

All Aboard: Towards an Inclusive, Healthy and Safe Transport System for Barking and Dagenham

Third Local Implementation Plan 2019/20 – 2021/22

January 2019



working on behalf of Barking and Dagenham





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Foreword

This third Local Implementation Plan (LIP3) outlines the Council's strategy for delivering improvements to the transport system in Barking and Dagenham.

Barking and Dagenham's previous two LIPs succeeded in securing a good level of funding, delivering extensive transport improvements and meeting many of our targets. The third LIP builds on this record. It includes a package of interventions which we believe will help deliver our Borough Manifesto ambition of growing the borough whilst ensuring 'no one is left behind'.

The measures in the LIP have been developed to prioritise schemes that address local problems and deliver the best value for money. We expect to receive around £4.5 million of funding from TfL over the next three years and this will be directed to schemes which will help deliver our overarching LIP objectives. This includes funding for improvements to Barking Station - the borough's busiest interchange, to improve accessibility and relieve overcrowding; and the Heathway – our principal District Centre, to reduce road user conflicts and increase levels of walking and cycling in the area.

LIP3 also sets out our longer-term priorities. Amongst these are immensely important pieces of infrastructure including a road tunnel and railway station at Castle Green; an HS1 interchange station at Barking or Dagenham Dock; and two new crossings over the River Roding, which are vital if we are to achieve our ambitious targets for delivering 50,000 new homes and 20,000 new jobs in the borough. We will continue to do everything in our power to make these happen.

The importance of the LIP cannot be underestimated. We are committed to ensuring that the proposals within it are delivered as they will make a real and lasting difference to those who live, work and do business in the borough.



Cllr C Geddes,
Cabinet Member for Regeneration and
Social Housing

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Executive Summary

Introduction and Overview

The London Borough of Barking and Dagenham is situated in east London and is located at the heart of the Thames Estuary Growth Corridor - a priority area for regeneration and economic development in London. A small, principally residential borough, its proximity to the main retail, leisure and employment centres of Docklands, Stratford and Romford; and good road, rail and Underground transport links to central London, means Barking and Dagenham has substantial opportunities for growth.

Despite this, Barking and Dagenham is one of the poorest and most deprived boroughs in London, characterised by unemployment levels above the London average and poor health and high levels of inactivity amongst residents. In addition, the borough has some of the busiest roads in the Capital and suffers from the problems traffic congestion causes. Furthermore, public transport connectivity is poor, particularly between certain parts of the borough and the key sub-regional hubs.

The London Borough of Barking and Dagenham third Local Implementation Plan (LIP3) outlines the Council's strategy for improvements to the transport network and services in the borough and to support our Borough Manifesto ambitions for delivering inclusive, sustainable growth. It details the short and longer-term proposals and measures to address some of the key transport challenges we face and implement the Mayor of London's Transport Strategy (MTS) at the local level.

Barking and Dagenham's first and second LIPs succeeded in securing a good level of funding, delivering an extensive programme of transport and public realm improvements and meeting a range of environmental and safety targets. LIP3 aims to build on this record by implementing a range of measures and interventions which will help connect people and places; promote healthy, sustainable travel; improve safety and security; and create better streets and places – our overarching transport objectives.

The Wider Context for the Local Implementation Plan

The Mayor of London's Transport Strategy (MTS) and Barking and Dagenham's Borough Manifesto provide the broad framework and vision for our LIP, as set out in chapter 1. Similarly, the plan is consistent with a range of other plans and strategies, including the draft London Plan and Mayoral strategies on the environment and economic development; as well as the borough's emerging Local Plan and our Growth and Health and Wellbeing strategies.

Chapter 1 also summarises the wide-ranging consultation, participation and partnership working that have been central to the development of the LIP and highlights how ongoing engagement will continue to inform the planning and implementation of our transport schemes and programmes, with a strong emphasis on ensuring that decisions and delivery more closely reflect the needs of local people and that, ultimately, 'nobody is left behind'.

Borough Transport Issues and Objectives

Chapter 2 of the LIP provides an overview of the key transport problems facing the borough, and the principal opportunities to overcome them. It explains that despite good progress having been made in recent years, there are still considerable challenges to improve transport in Barking and Dagenham. These include:

- Poor public transport connectivity to and within parts of the borough and issues surrounding quality and frequency of some services;
- The cost and accessibility of public transport services and facilities in some parts of the borough – particularly for those on low incomes, the elderly and disabled;
- The fragmented nature of the borough's cycling and walking links;
- Worsening of the performance of the road network;
- Poor air quality and traffic noise adjacent to some sections of the highway network;
- Road safety concerns;
- Crime and fear of crime on the local transport network;
- Poor-quality street scene.

Chapter 2 also presents the objectives of the LIP. The objectives have been formulated based on the various challenges and opportunities and to ensure consistency with the MTS and the vision for Barking and Dagenham as set out in the Borough Manifesto. Wide-ranging consultation and engagement have ensured that the views of the borough's residents, businesses, community groups and other organisations, as well as a range of other stakeholders, have been taken into account in drawing up the objectives. The eight objectives - grouped under four priority themes – are:

- A. Enhancing public transport connectivity to enable growth;
- B. Improving accessibility for all to key services and facilities;
- C. Encouraging active travel to improve health and wellbeing;
- D. Facilitating green travel to improve air quality and reduce the impact on the environment;
- E. Reducing the number of casualties on our roads;
- F. Improving safety and security across the transport network;
- G. Managing our road space more efficiently to tackle congestion;
- H. Transforming the public realm to create healthy, inclusive places.

LIP Delivery Plan and Programme of Investment

Chapter 3 sets out the overarching Delivery Plan and three-year Programme of Investment for the LIP - the combination of measures focused on addressing the problems and opportunities and achieving the objectives set out in chapter 2. It also provides details of the Council's Annual Spending Submission (ASS) to TfL for 2019/20.

The driving principles behind the Delivery Plan are regeneration, community, health and wellbeing, crime and safety and the environment. These reflect the Mayor's vision to create a future London that is home to more people and a better place for people to live in; and the overarching aim for 80% of all journeys to be made on foot, by cycle or by public transport by 2041. They also reflect our Borough Manifesto vision to build on the borough's position as London's growth opportunity and ensure this change benefits every resident.

The Delivery Plan is focused principally on those small to medium sized schemes and initiatives that can be delivered by the Council and its partners in the short-medium term. However, there are a number of more significant interventions which will be required to deliver Mayoral and borough priorities in the longer-term. These include:

- The relocation of a 1.3km stretch of the A13 at Castle Green into a tunnel to improve congestion and air quality and reduce severance in the area; along with the provision of a station on the recently approved London Overground Extension. Both schemes would support the delivery of up to 15,000 new homes and 7,000 new jobs in the area;
- The provision of a new HS1 interchange station at Barking Station and/or Dagenham Dock to provide improved links between east London and central London, SE England and Europe and maximise the growth potential of Barking Town Centre/London Riverside;
- Two new bus/transit river crossings over the River Roding - one linking Barking Riverside with Beckton in Newham and to act as a catalyst for the regeneration of existing industrial areas around Creekmouth/River Road; and one linking Abbey Road and Quay Road/Freshwater Road to improve accessibility and support the development of new homes/jobs in Barking Town Centre;
- A new C2C mainline rail stop at Dagenham East station to bolster the ambitious plans for Londoneast-uk including the planned development of film studios;
- A north-south transit system connecting Marks Gate/Chadwell Heath to Barking Riverside/Dagenham Dock to address severance, particularly in areas north of the A12 and south of the A13 and to support modal shift to public transport.

The Council expects to receive around £4.5 million of funding from TfL over the next three years and this will be directed to schemes which will lead to the development of a more joined-up, sustainable transport network in the borough. Proposed interventions include delivering improvements to Barking

Station to improve accessibility and relieve overcrowding; undertaking road safety improvements on the Heathway and Valence Avenue to reduce road user conflicts and increase levels of walking and cycling; and continuing our work with the borough schools, businesses and residents to promote healthy, sustainable travel practices. Table 3.8 in chapter 3 sets out our high level Programme of Investment for the three-year period to 2021/22, whilst Annex F provides details of our Annual Spending Submission to TfL in 2019/20.

Performance Management and Monitoring

Chapter 4 of the LIP sets out the performance management and monitoring arrangements for the plan. This is an essential element of the LIP process and will contribute to understanding progress in delivering the LIP objectives and, ultimately, the MTS and Borough Manifesto outcomes.

The chapter provides information on the LIP outcome indicators for which targets have been set by TfL. It includes details of the target value and date by which each target is to be reached, along with a summary of the actions needed and risks to achieve the targets. Key targets the borough is required to work towards include:

- Increasing walking, cycling and public transport mode share from 55% to 72% by 2041;
- Increasing the percentage of people doing at least 20 minutes of active travel a day from 18% to 70% by 2041;
- Ensuring zero killed and seriously injured (KSI) casualties from road collisions by 2041;
- Achieving a 5-10% reduction in the volume of traffic on our roads by 2041;
- Reducing CO₂, NO_x, and particulate emissions significantly by 2041;
- Increasing average bus speeds by between 5% and 15% by 2041;
- Doubling the number of daily trips made by public transport by 2041.



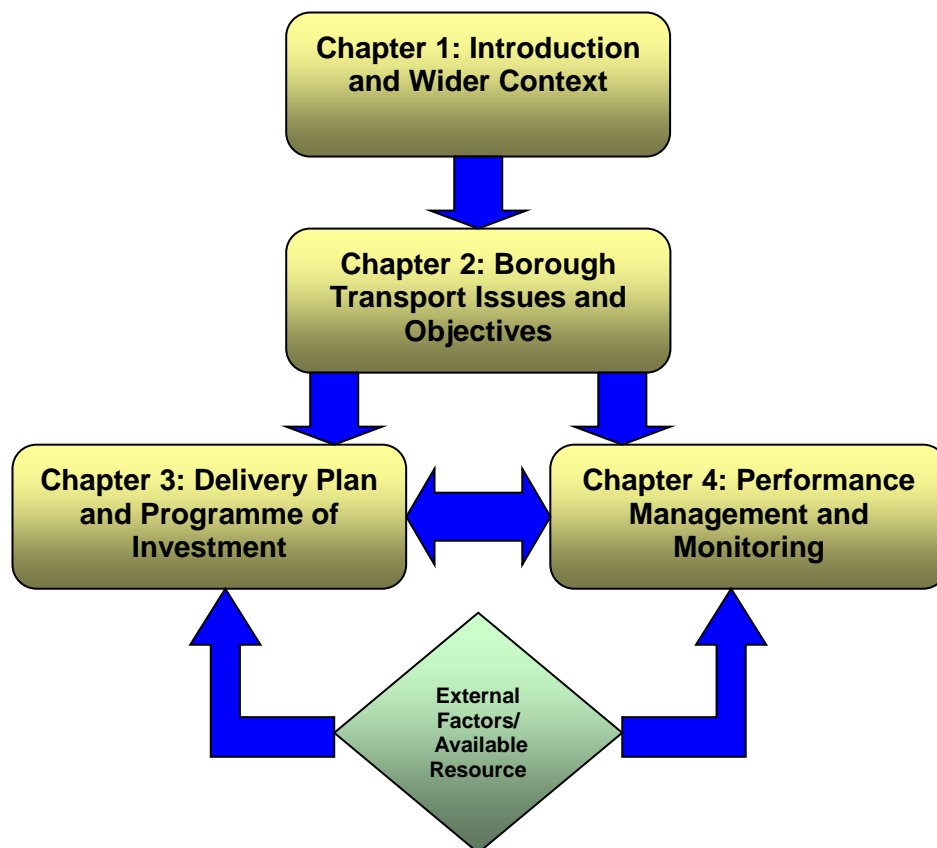
1. Introduction and Wider Context

1.1 Background and LIP Structure

1.1.1 The London Borough of Barking and Dagenham third Local Implementation Plan (LIP3) outlines the programmes and measures that form the basis for the delivery of improvements to the transport network in the borough to 2041. LIP3 also represents the Council’s submission to Transport for London (TfL) for funding for a range of transport projects for the three-year period 2019/20 - 2021/22 which will address local transport issues and implement the Mayor’s Transport Strategy at the local level.

1.1.2 The LIP is a statutory document prepared under Section 145 of the GLA Act that comprises an analysis of local transport problems, a set of objectives and targets, a delivery plan and a three-year programme of investment designed to improve transport in the borough. **Figure 1.1** illustrates the structure of the LIP and arrangement of the chapters within it.

Figure 1.1: Structure of the LIP



1.1.3 **Chapter 1** outlines the background to LIP3 and the wider context for production of the plan.

