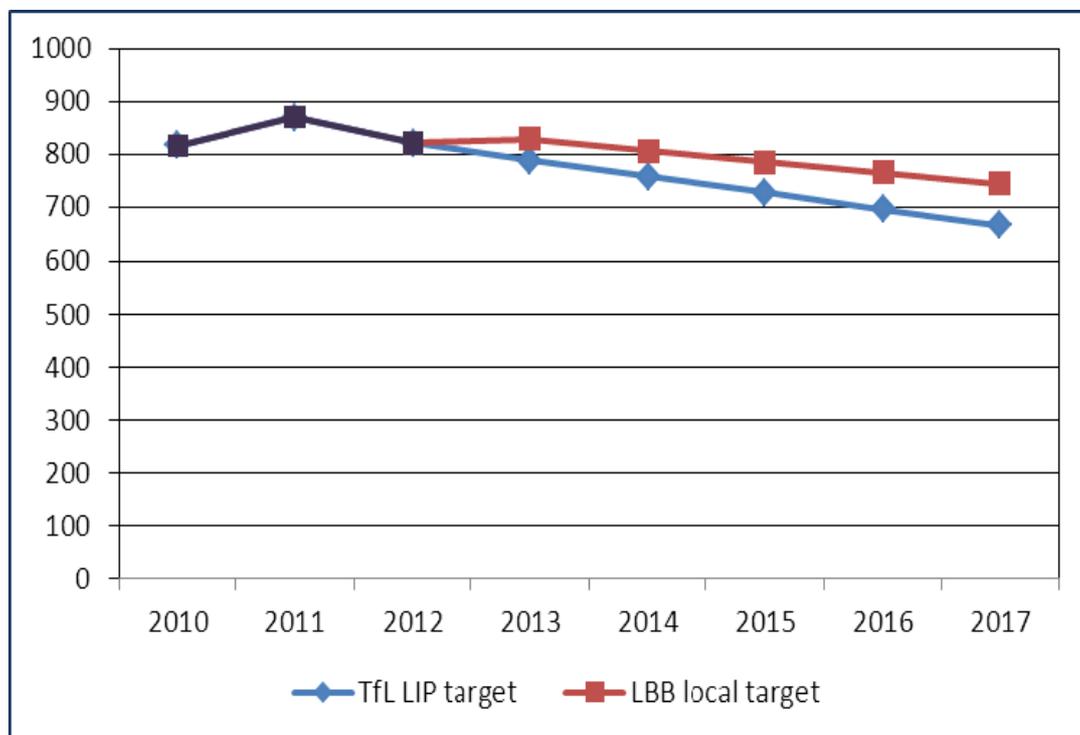


Road traffic casualties (Total Casualties) core target	
LIP Long term target	Reduce total casualties by 35% by 2020
Short term targets	665 total casualties by 2017
Data source	Modal Policy Unit, Surface Transport
Link to LIP objectives	B9
Evidence that the target is realistic and ambitious	<p>Whilst we continue with the original target set as part of this LIP, Bromley believes that targets for total casualties have had to be reviewed based on the most recent data available on actual total casualties.</p> <p>Bromley has therefore set a local target using the 2008-12 baseline on Slight casualties rather than 2004-08 as it ensures a more realistic calculation of the total casualties target.</p> <p>The total casualties target is based on an addition of the KSI and Slight target.</p> <p>As such, the local total casualties target are considered to be ambitious and realistic.</p>
Key actions for the Council	<p>The Council will continue to deliver the following programmes:</p> <ul style="list-style-type: none"> • Casualty reduction – individual locations & mass action • Joint casualty reduction / congestion relief schemes • Education, training and publicity
Key actions for local partners	<p>The Road Safety Unit will continue to work with close partners including the Police, Fire Brigade, Health Authorities, and many other stakeholders as referred to in the Road Safety Plan to deliver the above programmes in partnership with the Council.</p>
Principal risks and how they will be managed	<p>Risks to programmes due to funding constraints will be dealt with through prioritisation. Modal change programmes will encourage further walking and cycling. This could create a risk of further pedestrian and cyclist casualties and will be addressed in the Annual Road Safety Plan.</p>

Interim milestones

Total casualties (KSI's + Slight)	2010	2011	2012
Target	-	850	819
Actual	816	870	821