Chapter 1 sets out:

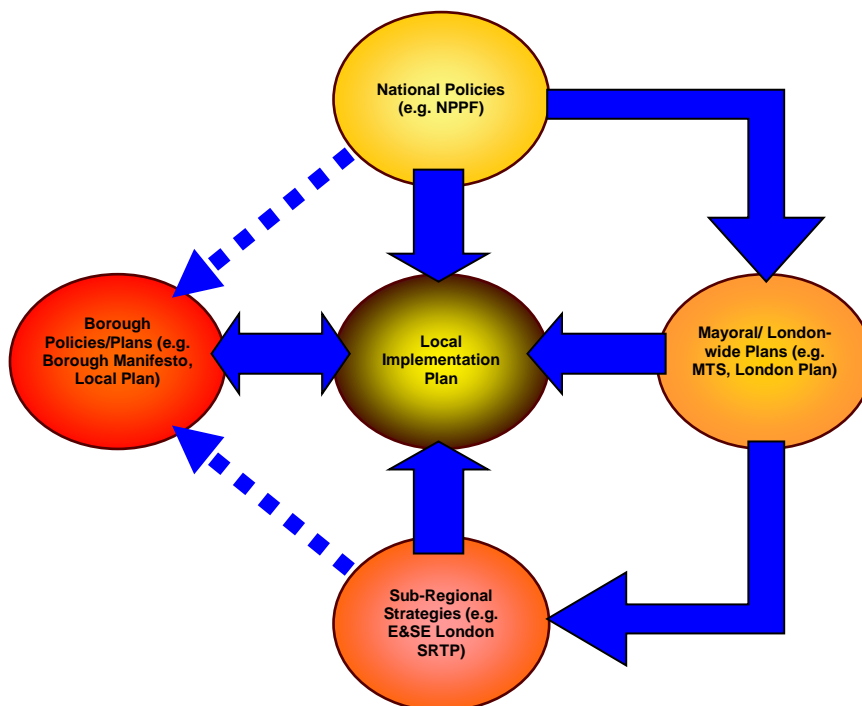
- Integration with other plans and strategies at the national level, London-wide, at the sub-regional level and locally (**section 1.2**);
- Details of consultation, engagement work and partnership working carried out in preparing the LIP, along with details of the local approval process (**section 1.3**);
- The role of statutory requirements and other duties and processes in shaping the plan (**section 1.4**).

1.1.4 To assist boroughs in the preparation and approval of their LIP, TfL has produced supporting guidance. The guidance contains a number of mandatory requirements that boroughs must include in their LIP. **Annex A** sets out where in the LIP these requirements have been addressed.

1.2 Policy and Programme Influences

1.2.1 The Mayor of London's Transport Strategy (MTS) provides the broad framework and vision for our LIP. Similarly, the plan is consistent with a wide range of other plans and strategies, including the TfL Business Plan and Barking and Dagenham's Borough Manifesto and emerging Local Plan. **Annex B** summarises the main Mayoral and borough plans and strategies that set the context for the LIP. **Figure 1.2** illustrates the relationship between the various plans.

Figure 1.2: Relationship between the LIP and other plans/strategies



The Mayor's Transport Strategy

- 1.2.2 The MTS was published in March 2018 and sets out the Mayor's policies and proposals to reshape transport in London up to 2041. The plan provides the overarching policy context for the LIP, setting the priorities and outcomes that the Council must help deliver.
- 1.2.3 The Mayor's Vision is to create a future London that is home to more people and a better place for people to live in. A key aim of the MTS is for 80% of all journeys to be made on foot, by cycle or by public transport by 2041. A central tenet of the strategy is the 'Healthy Streets' Approach – with the view to making health and personal experience the priority for London. **Table 1.1** highlights the core priorities and expected outcomes at the heart of the MTS which the LIP should contribute towards delivering.

Table 1.1: MTS priorities and outcomes

Mayoral Priority	Mayoral Outcomes	MTS Policies
Traffic reduction and changing mode share	80% of all trips in London to be made on foot, by cycle or using public transport by 2041	1
Healthy Streets and healthy people	1. Active: London's streets will be healthy and more Londoners will travel actively	2
	2. Safe: London's streets will be safe and secure	3,4
	3. Efficient: London's streets will be used more efficiently and have less traffic on them	5
	4. Green: London's streets will be clean and green	6,7,8,9
A good public transport experience	5. Connected: The public transport network will meet the needs of a growing London	10,17,18,19
	6. Accessible: Public transport will be safe, affordable and accessible to all	11,12,14,20
	7. Quality: Journeys by public transport will be pleasant, fast and reliable	13,15,16
New homes and jobs	8. Good Growth: Active, efficient and sustainable travel will be the best outcome in new developments	21a
	9. Unlocking: Transport investment will unlock the delivery of new homes and jobs	21b

Barking and Dagenham Together - Borough Manifesto

- 1.2.4 The Borough Manifesto sets out the long-term vision for Barking and Dagenham and how it aims to harness the energy, creativity and ambition of its residents to build on the borough's position as London's growth opportunity and ensure this change benefits every resident. The vision in the Manifesto is built around a number of diverse themes – covering regeneration, community, health and wellbeing, crime and safety and the environment.
- 1.2.5 Among the issues identified in the Manifesto is the need for a more joined-up, sustainable transport network if the borough's growth, environmental and health and well-being ambitions are to be met. Key priorities include the need to promote healthy, sustainable travel and to create better streets and places. Tackling crime and anti-social behaviour on the borough's streets is also a high priority, with personal safety whilst travelling an important issue for many.

1.3 Consultation, Participation, Engagement and Approvals

- 1.3.1 Wide-ranging consultation, participation and partnership working have been central to the development of the LIP and ongoing engagement will continue to inform the planning and implementation of our transport schemes and programmes, with a strong emphasis on ensuring that decisions and delivery more closely reflect the needs of local people and that, ultimately, 'nobody is left behind'. Details of the various engagement and consultation activities undertaken and the outcomes of these are summarised below.

Pre-Consultation Engagement

- 1.3.2 A number of public engagement exercises to inform the development of the draft LIP were undertaken in Spring 2018. These included:
- Workshops/meetings involving Council Members and officers, local businesses and representatives of local interest/amenity groups;
 - Transport fora, such as the Public Transport Liaison Group (PTLG) which meet regularly to consider transport issues in the borough;
 - Partnership arrangements with health, education, social services authorities and transport operators to work on joint interest projects;
 - Joint working with other departments within the Council, neighbouring local authorities and other organisations;
 - An online questionnaire and workshops seeking the views of the wider public on the transport issues that most affected them.
- 1.3.3 The outcomes of the various engagement activities are summarised in **Figure 1.3** and **Annex C**.

Figure 1.3: Pre-consultation engagement outcomes



Formal Consultation

- 1.3.4 A formal five-week consultation exercise on the draft LIP was undertaken between 2 November and 7 December 2018. Consultees, including a range of statutory and local stakeholders and the wider public, were asked to give their views on the various aspects of the plan.
- 1.3.5 The main forms of consultation carried out during this period included a questionnaire uploaded to the Borough Consultation Portal on the Council website and individual stakeholder meetings. Specific organisations consulted, as required under the GLA Act 1999, included:
- TfL and the Commissioner of Police for the Metropolis;
 - The Barking and Dagenham Access Group;
 - The neighbouring London boroughs of Newham, Redbridge, Havering, and Bexley and the Royal Borough of Greenwich.
- 1.3.6 During the course of the consultation, comments were received from a number of stakeholders including the Metropolitan Police; the London Cycling Campaign; and the London Borough of Bexley. Feedback was also provided by the Barking and Dagenham Access Group, via the Access and Planning Review Forum. Only 13 responses were received from the general public via the online questionnaire. Details of the various representations made and the Council's response to these are set out in **Annex C**.
- 1.3.7 Detailed feedback on the draft LIP was also provided by TfL, including a number of recommendations on how aspects of the plan could be strengthened. As a result of TfL's feedback, a number of small-scale changes to the draft LIP are now proposed. The changes, which are summarised in **Annex C**, include:
- Providing additional information on how the borough will achieve 'Vision Zero' – to support the Mayor's objective of eliminating all deaths and serious injuries on the Capital's transport network by 2041;
 - Providing further information on how LIP schemes/programmes are, and will be, prioritised, both in scale and geographical location – as a means of giving further confidence in the delivery of the borough's transport objectives;
 - Updating a number of charts/graphs to reflect recently published data.

Approvals

- 1.3.8 The outcomes of the various public consultation exercises have helped inform the development of the draft LIP which was approved by the Council's Cabinet and Assembly in January 2019. The final draft LIP was submitted to the Mayor of London for approval on 16 February 2019. The key milestones in the development of the LIP are outlined in **Table 1.2**.

Table 1.2: Key LIP Milestones

Stage	Milestone	Date
Pre-consultation approval	Consultation draft LIP approved by Cabinet.	16 Oct 2018
Submission	Consultation draft LIP submitted to TfL. 2019/20 Annual Spending Submission (ASS) submitted to TfL.	2 November 2018
Consultation	Five-week statutory public consultation exercise.	2 November – 7 December 2018
Post-consultation approval	Final draft LIP considered by Cabinet & Assembly.	22/31 January 2019
	Final draft LIP submitted to TfL	16 February 2019
	Mayor approves final draft LIP	March 2019

1.4 Statutory Requirements and Other Processes

- 1.4.1 The two main statutory duties which the Council is required to consider in developing the LIP are the need to undertake a Strategic Environmental Assessment (SEA) and an Equality Impact Assessment (EIA). **Table 1.3** summarises the requirements under these duties and how they have informed the development of the LIP. Further details are set out in **Annexes D and E**.

Table 1.3: Summary of key statutory duties

Statutory Duty	Rationale	Approach
Strategic Environmental Assessment (SEA)	To identify and evaluate the significant impacts (adverse and beneficial) that the measures in the LIP are likely to have on the environment.	Draft Environmental Report produced highlighting likely significant environmental effects of the measures contained within the LIP and setting out alternatives. Consultation on the Environmental Report undertaken alongside the consultation exercise on the draft LIP and results fed into the development of the final plan.
Equality Impact Assessment (EIA)	To demonstrate that the LIP does not have a negative impact on a particular group, or that any adverse impacts identified have been appropriately mitigated.	To meet the EIA guidelines, a Full Impact Assessment was carried out in November 2018 alongside the public consultation exercise on the draft LIP and the results fed into the development of the final plan.

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2. Borough Transport Issues and Objectives

2.1 Introduction

2.1.1 **Chapter 2** provides background information about Barking and Dagenham; including details of its geography, economy and social demographics; an overview of the transport networks serving the borough; along with a summary of the main problems relating to transport experienced in the borough and the key opportunities to address them. It also identifies the plan objectives. Chapter 2 provides the context for the LIP Delivery Plan and three-year Programme of Investment presented in chapter 3.

Chapter 2 sets out:

- An overview of the borough's geographic and socio-economic characteristics (**section 2.2**);
- The transport scene, in terms of demand for and provision of transport infrastructure and services in Barking and Dagenham and the surrounding area (**section 2.3**);
- A summary of the main transport related problems in the borough and the opportunities to overcome them (**section 2.4**);
- The principal LIP objectives and how they were formulated (**section 2.5**).

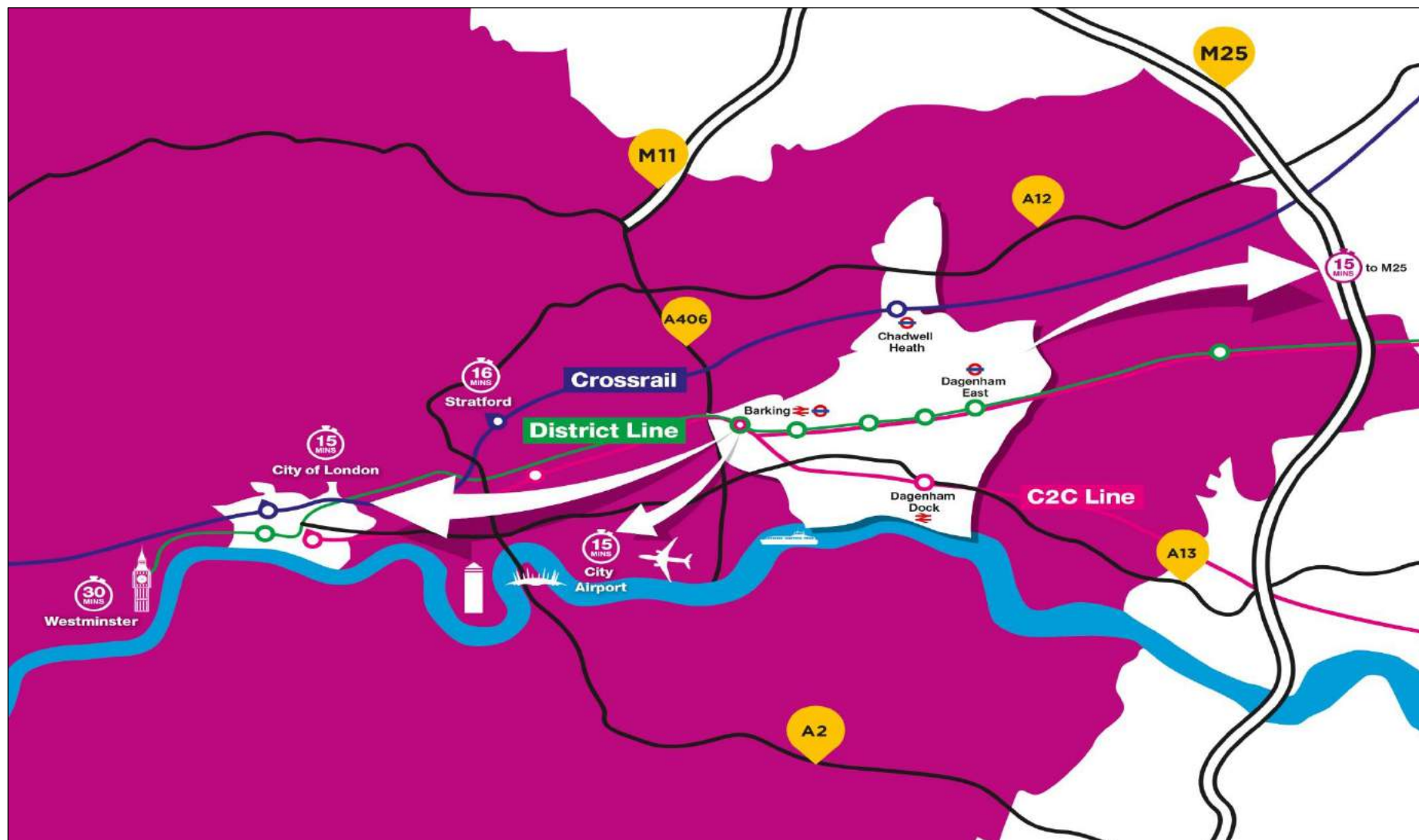
2.2 Borough Overview

2.2.1 The London Borough of Barking and Dagenham is situated in east London and is located at the heart of the Thames Estuary Growth Corridor - a priority area for regeneration and economic development in London (see **Figure 2.1**). It is bordered by the London Boroughs of Newham to the west, Havering to the east and Redbridge to the north, whilst the River Thames forms the borough's southern boundary.

2.2.2 Measuring just 3,611 hectares in size, Barking and Dagenham is one of the smallest boroughs in London and has a population of around 206,460 – the 7th smallest in the capital. The borough is principally residential in character but also has significant areas of employment land and green space. Barking is the borough's one major town centre, whilst Dagenham Heathway, Chadwell Heath and Green Lane serve as the borough's main district centres.

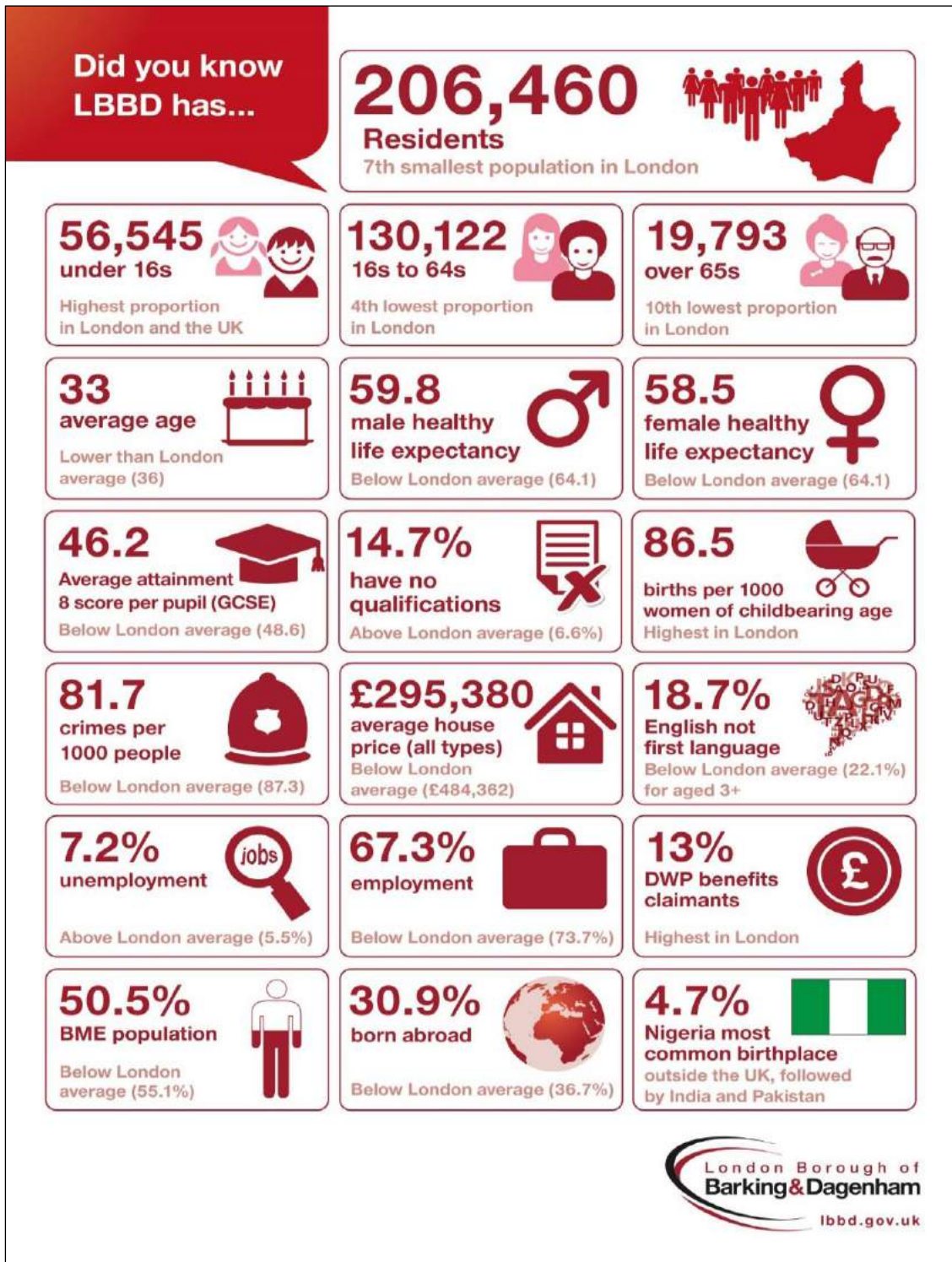
2.2.3 Barking and Dagenham's key advantages are its proximity to the main employment, retail and leisure centres of Docklands, Stratford and Romford; its good road and rail links to central London; and its proximity to the Thames, Crossrail, the M25 Motorway and London City Airport. In addition, the borough is predominantly flat which is advantageous for walking and cycling trips.

Figure 2.1: Borough location



2.2.4 **Figure 2.2** summarises the key demographic and socio-economic characteristics of the borough, providing information on population, employment, crime and housing. This information provides the key to understanding the rationale behind the LIP objectives and delivery plan.





Figure 2.2: Borough facts and figures



2.3 Local Transport Context

2.3.1 **Table 2.1** and **Figure 2.3** provide an overview of the nature and extent of the key transport networks and services in Barking and Dagenham, including the highways, public transport and cycling/walking networks serving the borough.

Table 2.1: Borough transport provision

Mode/Network	Provision
	<ul style="list-style-type: none"> • There are 396 km (248 miles) of roads in Barking and Dagenham comprising: <ul style="list-style-type: none"> ▪ 3km of trunk roads managed by TfL (including the A13 managed via a DBFO agreement); ▪ 51km of borough principal and 342km of minor roads managed by the Council. • There are 106 bridges, culverts and other major structures located in the borough. The Council also has responsibility for the upkeep of 15,000 street lights across the borough. • There are 118 sets of traffic signals in the borough, operated and maintained by TfL; • A network of 39 on-street electric vehicle charging points at 13 locations across the borough is managed by Source London.
 	<ul style="list-style-type: none"> • Barking and Dagenham is served by an extensive east-west radial rail network, comprising: <ul style="list-style-type: none"> ▪ National Rail services, operated by C2C, connecting London and Southend and calling at Barking and Dagenham Dock; ▪ London Underground services via the District and Hammersmith & City Lines provide a link with Central and West London. District Line trains stop at Barking, Upney, Becontree, Dagenham Heathway and Dagenham East, whilst Hammersmith & City Line trains terminate at Barking; ▪ London Overground, which connects Barking to Gospel Oak and provides a connection to the North London Line; ▪ TfL Rail, which runs suburban services between London and Shenfield and calls at Chadwell Heath. • There are several active rail freight facilities in the borough, including the Freightliner/P&O intermodal terminal and the Ford intermodal terminal in Dagenham. These account for a growing proportion of rail freight movements in the borough.
	<ul style="list-style-type: none"> • The bus network in Barking and Dagenham comprises: <ul style="list-style-type: none"> ▪ 26 bus routes providing links to a range of local destinations, as well as to the major centres of Rainham, Romford, Ilford and Stratford in neighbouring boroughs; ▪ 23 routes run daily services across the borough. A number of night bus services are also in operation; ▪ There are 350 bus stops in the borough, located on the borough road network and the TLRN. 93% of these are classed as being fully accessible for disabled passengers; ▪ There are no bus stations in the borough. However, it is served by two main bus depots based in Barking and Creekmouth.




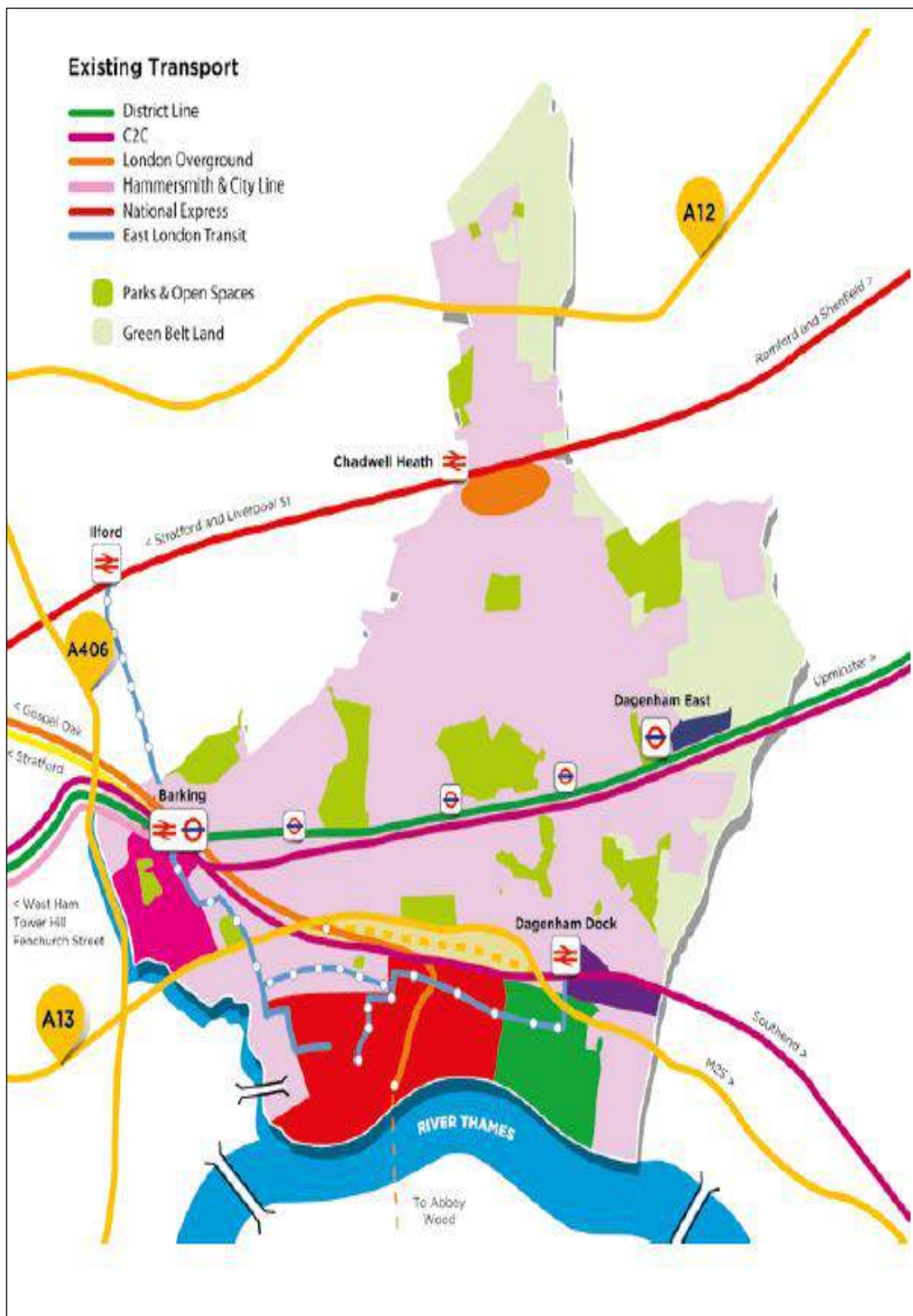
Mode/Network	Provision
	<ul style="list-style-type: none"> • The River Thames remains largely underutilised as a transport network in East London, with no passenger services in operation east of the Thames Flood Barrier at Woolwich. • Significant freight activity occurs on the Thames around Barking Reach. Over half of London's safeguarded wharf sites are located here - handling significant volumes of freight.
 	<ul style="list-style-type: none"> • Barking and Dagenham is served by a number of on and off-road cycle routes and supporting infrastructure, including: <ul style="list-style-type: none"> ▪ 7km of 'Greenways' routes, providing safe, continuous cycle links through a number of borough parks; ▪ Local 'Quietways', linking the main urban centres and other key destinations in the borough; ▪ Cycle Superhighway 3, providing a direct route from Barking to Tower Hill in the City; ▪ An extensive network of cycle parking facilities at key locations and destinations across the borough. • Key walking routes/facilities in the borough include: <ul style="list-style-type: none"> ▪ A 16km Rights of Way network, predominantly located in the more rural eastern part of the borough; ▪ The Thames Path 'City to Sea' pedestrian/cycling route; ▪ Eight 'Just Walk' routes set up in the borough's parks, to encourage people to walk to improve their health; ▪ A network of designated 'safe routes to schools' - to encourage more children to walk to school.