	2013	2014	2015	2016	2017
TfL LIP target	788	757	727	696	665
LBB local target	828	806	785	765	744

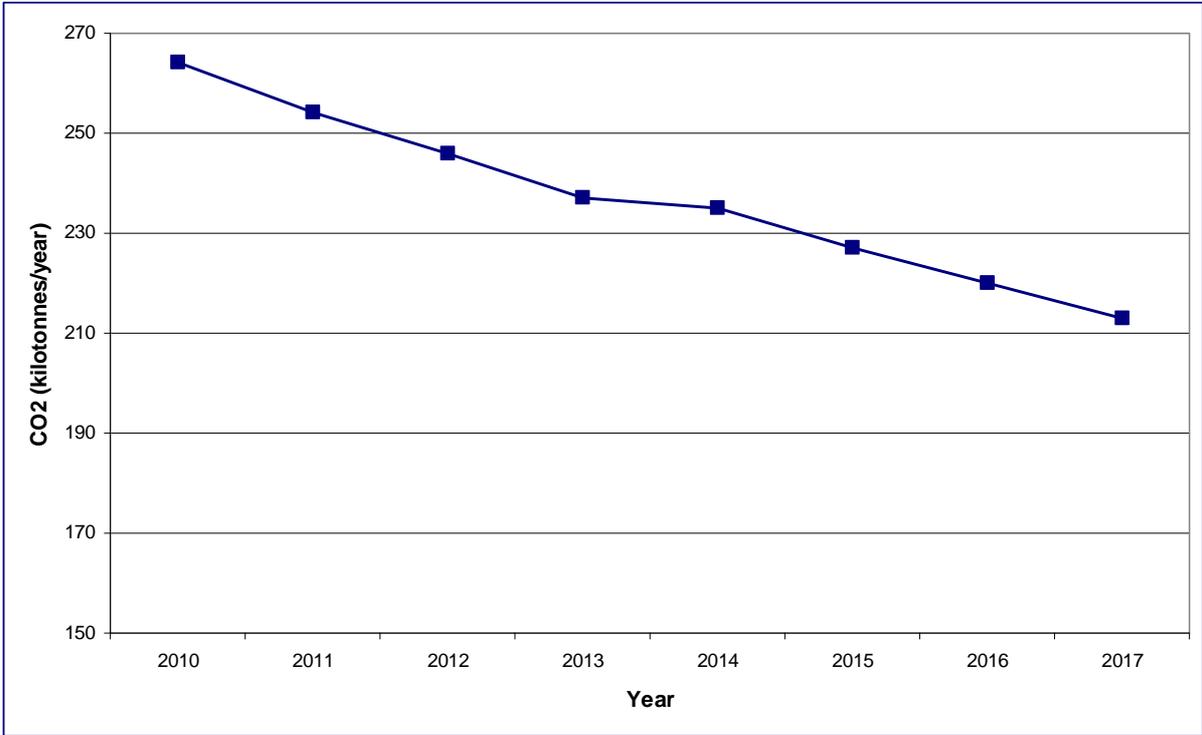


CO₂ emissions core target	
LIP Long term target	155 kilotonnes of ground-based transport emissions by 2025.
Short term target	213 kilotonnes of ground-based transport CO ₂ emissions by 2017
Data source	GLA's London Energy and Greenhouse Gas Emissions Inventory (LEGGI)
Link to LIP objectives	B1, B4, B10
Evidence that the target is realistic and ambitious	<p>Based on 2008 data, Bromley has the 9th highest level of transport-related emissions across the 33 London Boroughs at 283,000 tonnes of CO₂.</p> <p>The long-term target for ground-based transport CO₂ emissions in Bromley equates to 155 kilo-tonnes by 2025. This represents a 45% reduction between 2008 and 2025. The short-term reduction to 213 kilo-tonnes by 2017 equates to a reduction of 16%.</p>
Key actions for the Council	<p>The Council will continue to deliver the following programmes:</p> <ul style="list-style-type: none"> • Carbon Management – seeking to reduce emissions of the Council's operations by 25% by 2012/13. • Green Transport Review • Bus priority and improved facilities for bus passengers • Sustainable transport promotion • Smarter driving • Electric charging points.
Key actions for local partners	The Bromley Environment Partnership was formed in 2010 to share good practice with the Council's key strategic stakeholders including the PCT, Police, Colleges and large employers. A 'Travel' theme has been created which focuses on promotion of travel choice and grey fleet.
Principal risks and how they will be managed	Modal change programmes are subject to tight budget allocations and can often be most vulnerable with reducing budgets. The Council will look to ensure programmes are delivered efficiently and utilise the partnership opportunities available.