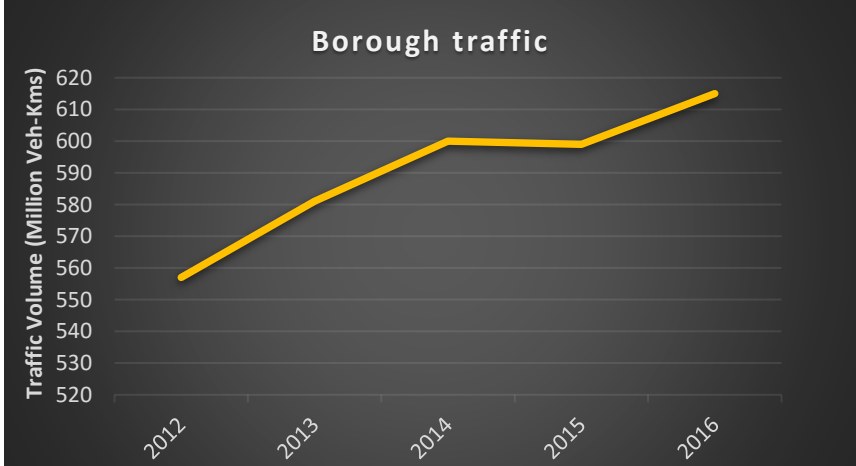
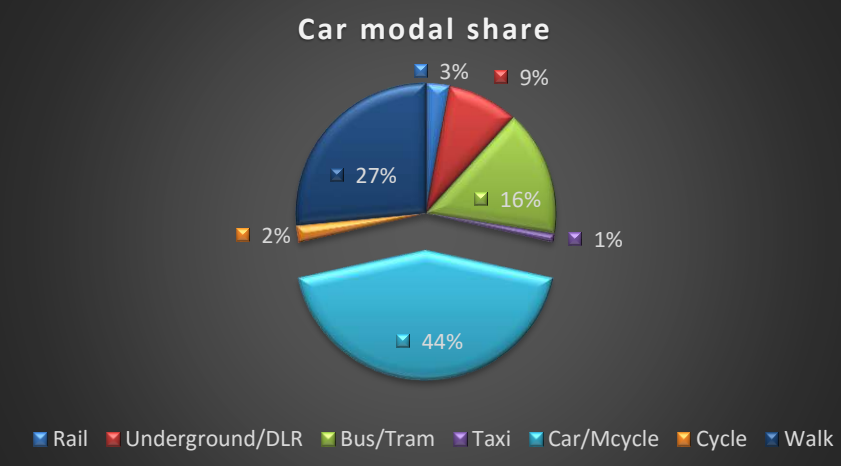



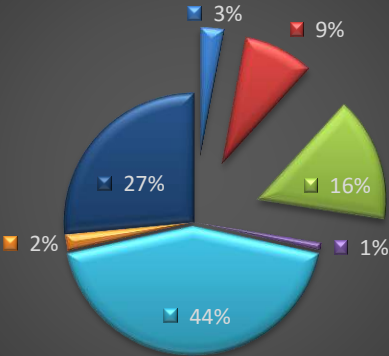
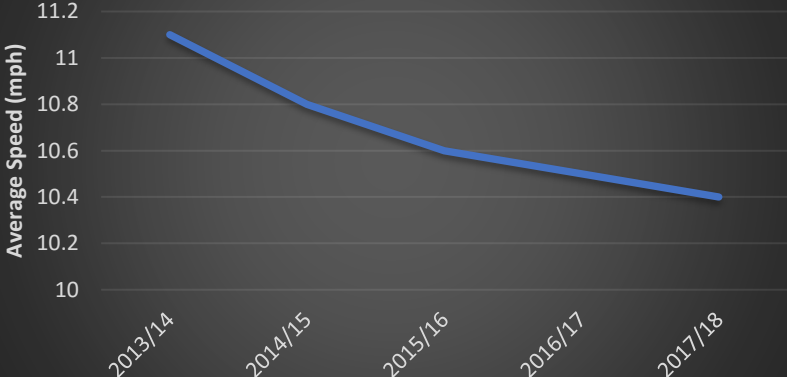
Figure 2.3: Borough transport networks and services


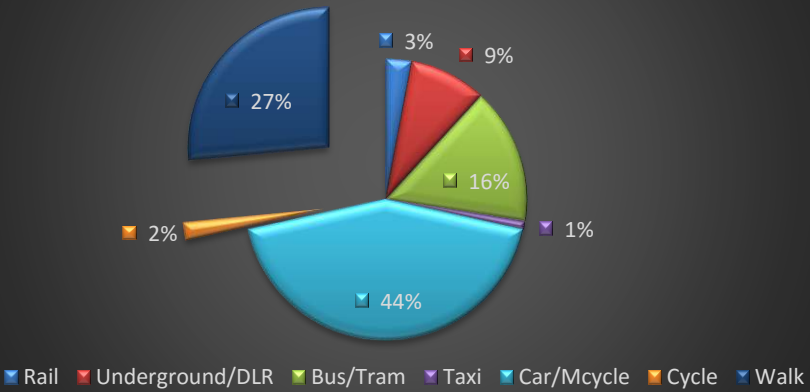
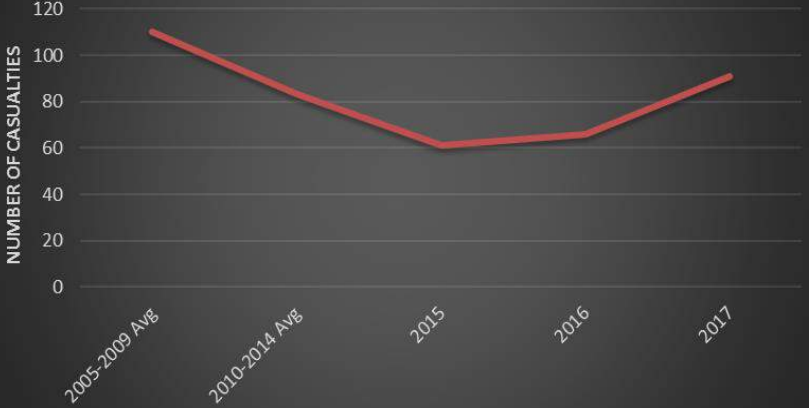


2.3.2 **Table 2.2** provides a summary of the key trends and developments relating to transport and travel in Barking and Dagenham.

Table 2.2: Borough transport and travel trends

Mode/Network	Key Trends																												
	<ul style="list-style-type: none"> • Road traffic volumes in Barking and Dagenham have increased in recent years with the number of vehicle kms travelled on the borough road network rising from 557 million in 2012 to 615 million in 2016 – a 10% increase. This compares with a 2% increase across Outer London as a whole over the same period. • There has been a large increase in the amount of lorry and van traffic on the borough road network, with a 24% rise in HGV and LGV movements between 2010 and 2016 (DfT Traffic Data, 2017). • 44% (circa 113,000) of all daily trips in Barking and Dagenham were made by car in the period 2014/15 – 2016/17 - below the Outer London average of 47%. 																												
<p style="text-align: center;">Borough traffic</p>  <table border="1"> <caption>Borough traffic volume (Million Veh-Kms)</caption> <thead> <tr> <th>Year</th> <th>Traffic Volume (Million Veh-Kms)</th> </tr> </thead> <tbody> <tr> <td>2012</td> <td>557</td> </tr> <tr> <td>2013</td> <td>580</td> </tr> <tr> <td>2014</td> <td>600</td> </tr> <tr> <td>2015</td> <td>598</td> </tr> <tr> <td>2016</td> <td>615</td> </tr> </tbody> </table>	Year	Traffic Volume (Million Veh-Kms)	2012	557	2013	580	2014	600	2015	598	2016	615	<p style="text-align: center;">Car modal share</p>  <table border="1"> <caption>Car modal share</caption> <thead> <tr> <th>Mode</th> <th>Share (%)</th> </tr> </thead> <tbody> <tr> <td>Rail</td> <td>3%</td> </tr> <tr> <td>Underground/DLR</td> <td>9%</td> </tr> <tr> <td>Bus/Tram</td> <td>16%</td> </tr> <tr> <td>Taxi</td> <td>1%</td> </tr> <tr> <td>Car/Mcycle</td> <td>44%</td> </tr> <tr> <td>Cycle</td> <td>2%</td> </tr> <tr> <td>Walk</td> <td>27%</td> </tr> </tbody> </table>	Mode	Share (%)	Rail	3%	Underground/DLR	9%	Bus/Tram	16%	Taxi	1%	Car/Mcycle	44%	Cycle	2%	Walk	27%
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	<ul style="list-style-type: none"> • The mode share for cycling trips originating in Barking and Dagenham is 2% - on a par with the Outer London average. • 27% of all trips originating in the borough are made on foot – slightly lower than the Outer London average of 28%. • The number of people killed and seriously injured on the borough's roads has increased in recent years (up 49% between 2015 and 2017) – bucking the previous downward trend. • The number of slight casualties has risen by 26% over the same period, with the high number of pedestrian and cycle casualties is a particular cause for concern. 																												
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Source: Travel in London Reports 9 and 10, TfL (2016, 2017), TfL; Borough Traffic Data, DfT (2017)

2.4 Challenges and Opportunities

2.4.1 Despite significant progress in recent years, Barking and Dagenham still faces some major transport challenges. This section provides an overview of the main transport challenges facing the borough and the opportunities to overcome them. This provides the context for the LIP objectives and delivery plan measures aimed at tackling these issues and which, in turn, will help deliver the MTS priorities and outcomes.

Overarching mode share aim – changing the transport mix

2.4.2 A key aim of the MTS is for 80% of all journeys to be made by active, efficient and sustainable modes – public transport, walking and cycling - by 2041. In order to achieve this ambitious target, the Council and its partners will need to overcome a number of transport challenges including poor public transport connectivity and accessibility to and within parts of the borough; a worsening of the performance of the road network; poor air quality adjacent to some sections of the highway network; and a range of crime and safety issues.

2.4.3 The MTS and TfL Business Plan identify a range of opportunities for shifting trips and journey stages in Barking and Dagenham to walking, cycling and public transport. These are summarised in **Table 2.3**.



Table 2.3: Key borough transport challenges and opportunities

Key Challenges	Priority Issues/Concerns	Key Opportunities
<p>Poor public transport connectivity to and within parts of the borough and issues surrounding quality and frequency of some services.</p>	<ul style="list-style-type: none"> • The lack of north/south and orbital links - the areas to the north of the A12 and south of the A13 remain poorly served with few connections to other parts of the Borough; • There are no direct links from Barking to the key sub-regional hub of Stratford and no passenger piers or boat services are in operation east of the Thames Flood Barrier at Woolwich. 	<ul style="list-style-type: none"> • The introduction of new or enhanced bus services (MTS Proposal 57); • The development of multi-modal interchange hubs (MTS Proposal 67); • The extension of river transport services to Barking Riverside by the early 2020s (MTS Proposal 73); • The extension of Night Tube/Night Bus services (MTS Policy 19).
<p>The cost and accessibility of public transport services and facilities in some parts of the borough – particularly for those on low incomes, the elderly and disabled.</p>	<ul style="list-style-type: none"> • Station accessibility issues, compounded by lack of step-free access at some stations, and the inconsistent provision of travel information across the transport network remain to be addressed. 	<ul style="list-style-type: none"> • The roll-out of improved journey planning tools and the provision of travel mentoring (MTS Proposal 53); • The provision of accessibility training to bus drivers; a review of bus design and the upgrading of bus stops to ensure they are wheelchair accessible (MTS Proposal 54); • The provision of step-free access at rail and Underground stations and on all new infrastructure; and improvements to the accessibility of taxi ranks (MTS Proposal 55).
<p>The fragmented nature of the borough's cycling and walking links.</p>	<ul style="list-style-type: none"> • Severance caused by major infrastructure, such as the A12, A13, rivers and several railway lines are often cited as a barrier to people wanting to cycle or walk more. 	<ul style="list-style-type: none"> • Delivery of a London-wide strategic cycle network (MTS Proposal 3a).
<p>Worsening of the performance of the road network.</p>	<ul style="list-style-type: none"> • Several of the junctions on the A12 and A13 have frequent congestion problems, whilst journey time reliability for buses on a number of key corridors within the borough remains poor, especially during peak hours. 	<ul style="list-style-type: none"> • Making greater use of the rail and river network to transport freight (MTS Proposal 16); • Improving the efficiency of last mile deliveries and servicing (MTS Proposal 17); • Applying road user charging/workplace parking levy schemes as a means of reducing traffic and