Interim milestones

	2010	2011	2012	2013
Target	264 kt	254 kt	246 kt	237 kt
Actual	269 kt			

Base (2008)	2014	2015	2016	2017
283 kt	235 kt	227 kt	220 kt	213 kt



Local Targets

The following local targets have been identified in order to support the core targets, overall performance monitoring of the LIP objectives and also reflect local priorities in Bromley.

Reduce proportion of car use by 10% over ten years in Bromley Town Centre - "10 in 10"	
LIP Long term target	10% reduction in proportion of car use by 2021
Short term target	1% reduction by 2013
Evidence that the target is realistic and ambitious	<p>This local target is part of the Bromley Town Centre Area Action Plan and is a 10 year target to reduce congestion in the Town Centre. It will be measured annually using a pre-defined cordon of traffic count sites, supported by rail station usage and bus patronage data. Qualitative town centre visitor surveys may also be used.</p> <p>Between 2001 and 2010, overall traffic levels around the town centre fell by 22.9% but only 7.4% in peak hours (8am – 9am; and 5pm-6pm inclusive). Current projections to 2011 suggest the trend continues to remain downward. Despite this, the town centre’s road network still becomes congested – notably in-bound in the weekday morning peak, out-bound in the weekday evening peak and on the peak shopping day, which is Saturday.</p> <p>Due to cost, the annual collection of traffic data at count sites will not be possible. The baseline for this target will be set following collection of data in June/July 2011. Following this, it is anticipated that traffic count data will be collected every three years.</p>
Key actions for the Council	<p>The 10 in 10 project will rely largely on ‘promoting travel choice’ measures to achieve both the short and long term target. Bromley Town Centre has been identified as the ‘Cycling Hub’ in the Biking Borough project and will therefore benefit from funded measures as part of this particular programme. These measures will include:</p> <ul style="list-style-type: none"> - Town centre workplace travel planning programme. - Promotion and publicity of public transport, walking and cycling. - Improved cycle permeability, signage and parking.

<p>Key actions for local partners</p>	<p>In order to achieve this target, the 10 in 10 project will rely upon and work closely with large employers, in particular the Glades Shopping Centre and key town centre businesses. The local Train Operating Company will also be asked to become involved in promoting travel choice along with co-operation from London Buses.</p>
<p>Principal risks and how they will be managed</p>	<p>Modal change programmes are subject to tight budget allocations and can often be most vulnerable with reducing budgets. The Council will look to ensure programmes are delivered efficiently and utilise the partnership opportunities available.</p>

Maintain the number of school children travelling by car at 31%

LIP Long term target	No long term target currently set
Short term target	31% of school children travelling by car by 2016/17
Evidence that the target is realistic and ambitious	<p>This local target measures the success of the school travel planning (STP) programme in Bromley and aims to reduce the percentage of children travelling to school by car as measured previously through National Indicator 198. The Council still intends to measure this informally on a local basis.</p> <p>The STP programme boasts the highest number of accredited schools in any borough across London. To date, school travel plans have led to a combined 7% reduction in single occupancy journeys on the school run across the borough.</p> <p>With increased pressures on travel planning resource and reducing budgets, a target of maintaining single car occupancy on school journeys at the current level, 31% is considered realistic.</p>
Key actions for the Council	<p>To continue to deliver its school travel planning programme including:</p> <ul style="list-style-type: none"> • Smart Movers • Schools Walking the World • Transportal • Walking Bus • Junior Travel Advisor
Key actions for local partners	Schools are key partners in delivering the school travel planning programme and the Council makes effort to support schools throughout the process.
Principal risks and how they will be managed	Modal change programmes are subject to tight budget allocations and can often be most vulnerable with reducing budgets. The Council will look to ensure programmes are delivered efficiently and utilise the partnership opportunities available.

Reduce traffic congestion caused by utilities companies through maintaining inspections at 80% (50% more than expected in code of practice) of streetworks

LIP Long term target	No long term target current set
Short term target	Maintaining streetworks inspections at 80%
Evidence that the target is realistic and ambitious	<p>This local target measures the impact of work carried out by utilities companies in the Borough. It will be measured through the percentage of visual inspections of streetworks, the quality of workmanship, speed at which works are carried out and the use of enforcement action if necessary to improve congestion around sites.</p> <p>The London Permit Scheme has been successfully launched in Bromley and will work alongside the routine inspections to monitor streetworks caused by utility companies.</p> <p>This higher, more stretching target is considered reasonable and realistic given that over the previous three years, over 80% of inspections have been made per annum. Maintaining at this level is 50% above the code of practice.</p>
Key actions for the Council	<p>To continue to carry out inspections of 80% of streetworks undertaken by utility companies.</p> <p>To continue to build on the successful introduction of the London Permit Scheme in order to reduce delays and congestion.</p> <p>To continue to work with utility companies to improve the speed and quality of their work, taking enforcement action where necessary</p>
Key actions for local partners	Utility companies are key partners in ensuring congestion and unnecessary delays are reduced by streetworks.
Principal risks and how they will be managed	<p>Further reduction in general funding levels available to carry out the inspections. This will be managed through prioritisation of works.</p> <p>Utility companies do not make all reasonable efforts to keep the streetworks and their impact to congestion and delays to a minimum. The use of enforcement will be used to manage this.</p>

Maintain public satisfaction with standards of road and pavement maintenance at 52% annually

LIP Long term target	No long term target currently set
Short term target	52% public satisfaction annually
Justification for target removal	<p>This local target measured resident perception of the standard of maintenance of roads and pavements in the Borough.</p> <p>Previous measurement of public satisfaction was made through the national Place Survey. This survey is no longer carried out and with no reasonable alternative collection method, this target can not continue to be measured.</p>

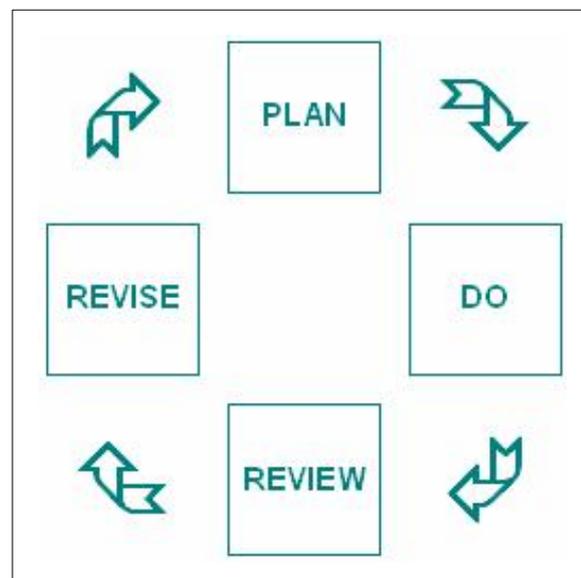
Monitoring Indicators

The following monitoring indicators support the measurement of both our core and local targets. These indicators, with the exception of condition of footway surface, were formerly National Indicators. The Council will continue to monitor the following indicators on an ongoing basis. These are reported on in the Environmental Services Portfolio Plan.

Asset condition	Condition of principal roads (NI 198)
	Condition of non-principal roads (NI 169)
	Condition of footway surface (local indicator)
CO2 emissions	CO ₂ reduction from Council operations (NI 185)
	CO ₂ reduction per capita (NI 186)
Mode share	Proportion of school children travelling by car (formerly NI 198)
Road traffic casualties	People killed/seriously injured in road accidents (NI 47)
	Children killed or seriously injured in road accidents (NI 48)

Monitoring Process

Progress against targets and indicators will be monitored on a continuing basis. The following performance management approach is an adopted framework within the Council's Performance Management Strategy. It aims to monitor performance and feed into the review process for future planning.



The Council maintains focus on its priorities through its core policy and portfolio planning documents, and performance is monitored through regular reports to the Council's Environment Policy Development and Scrutiny (PDS) Committee.