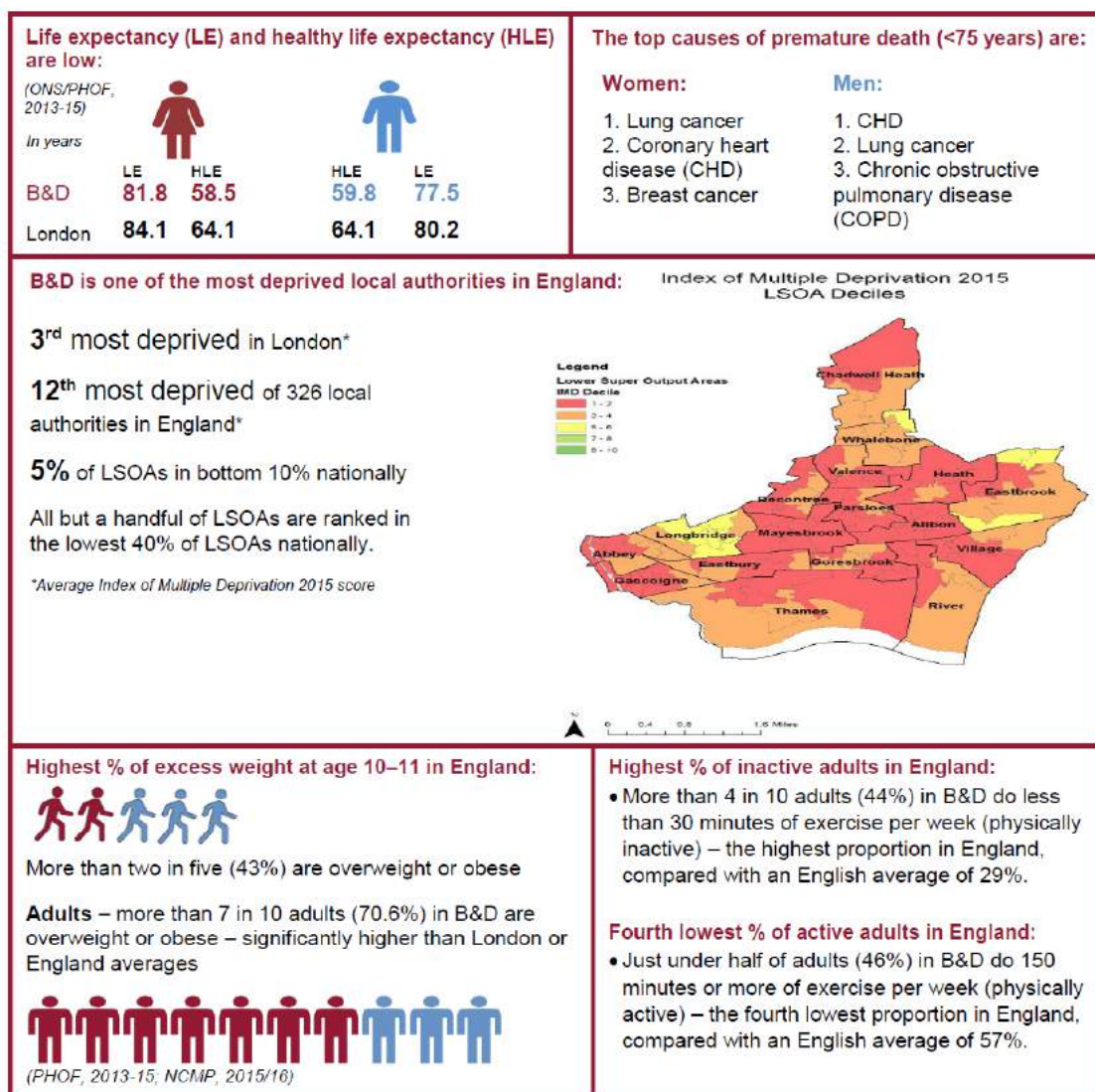
Key Challenges	Priority Issues/Concerns	Key Opportunities
		<p>encouraging a switch to more sustainable modes of travel (MTS Proposal 23);</p> <ul style="list-style-type: none"> • Roll-out of TfL's bus priority programme (MTS Proposal 59).
<p>Poor air quality and traffic noise adjacent to some sections of the highway network.</p>	<ul style="list-style-type: none"> • The A13 has been identified as an area for improvement, having been designated an Air Quality Action Area by TfL in 2011; • Traffic noise is an issue in some areas where both vehicle speeds and traffic flows are high. 	<ul style="list-style-type: none"> • The introduction of tighter emission standards and the expansion of the London Ultra Low Emission Zone (ULEZ) (MTS Proposal 24); • Upgrading of the TfL bus fleet (MTS Proposal 25 and 29); • The introduction of regulatory and fiscal incentives to support the transition to low/zero emission vehicles (MTS Proposals 28 and 33); • The introduction of zero-emission zones in town centres and across London (MTS Proposal 35); • Initiatives to encourage the use of quieter vehicles and ensuring effective/timely highway maintenance works (MTS Proposal 48).
<p>Road safety concerns.</p>	<ul style="list-style-type: none"> • Reducing casualties on the borough's road network remains a major task, with the relatively high number of cyclist and pedestrian casualties a cause for concern. 	<ul style="list-style-type: none"> • Adopting the Vision Zero approach for road danger in London (MTS Policy 3);
<p>Crime and fear of crime on the local transport network.</p>	<ul style="list-style-type: none"> • Safety and security issues resulting from poorly lit/maintained infrastructure are key issues, as is staff availability at stations. 	<ul style="list-style-type: none"> • Prioritising the tackling of 'high-harm' crimes on the borough's streets and public transport system (MTS Proposal 12).
<p>Poor-quality street scene.</p>	<ul style="list-style-type: none"> • Concerns over the quality of the public realm, particularly in town/district centres, remain, with a need for further improvements to the local environment. 	<ul style="list-style-type: none"> • Building new green infrastructure into the existing transport estate (MTS Policy 8), including street trees and sustainable drainage systems (MTS Proposals 43 and 44);

MTS Priority: Healthy Streets and healthy people

MTS Outcome 1: Active

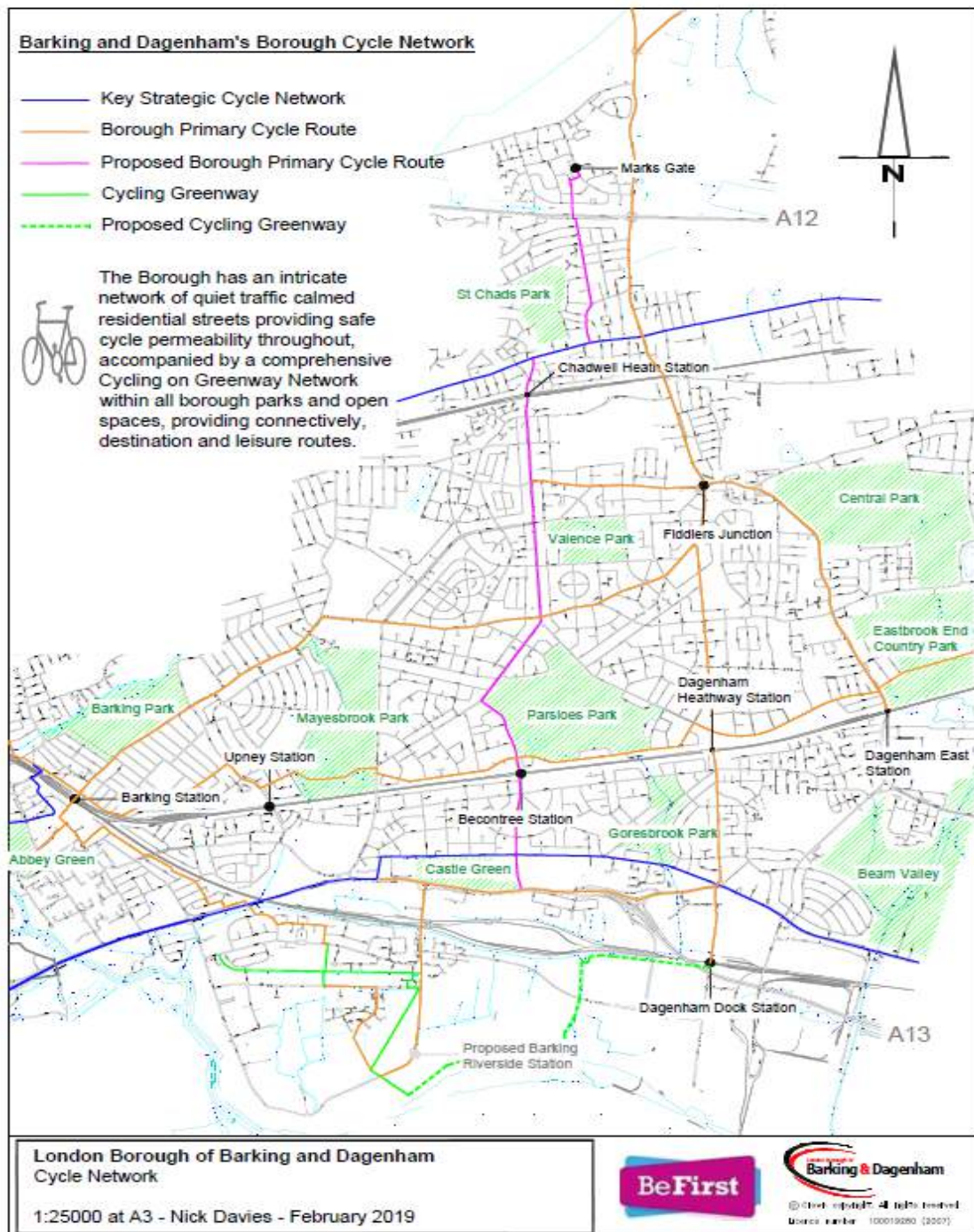
2.4.4 Poor health and high levels of inactivity are two of the major challenges facing a large number of Barking and Dagenham residents. The borough is ranked as the third most deprived local authority in London and has the highest proportion of overweight or obese children aged 10-11 in London and England, whilst one in four of children aged 4-5 are overweight or obese - the third highest in London. In addition, over two-thirds of adults are classified as overweight or obese – the highest proportion in London and significantly higher than the London and England averages. The borough also has the highest proportion of inactive adults in England, with more than 4 in 10 doing less than 30 minutes of exercise per week. **Figure 2.4** highlights the scale of the borough’s health problems.

Figure 2.4: Barking and Dagenham health profile



2.4.5 The fragmented nature of many of the borough's cycling and walking links often prevents better utilisation of these assets by cyclists and pedestrians. A lack of connectivity and route severance in particular are cited as problems by users. Other issues often acting as a deterrent to more active travel include high traffic volumes; parking on footways and in cycle lanes; fear of crime/collisions; and poorly maintained/cluttered footways. **Figure 2.5** outlines the extent of the cycling network in Barking and Dagenham.

Figure 2.5: Borough cycling network

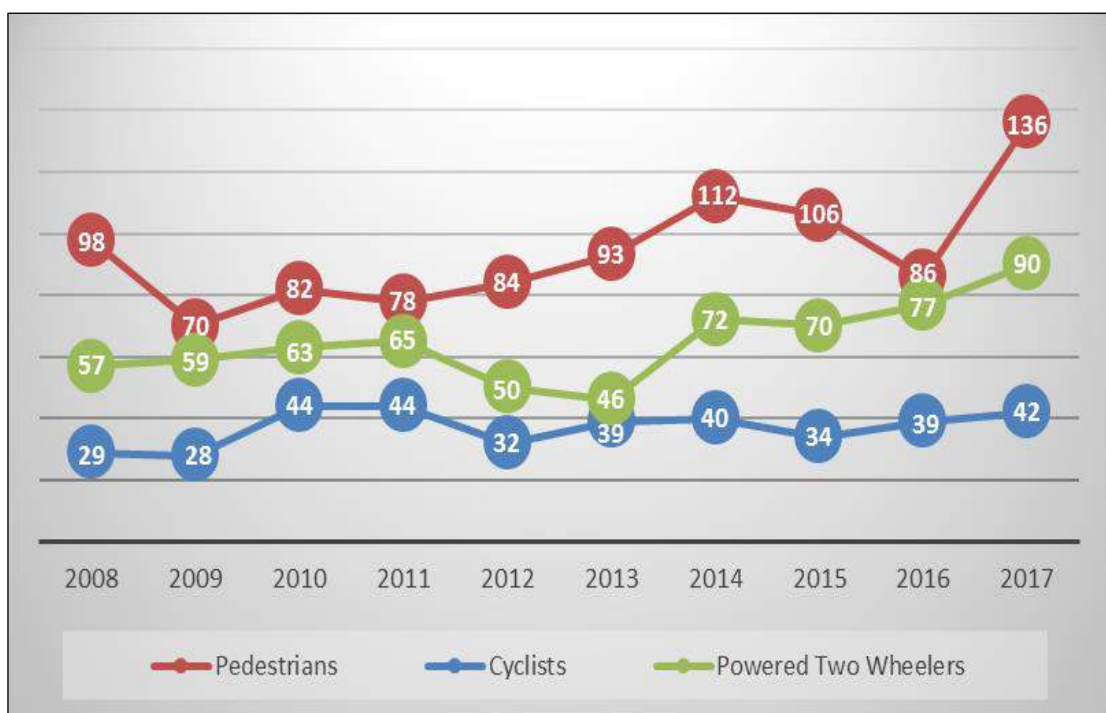


2.4.6 Providing safe and secure infrastructure to encourage greater levels of cycling and walking, especially for shorter journeys, represents one of the best ways of addressing challenges around poor health and inactivity. A key opportunity that could benefit the borough's residents is TfL's plan for a London-wide strategic cycle network (MTS Proposal 3a) which, when completed, will place 70% of Londoners within 400 metres of new, high quality, safe cycle routes. Among the schemes currently being developed are proposals for a new Quietway link between Ilford in the neighbouring borough of Redbridge and Barking Riverside. Another key opportunity includes the potential for securing the extension of the Mayor of London's and/or other Cycle Hire Schemes to the borough (MTS Proposal 6).

MTS Outcome 2: Safe

2.4.7 Safety and security is a key concern for many in Barking and Dagenham, particularly vulnerable groups such as cyclists and pedestrians and the elderly. In particular, reducing casualties on the borough's road network remains a major task, with the relatively high number of pedestrian and powered two-wheeler casualties being a cause for concern (see **Figure 2.6**).

Figure 2.6: Borough road casualties by mode



2.4.8 Crime is also a significant concern for residents in Barking and Dagenham, with 40% of people questioned in a recent Residents Survey rating it as their main concern, whilst nearly half of residents said they felt unsafe in their local area after dark. Staff availability at stations and on public transport is also an issue for some users.

2.4.9 Key opportunities for improving safety and security in the borough include adopting the Vision Zero approach for road danger in London (MTS Policy 3) and working collaboratively with TfL to set out a programme to achieve the Vision Zero aim of reducing the number of people killed or seriously injured on the borough's streets to zero (MTS Proposal 10). In addition, by working with TfL, the police and transport providers to prioritise the tackling of 'high-harm' crimes on the borough's streets and public transport system, we can take steps to protect and reassure those who feel most vulnerable when travelling (MTS Proposal 12).

MTS Outcome 3: Efficient

2.4.10 Like many parts of London, Barking and Dagenham's streets suffer, sometimes significantly, from the effects of congestion. Recent figures reveal that, overall, the performance of the borough's road network has worsened (see **Table 2.2**, above). Average speeds and journey time reliability, particularly for buses, have fallen and congestion has worsened. The increase in road freight movements in the borough is further adding to problems of congestion and environmental impacts, whilst congestion caused by illegal/inconsiderate on-street parking and loading and lack of adequate enforcement is also an issue in parts of the borough.

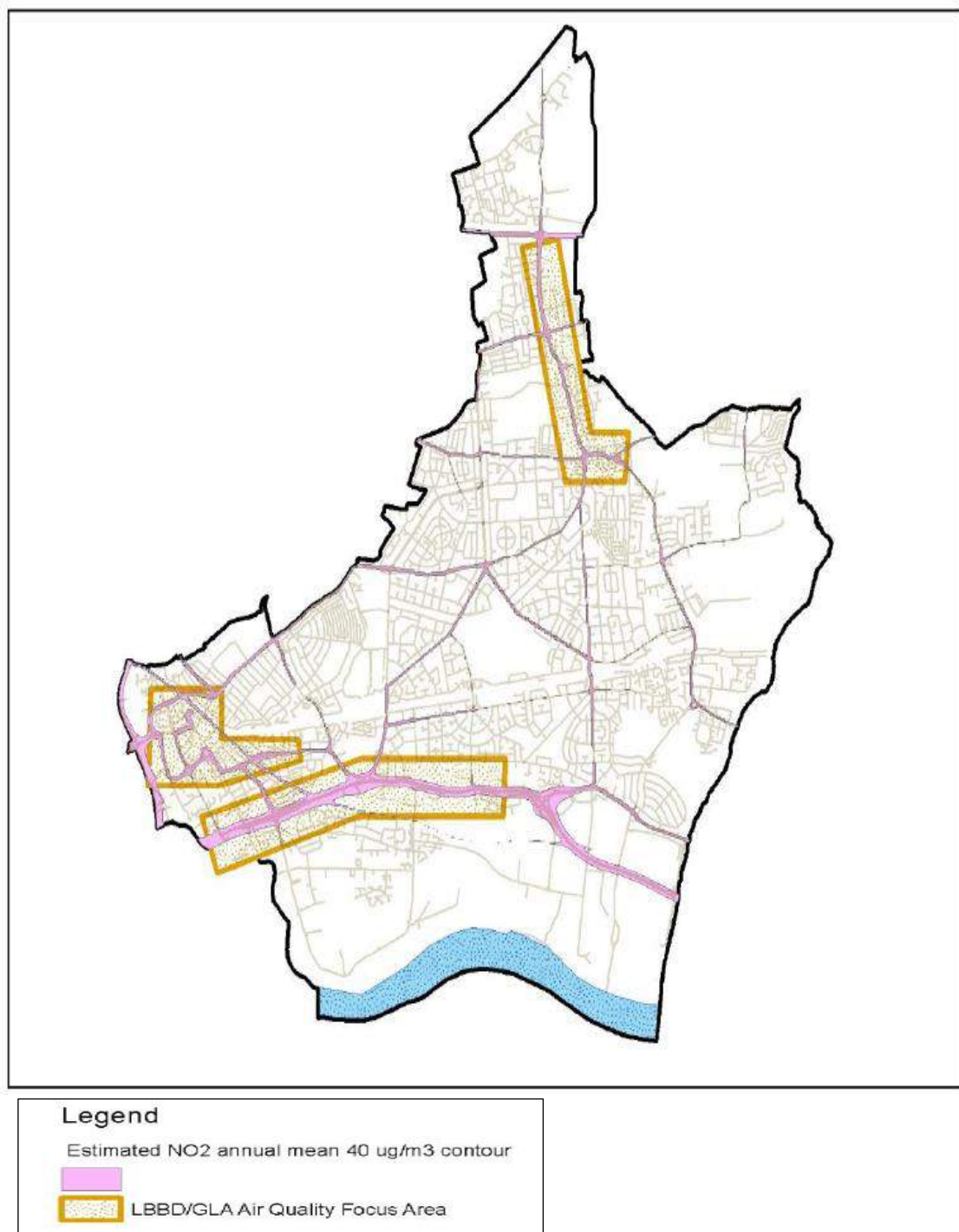
2.4.11 It is clear then that action is needed to reduce the negative impacts of congestion on the borough. This includes working with TfL, businesses, freight operators and a range of other stakeholders to prioritise space-efficient modes of transport and improve the efficiency of streets for the movement of people and goods (MTS Policy 5). Key opportunities to tackle congestion and make Barking and Dagenham's streets more efficient include:

- Making greater use of the rail and river network to transport freight and establishing a regional freight consolidation and distribution network (MTS Proposal 16) and improving the efficiency of last mile deliveries and servicing (MTS Proposal 17);
- The potential for applying road user charging or workplace parking levy schemes as a means of reducing traffic and encouraging a switch to more sustainable modes of travel and to generate income to fund new and improved public transport infrastructure and services (MTS Proposal 23).

MTS Outcome 4: Green

2.4.12 Road traffic is one of the biggest contributors to poor air quality in London and air quality adjacent to some sections of the road network in Barking and Dagenham is very poor (see **Figure 2.7**). The A13 in particular has been identified as an area for improvement, having been designated an Air Quality Action Area by TfL in 2011. Traffic noise is also an issue in some areas of the borough, especially where both vehicle speeds and traffic flows are high. The increase in HGV movements is adding to this problem.

Figure 2.7: Borough Air Quality Focus Areas



2.4.13 To protect the health of the borough's residents, the local transport network needs to contribute to the meeting of legal air quality levels as soon as possible. Action also needs to be taken to reduce the number of people in the borough exposed to excessive noise and vibration levels from road transport. Key opportunities to achieve this include:

- The introduction across London of tighter emission standards for heavy vehicles and the expansion of the London Ultra Low Emission Zone (ULEZ) to cover the whole of inner London (MTS Proposal 24);
- Upgrading of the TfL bus fleet, ensuring vehicles meet Euro VI diesel standards by 2020 (MTS Proposal 25) and all vehicles are zero-emission by 2037 (MTS Proposal 29);
- Initiatives such as the Mayor’s Air Quality Fund aimed at tackling pollution from transport in local air quality hotspots and at sensitive locations (MTS Proposal 27);
- The introduction of regulatory and fiscal incentives to support the transition to low/zero emission vehicles (MTS Proposals 28 and 33);
- The introduction of zero-emission zones in town centres from 2020 and large zones across London by 2050 (MTS Proposal 35);
- Initiatives to encourage the use of quieter vehicles and ensuring effective and timely carriageway maintenance works (MTS Proposal 48).

MTS Priority: A good public transport experience

MTS Outcome 5: Connected

2.4.14 Despite London having one of the most extensive public transport networks in the world, there is poor public transport connectivity between certain parts of Barking and Dagenham, to sub-regional hubs and important destinations in and outside the borough (see **Figure 2.3**, above). The lack of north-south and orbital connections is a particular problem and often requires journeys to be made using more than one mode of transport – thereby adding significantly to the cost of travel for people living and working in the borough. Specific borough issues include:

- Poor public transport connectivity between the north and south of the borough - exacerbated by barriers such as the A12/A13;
- Limited connectivity between Barking Town Centre/Barking Riverside and the Royal Docks and poor links with the wider London Riverside Opportunity Area. The lack of a direct rail link to Stratford from Barking is a particular issue;
- Poor bus access from residential areas north of the A13 to the employment areas south of the A13 and lack of direct services to key health care and education facilities, including Queen’s Hospital and Barking College;
- Lack of Night Tube services in the borough;
- No passenger piers or boat services in operation east of the Thames Flood Barrier at Woolwich.

2.4.15 Travel to, from and within Barking and Dagenham could be greatly enhanced through the provision of new or improved public transport links. For example, the London Overground extension to Barking Riverside will improve public transport links to Barking Town Centre and provide connections to central London; whilst extending Night Tube services to include the District and

Hammersmith & City lines (and enhancements to Night Bus services to those areas of the borough not served by the Underground), will improve connectivity to and within the borough and will also help boost the night time economy (MTS Policy 19). In addition, major new developments at Beam Park and the former Fords Stamping Plant will provide opportunities to secure S106 funding to enhance bus/rail interchange facilities at Dagenham Dock station. Other key opportunities include:

- The introduction of new or enhanced bus services to reduce car dependency and support growth, particularly around Elizabeth line (Crossrail) stations and in areas where housing growth is expected, such as Barking Riverside (MTS Proposal 57);
- The development of multi-modal interchange hubs to create 'mini-radial' public transport links to town centres and to provide improved 'orbital' public transport connectivity (MTS Proposal 67);
- The extension of river transport services to Barking Riverside by the early 2020s to connect key growth areas with Canary Wharf and other new developments in east London (MTS Proposal 73).

MTS Outcome 6: Accessible

2.4.16 An easy to use and accessible public transport system is important as it gives people alternatives to car use for journeys that are not possible on foot or by cycle. However, there is a range of issues surrounding the accessibility of and safety/security on rail and bus services and at stations/bus stops in the borough that are often cited as a deterrent for travelling by public transport, especially by more vulnerable travellers. Particular areas for concern include the lack of step-free access and staff presence at stations; a lack of wheel chair space on buses; a lack of, or unclear, travel information; and poorly lit/badly maintained infrastructure.

2.4.17 A fully inclusive public transport system would enable Barking and Dagenham residents to take advantage of the opportunities the borough and London has to offer. For example, improvements to Barking Station planned by C2C will address issues of overcrowding and lack of step-free access in the short-medium term, whilst major new developments at londoneast-uk will provide opportunities to secure step-free access at Dagenham East Station. Other key opportunities to improve the accessibility of the public transport system in the borough include:

- The roll-out of improved journey planning tools and the provision of travel mentoring and other opportunities to enable spontaneous and independent travel for disabled and older people (MTS Proposal 53);
- The provision of accessibility training to all bus drivers; a review of bus design to ensure that existing/new buses provide better accessibility for all users; and the upgrading of bus stops to ensure they are wheelchair accessible (MTS Proposal 54);

- The provision of step-free access at selected rail and Underground stations and on all new infrastructure; and improvements to the accessibility of taxi ranks (MTS Proposal 55);

MTS Outcome 7: Quality

2.4.18 Despite some improvements in recent years, there are still too many inconsistencies across the public transport network in Barking and Dagenham, particularly in terms of quality and reliability, information provision and general integration between different transport options. For example, performance of some parts of the borough’s road network has declined and congestion has worsened, leading to a fall in average bus journey speeds and journey time reliability (see **Table 2.2**, above). In addition, there are issues surrounding the quality and frequency of some local bus and rail services, whilst overcrowding on buses and trains, particularly at peak hours, are major factors restricting the efficiency of services. The need for additional capacity on bus routes serving the borough’s schools is also a critical issue.

2.4.19 An improved quality of service is needed to enable more borough residents to positively choose to use public transport as an alternative to the car. For example, planned capacity improvements on the Barking-Gospel Oak and Hammersmith & City and District lines will help alleviate some of the current problems with overcrowding on rail services in the borough, whilst TfL’s bus priority programme (MTS Proposal 59) will help improve bus journey times and reliability on the local road network. Other opportunities to improve the quality of public transport services in the borough include:

- Capacity and service reliability improvements on the national rail network, including longer C2C trains into Fenchurch Street station and through the implementation of a ‘Digital Railway’ (MTS Proposal 64);
- The provision of additional capacity on the London Overground network (MTS Proposal 68);
- The delivery of a programme of station capacity enhancements, including priority stations such as Barking (MTS Proposal 71).

MTS Priority: New homes and jobs

MTS Outcome 8: Good Growth

2.4.20 Barking and Dagenham is London’s next big growth story. Over the next 25 years, the Council has ambitious plans to deliver 50,000 new homes and 20,000 new jobs. However, new homes, schools and businesses will increase demand on already congested roads. If new development is not planned correctly this could increase congestion, air pollution, and impact on the Council’s ability to reduce traffic growth and change mode share.

2.4.21 To mitigate the impacts of all this growth, all new developments will be required to be delivered in line with the seven transport principles of ‘Good

Growth' as set out in the MTS (see **Figure 2.8**). The Council will adopt the Healthy Streets approach to ensure developments encourage active, efficient and sustainable travel and will also consider applying the 'Healthy New Town Principles' used on the emerging Barking Riverside development. Other key opportunities to deliver 'Good Growth' in Barking and Dagenham include the development of Opportunity Area Planning Frameworks with ambitious mode shares for walking, cycling and public transport and the creation of new mechanisms for coordinating planning and investment along transport growth corridors (MTS Proposal 99).