Appendices

Proforma B – LIP Local Targets

Glossary of Terms used in the LIP

PROFORMA B

Locally specific targets for mandatory indicators

Borough: **Bromley**

Core indicator	Definition	Year type	Units	Base year	Base year value	Target year	Target year value	Trajectory data				Data source
								2013/14	2014/15	2015/16	2016/17	
Mode share of residents	% of trips by walking	Three-year average	%	2006/07 - 2008/09	27.6	2016/17	28.4	28.1	28.2	28.3	28.4	LTDS Table 3.4. (pg 72) Travel in London - Report 2
Mode share of residents	% of trips by cycling / no of trips	Three-year average	%	2006/07 - 2008/09	0.9	2016/17	1.4	1.5	1.2	1.3	1.4	LTDS Table 3.3. (pg 70) Travel in London - Report 2
Bus service reliability	Excess wait time in mins	Financial	Mins	2008/2009	1.0	2017/18	1.0	1.0	1.0	1.0	1.0	Transport for London, iBus Bus Service Reliability Indicators
Asset condition - principal roads	% length in need of repair	Financial	%	2008	5.7	2017/18	6.0	6.0	6.0	6.0	6.0	Detailed Visual Inspection (DVI) data supplied for each borough to TfL by LB Bromley
Road traffic casualties	Total number of people killed or seriously injured	Calendar	Number	2006 to 2010 average	133	2017	100	119	114	109	105	Modal Policy Unit, Surface Transport
Road traffic casualties	Total casualties	Calendar	Number	2006 to 2010 average	981	2017	665	788	757	727	696	Modal Policy Unit, Surface Transport
CO2 emissions	CO2 emissions	Calendar	kilotonnes/year	2008	283	2017	213	237	235	227	220	GLA's London Energy and Greenhouse Gas Emissions Inventory (LEGGI)

Additional (non-mandatory) local targets

Local indicator	Definition	Year type	Units	Base year	Base year value	Target year	Target year value	Trajectory data				Data source
								2013	2014	2015	2016	
Reduce proportion of car use by 10% over ten years in Bromley TC - "10 in 10"	% reduction of vehicles	Calendar	%	2010	TBC	2017	TBC	-1	TBC	TBC	TBC	Bromley Town Centre Traffic Count
Reducing traffic congestion caused by school traffic	% of children traveling to school by car	Calendar	%	02-Jul	31	2016/17	31	31	31	31	31	School Travel Plan survey results/School Census
Reducing traffic congestion caused by utilities companies	% streetworks inspected	Calendar	%	2010	40	2017	40	40	40	40	40	Transport & Highways Highway Management Team; LB Bromley

GLOSSARY OF TERMS USED IN THE LIP

AAP	Area Action Plan
AQAP	Air Quality Action Plan
AQMA	Air Quality Management Area
BNV	Bromley North Village
CCTV	Closed circuit television
CIPFA	The Chartered Institute of Public Finance and Accountancy
CO ₂	Carbon Dioxide
DDA	The Disability Discrimination Act 1995 (as amended). From 1st October 2010, the Equality Act replaced most of the Disability Discrimination Act
DfT	Department for Transport
DLR	Docklands Light Railway
DSP	Delivery and Servicing Plan
EQIA	Equality Impact Assessment
EWT	Excess waiting Time – a measure of bus service reliability
EYTB	Earn Your Travel Back scheme
GLA	Greater London Authority
HAMP	Highway Asset Management Plan
KSI	Killed or Seriously Injured
LAA	Local Area Agreement
LBB	London Borough of Bromley
LCN+	London Cycle Network Plus
LDF	Local Development Framework
LEGGI	The London Energy and Greenhouse Gas Inventory
LIP	Local Implementation Plan
Draft LIP	The version of the LIP used for consultation
Final LIP	The version of the LIP submitted for Mayoral approval
LoPS	The London Permit Scheme for streetworks
LTDS	London Travel Demand Survey
MORI	Ipsos MORI, a well-known market research company
MTS	The Mayor's Transport Strategy
NI	National Indicator
NO _x	Oxides of Nitrogen
PCT	Primary Care Trust (National Health Service)

PDS	Policy Development and Scrutiny
PM ₁₀	Particles 10 micrometers or less in diameter – a measure of air pollution
PRUH	The Princess Royal University Hospital, Farnborough
PTAL	Public Transport Accessibility Level
SEA	Strategic Environmental Assessment
Seltrans	South East London Transport Strategy
SRTP	Sub-Regional Transport Plan
TfL	Transport for London
TLRN	Transport for London Road Network
UDP	Unitary Development Plan
UTMC	Urban Traffic Management and Control – a protocol which allows traffic management systems to communicate and share information with each other
VMS	Variable Message Sign