Figure 2.8: The transport principles of Good Growth

- Good access to public transport
- High-density, mixed-use developments
- People choose to walk and cycle
- Car-free and car-lite places
- Inclusive, accessible design
- Carbon-free travel
- Efficient freight

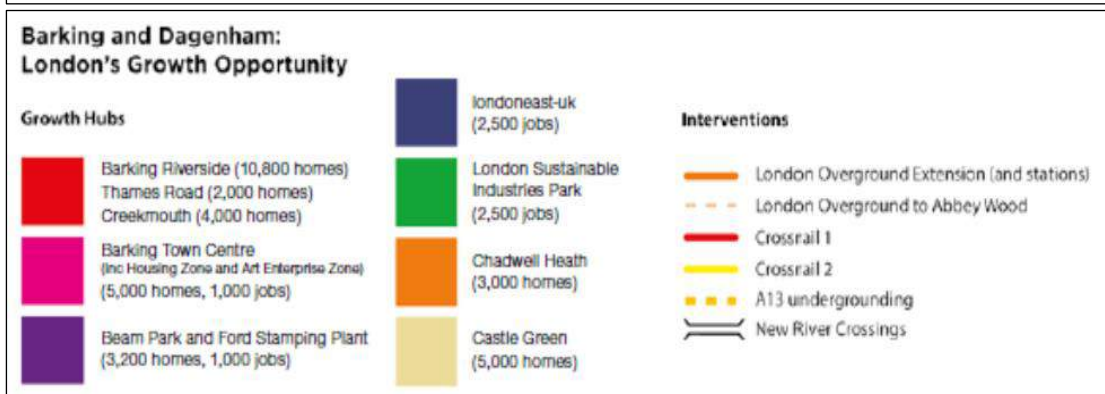
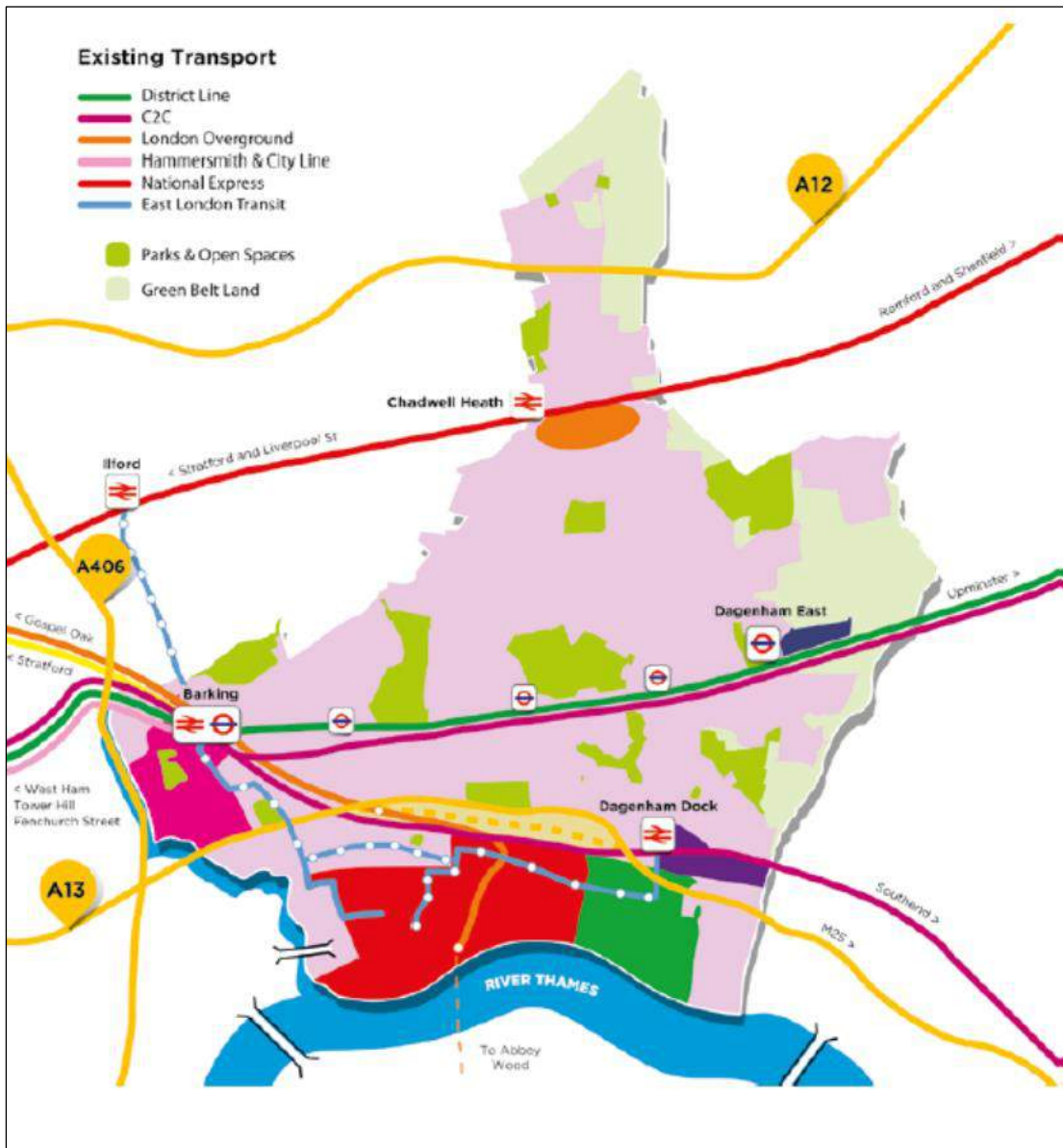
MTS Outcome 9: Unlocking

2.4.22 Most of the planned growth in Barking and Dagenham will be focused in the borough's key regeneration areas within the London Riverside Opportunity Area (see **Figure 2.9**). However, the area is relatively poorly served by public transport and the ambitious housing and jobs targets will simply not be realised without significant improvements to the transport network. Major developments such as Barking Riverside and Castle Green in particular are dependent on improvements to transport infrastructure and services.

2.4.23 A number of opportunities exist that will serve to unlock development opportunities in the borough. These include:

- The provision of new rail stations (MTS Proposal 87);
- Improvements to local bus services, bus priority and bus infrastructure to enable high-density development over a larger area (MTS Proposal 90);
- Piloting of bus transit networks in outer London Opportunity Areas to bring forward development ahead of rail investment or to support growth in places without planned rail access (MTS Proposal 91);
- The introduction of demand-responsive bus services, particularly in difficult-to-serve areas of outer London (MTS Proposal 92);
- The development of new walking, cycling, public transport and road river crossings (MTS Proposals 94 and 95);
- The redevelopment of operational sites such as rail or bus stations (MTS Proposal 97) and the decking over of the A13 (MTS Proposal 98);
- The use of public sector funding, such as TfL's Growth Fund, for smaller scale transport schemes (MTS Proposal 99).

Figure 2.9: Barking and Dagenham principal growth areas



2.5 Borough Transport Objectives

2.5.1 The principal objectives of the LIP are outlined below. They have been formulated having regard to the following principles:

- Continuity with the objectives in the second LIP, whilst acknowledging the shift in emphasis needed as local and Mayoral priorities change;
- Consistency with the MTS and the vision for Barking and Dagenham as set out in the Borough Manifesto, as well as other key plans and strategies (e.g. the London Plan and emerging Local Plan);
- The imperative to integrate transport policy with other policies (including land use planning and public health) and to liaise with key partners in the Council and TfL;
- The constraints of funding identified in chapter 3.

2.5.2 There were 10 objectives in the second LIP, with a focus on tackling congestion; improving access for all; improving safety and security; reducing pollution and enhancing the environment; and improving the public realm. We aim to retain most of these objectives in LIP3, but in some cases are taking the opportunity to change the emphasis.

2.5.3 Chapter 1 outlines how the LIP is compatible with and complements the approach of the MTS. Development of the LIP objectives has also been guided by the Borough Manifesto - which provides the broadest picture of how local communities would like to see the borough in the long term. Similarly, other key plans and policies, such as the London Plan and Local Plan, have played an integral role in helping to shape LIP objectives.

2.5.4 Ongoing consultation and engagement on the LIP will ensure that the views of Barking and Dagenham residents, businesses, community groups and other organisations, as well as a range of other stakeholders, will be taken into account in finalising the objectives. Details of the wide-ranging consultation planned or currently underway are set out in chapter 1.

2.5.5 The objectives have been selected on the basis that funding will be as indicated in the guidance. Changes to the LIP funding allocation could result in changes to the scope of our objectives, with programmes and targets either being stretched or reduced. The potential implications are explored in more detail in chapters 3 and 4.

2.5.6 **Table 2.4** outlines the eight LIP objectives – grouped under four priority themes, indicating how they relate to the MTS priorities and outcomes and the Borough Manifesto vision and priorities. The objectives have been informed by the issues and opportunities identified above and have a lifespan to 2041 to reflect the timeframe of the MTS.

Table 2.4: LIP objectives

LIP Priorities/ Objectives*	MTS Priorities/Outcomes										Borough Manifesto Vision/Priorities						
	Changing the transport mix	Healthy Streets and healthy people				A good public transport experience			New homes and jobs		One Borough. One Community. No-one left behind.						
		Active	Safe	Efficient	Green	Connected	Accessible	Quality	Good Growth	Unlocking	Health and Wellbeing	Employment and Enterprise	Safety	Skills and Education	Environment	Community Engagement	Housing
LIP Priority: Connecting people and places																	
A. Enhancing public transport connectivity to enable growth	✓✓		✓	✓	✓	✓✓	✓	✓✓	✓✓	✓✓		✓✓	✓		✓		✓✓
B. Improving accessibility for all to key services and facilities	✓		✓			✓✓	✓✓	✓	✓	✓		✓✓	✓	✓			✓
LIP Priority: Promoting healthy, sustainable travel																	
C. Encouraging active travel to improve health and wellbeing	✓✓	✓✓	✓	✓	✓✓			✓	✓✓		✓✓		✓	✓	✓✓	✓	
D. Facilitating green travel to improve air quality and reduce the impact on the environment	✓✓	✓✓		✓	✓✓			✓	✓✓		✓✓			✓	✓✓	✓	

LIP Priorities/ Objectives*	MTS Priorities/Outcomes									Borough Manifesto Vision/Priorities							
	Changing the transport mix	Healthy Streets and healthy people				A good public transport experience			New homes and jobs		One Borough. One Community. No-one left behind.						
		Active	Safe	Efficient	Green	Connected	Accessible	Quality	Good Growth	Unlocking	Health and Wellbeing	Employment and Enterprise	Safety	Skills and Education	Environment	Community Engagement	Housing
LIP Priority: Improving safety and security																	
E. Reducing the number of casualties on our roads	✓✓	✓	✓✓				✓	✓			✓✓		✓✓	✓		✓	
F. Improving safety and security across the transport network	✓	✓	✓✓		✓		✓	✓			✓		✓✓			✓	
LIP Priority: Creating better streets and places																	
G. Managing our road space more efficiently to tackle congestion	✓✓	✓✓	✓	✓✓	✓✓		✓	✓✓	✓		✓✓	✓	✓		✓✓	✓	
H. Transforming the public realm to create healthy, inclusive places	✓✓	✓✓	✓	✓✓	✓✓		✓	✓	✓	✓	✓✓		✓		✓✓	✓	
KEY: ✓✓ High contribution to priorities/outcomes ✓ Lower contribution to priorities/outcomes * All LIP objectives have a lifespan to 2041 to reflect the timeframe of the MTS																	

- 2.5.7 **Objectives A and B**, which are concerned with the issues of connectivity and accessibility, are principally geared to supporting growth and regeneration and to ensure greater social inclusion. The emphasis here is likely to focus on improving the provision and quality of public transport services and cycling and walking facilities to and within Barking and Dagenham. Achieving these objectives will help deliver MTS outcomes 5, 6, 7 and 9 and the Borough Manifesto priorities around Employment and Enterprise and Housing.
- 2.5.8 Key concerns relating to the environment and sustainability are air quality and climate change, on which transport has a major impact. The impact of transport choice and levels of pollution are also issues in relation to public health. The main focus of **objectives C and D** will therefore be on promoting the use of more active and sustainable modes of transport, whilst reducing the number of journeys made by private vehicles. This, in turn, will help us achieve a cleaner, greener and more sustainable borough, as well as helping to improve peoples' quality of life (MTS outcomes 1, 4 and 8 and Borough Manifesto priorities around Health and Wellbeing and Environment).
- 2.5.9 Safety and security across the borough transport network remains a key concern for many, particularly vulnerable groups such as cyclists and pedestrians and the elderly. The successful delivery of **objectives E and F** will go some way to achieving the MTS outcome of making London's streets safe and secure (Outcome 2) and the Borough Manifesto priority of creating a safer borough.
- 2.5.10 The need for a planned, coordinated approach to the management of our roads and the creation of distinctive public places are the key drivers behind **objectives G and H**. In particular, a long-standing priority for residents and businesses is the need to tackle congestion on the borough road network – particularly at peak times. Reducing severance and securing improvements to the public realm is also a key priority for the Council. Achieving these objectives will help deliver MTS outcomes 1, 3, 4 and 7 and the Borough Manifesto priorities around Health and Wellbeing and Environment.
- 2.5.11 All eight LIP objectives contribute, to a greater or lesser extent, to the overarching MTS aim of increasing sustainable travel mode share.

3. Delivery Plan and Programme of Investment

3.1 Introduction

3.1.1 **Chapter 3** sets out the overarching Delivery Plan and three-year Programme of Investment for the LIP. The Delivery Plan and associated transport measures form the framework for the development of the Programme of Investment which, in turn, is designed to meet our objectives, and to address the transport problems and opportunities identified in chapter 2.

Chapter 3 sets out:

- The Delivery Plan and the associated range of short and long-term measures/interventions, together with the priorities for implementation and how it links to the various Mayoral/Borough priorities (**section 3.2**);
- Confirmed/potential funding sources for implementing the Delivery Plan (**section 3.3**);
- The three-year indicative Programme of Investment for the period 2019/20 – 2021/22, together with information on the detailed annual spending programme for 2019/20 (**section 3.4**);
- Details of the methodology used for prioritising and monitoring progress of the Delivery Plan and Programme of Investment, and identification of potential risks and associated mitigation measures (**section 3.5**).

3.2 Delivery Plan

Principles and Priorities

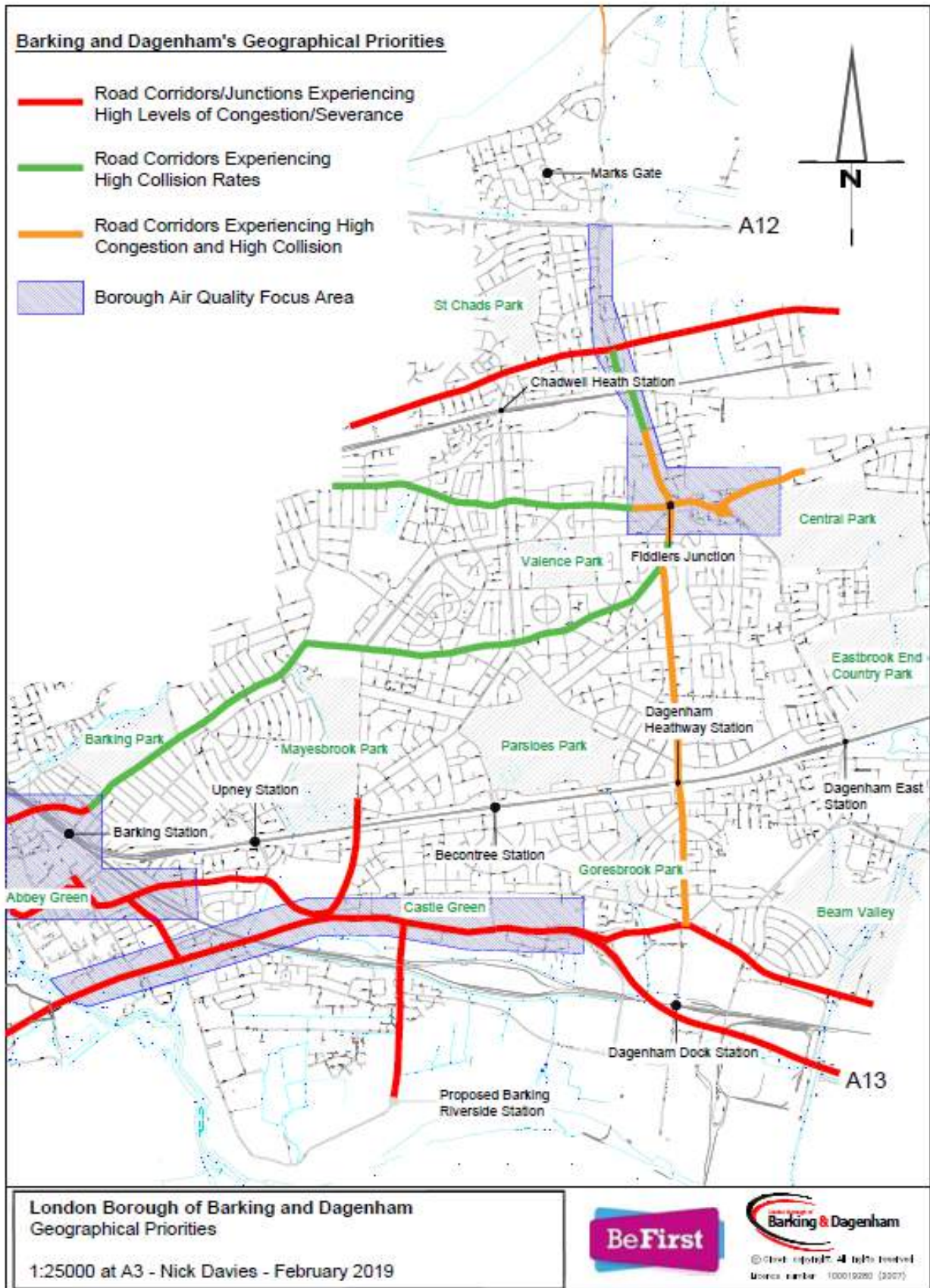
3.2.1 The Delivery Plan has been developed to help achieve the overarching LIP objectives as well as to contribute to the delivery of the MTS priorities and outcomes and the Borough Manifesto vision and priorities. The driving principles behind the Delivery Plan are regeneration, community, health and wellbeing, crime and safety and the environment. These reflect the Mayor's vision to create a future London that is home to more people and a better place for people to live in; and the overarching aim for 80% of all journeys to be made on foot, by cycle or by public transport by 2041. They also reflect our Borough Manifesto vision to build on the borough's position as London's growth opportunity and ensure this change benefits every resident.

3.2.2 The priorities for implementing the Delivery Plan take into account such factors as the various transport problems and opportunities in the borough (chapter 2); indicators and targets (chapter 4); consultation and engagement outcomes (Annex C) and wider policy and programmes (Annex B). All parts of the Delivery Plan are of equal importance. However, from a geographic perspective there are certain areas of the borough where some elements of the plan require particular emphasis (see **Table 3.1** and **Figure 3.1**).

Table 3.1: Geographic priorities

Priorities	Areas of Emphasis
<p>Connecting people and places (Objectives A & B)</p>	<ul style="list-style-type: none"> • The main focus will be on improving north-south and orbital links within the borough, in particular, enhancing public transport, cycling and walking links between Marks Gate and Dagenham and to London Riverside from outside and within the borough. • Improving access by public transport, cycling and walking to local health, education, employment and shopping/leisure facilities will be a key focus, in particular: <ul style="list-style-type: none"> ▪ Health - access to King George and Queen’s Hospitals in the neighbouring boroughs of Redbridge and Havering; ▪ Education – access to borough schools and colleges, including Barking and Dagenham College in Rush Green and the Coventry University campus in Becontree Heath; ▪ Employment – access to major employment areas south of the A13, including Dagenham Dock and River Road industrial areas; ▪ Shopping/leisure – access to Barking Town Centre, Chadwell Heath and Dagenham Heathway.
<p>Promoting healthy, sustainable travel (Objectives C & D)</p>	<ul style="list-style-type: none"> • With high levels of deprivation and problems with obesity prevalent, measures to promote healthy, active travel will be implemented across Barking and Dagenham. Particular emphasis will be placed on engaging the borough’s schools and colleges. • Measures aimed at improving air quality in the borough will be focused on busy corridors and outside schools across the borough. Special attention will be placed on the three Air Quality Focus Areas in the borough – Barking Town Centre, Becontree Heath/Whalebone Lane and the A13 corridor.
<p>Improving safety and security (Objectives E & F)</p>	<ul style="list-style-type: none"> • There are no geographical priorities for road casualty reduction. Locations will be dictated by intelligent analysis of collision data. However, a number of key corridors have been identified as having high collision rates, including: <ul style="list-style-type: none"> ▪ A124 (Longbridge Road/Wood Lane); ▪ A1240 (Heathway); ▪ A1083 (Green Lane); ▪ A1112 (Whalebone Lane South). • The need for specific security enhancements will take into account areas where such issues are important. Priority areas include stations, bus stops, parks and town centres.
<p>Creating better streets and places (Objectives G & H)</p>	<ul style="list-style-type: none"> • Measures aimed at tackling congestion, addressing issues of severance and creating ‘healthy streets’ will be implemented throughout the borough. However, there will be a particular emphasis along key corridors and at major junctions, including: <ul style="list-style-type: none"> ▪ The A13 corridor and major junctions including Movers Lane, Lodge Avenue, Renwick Road and Goresbrook Interchange; ▪ The A1306 corridor and Ballards Road gyratory; ▪ The A123 and A124 corridors into Barking Town Centre, including the Fanshawe Roundabout, London Road Roundabout and Ripple Road Gyratory; ▪ The A1240 (Heathway) and A118 (High Road) corridors; ▪ The ‘Merry Fiddlers’ junction and Civic Centre roundabout (convergence of Wood Lane, Green Lane, Whalebone South and Rainham Road North).

Figure 3.1: Map of geographic priorities



Measures and Interventions

- 3.2.3 Details of the various measures and interventions that form the Delivery Plan are set out below and in **Table 3.2**, together with an indication of our approach to scheme delivery and how schemes align to the MTS priorities and outcomes and the Borough Manifesto vision and priorities. Experience gained implementing schemes in recent years, including the need for close partnership working with a range of stakeholders and exploring opportunities to adopt new, innovative approaches to scheme delivery; as well as learning from the best practice of others, has enabled us to develop a Delivery Plan with a more effective range of measures.
- 3.2.4 The Delivery Plan will focus principally on those smaller to medium sized schemes/initiatives that can be delivered by the Council and its partners in the short-medium term. Some of the more significant interventions required to meet LIP objectives and deliver Mayoral and borough priorities are set out in **Table 3.4** (Long-term Interventions).

Priority Area: Connecting People and Places

Key Delivery Plan Measures: *Public Transport Initiatives; Cycling/Walking Schemes; Highways/Public Realm Enhancements*

Delivery Plan Approach:

- Engaging with key partners/the wider community to identify areas of poor connectivity/accessibility and working with them to develop effective solutions;
- Investing in public transport, cycling and walking infrastructure;
- Delivering improved facilities and access for all, but particularly for more vulnerable groups such as the elderly and disabled people.

- 3.2.5 Delivery Plan measures/interventions proposed under this priority area will help deliver the LIP objectives around enhancing public transport connectivity to enable growth (**Objective A**) and improving accessibility for all to key services and facilities (**Objective B**). These typically include:
- Public transport initiatives – (e.g. new/improved infrastructure and services; introduction/expansion of bespoke travel services);
 - Cycling and walking schemes – (e.g. new cycle/pedestrian routes); and
 - Highways/public realm enhancements (e.g. station access/town centre improvements).
- 3.2.6 Our short-medium term priorities include:
- **Securing capacity and access enhancements at Barking station** to reduce overcrowding, improve passenger experience and support future passenger demand (see below);

- Securing additional capacity on key bus routes serving major growth areas such as London Riverside and Chadwell Heath to ease overcrowding, particularly at peak times, and support future housing growth;
- Implementing new cycling and walking links to key destinations, in particular the key 'hubs' of Barking Town Centre, Barking Riverside, Dagenham Heathway and Chadwell Heath to improve inter-borough connectivity and promote sustainable mode shift;
- Exploring the potential for demand-responsive bus services to connect to those parts of the borough which are currently poorly served by public transport;
- Maintaining and, where possible, enhancing the Borough's bespoke travel services, such as our Disabled Access and School Transport services, as a means of meeting the diverse travel needs of those individuals less able to access conventional public transport;
- Continuing the bus stop accessibility improvements programme, to provide disabled passengers with safe, accessible boarding facilities at bus stops, as required under the Equality Act;
- Continuing our station access and shopping parade improvements programme, as a means of making transport hubs and town and district centres in the borough accessible to all. Potential measures may include the provision of new or improved footways, accessibility improvements for disabled people and enhanced cycle parking and related infrastructure;
- Investigating the potential for replacing subways and footbridges with surface level crossings to meet the access needs of the mobility impaired and provide benefits to pedestrians and cyclists. Such schemes will also help reduce severance and address concerns around safety and security. A priority for the Council remains securing improved crossing facilities on the A12 to provide improved connectivity between Marks Gate and Chadwell Heath.

Priority Project: Barking Station Improvements

The Grade II listed Barking Station is one of the busiest interchange stations in London. Around 12.8 million passengers passed through the station in 2016/17.



The current Essex Thameside rail franchise commits the operator, C2C, to deliver a range of capacity and access improvements at Barking station by December 2019. This includes the remodelling/decluttering of the station concourse; the installation of additional ticket barriers; the provision of step-free access to platforms; new retail units and improved passenger information.



A planning application is due to be submitted in early 2019 with improvement works anticipated to commence in summer 2019.

The Council previously committed to providing £900,000 towards the cost of these improvement works and has identified a similar amount to be funded from the Council's LIP allocation in 2019/20.

Priority Area: Promoting Healthy, Sustainable Travel

Key Delivery Plan Measures: *'Behaviour Change' Initiatives; Cycling/Walking Schemes; Public Transport Initiatives; Traffic Management/Reduction Measures; Highways/Public Realm Enhancements*

Delivery Plan Approach:

- Reducing the need to travel, especially by car;
- Promoting the greater use of cycling and walking, especially for shorter journeys and public transport for longer journeys;
- Reducing transport related pollution/disturbance.

3.2.7 The principal Delivery Plan measures/interventions to encourage active travel to improve health and wellbeing (**Objective C**) and facilitate green travel to improve air quality and reduce the impact on the environment (**Objective D**) are highlighted below and typically include:

- 'Behaviour Change' initiatives - (e.g. 'active'/'green' travel programmes; travel plans);

- Cycling and walking schemes - (e.g. new cycle/pedestrian facilities; cycle training programmes);
- Public transport initiatives – (e.g. improved passenger information; low emission/quieter vehicles);
- Traffic management/reduction measures - (e.g. vehicle restrictions; ‘cleaner’ fleets/vehicles);
- Highways/public realm enhancements - (e.g. ‘green’ infrastructure; use of innovative materials).

3.2.8 Our short-medium term priorities include:

- Developing and monitoring sustainable travel strategies for schools, businesses and new developments as a focus for reducing travel by car and increasing mode share of journeys by public transport, cycling and walking. A key priority is the need to manage and mitigate against the impacts of school travel and freight operations in the borough;
- Continuing our highly successful borough-wide ‘Active Travel’ and cycle training programmes as a means of facilitating healthier and ‘greener’ travel practices amongst children and adults (see below). A key focus will be on encouraging more school-aged children to walk and cycle;
- Implementing more pedestrian and cycling schemes. Walking and cycling are low cost, healthy and environmentally friendly means of travel and form an important component of our Delivery Plan. A key focus of our work here will be the implementation of safe, continuous cycle routes and supporting infrastructure as part of TfL’s ‘Future Routes’ programme and delivering ‘Healthy Routes’ to create attractive, safe and accessible walking routes to schools and other key trip generators;
- Promoting the use of cleaner/environmentally friendly vehicles to reduce emissions and improve air quality in the borough. As well as encouraging TfL/bus operators to introduce more hybrid and electric vehicles on borough bus routes, the Council will consider ways of introducing new, low-emission vehicles as part of its fleet management plans and will look to install additional electric vehicle charging facilities, including rapid charging points, throughout the borough;
- Encouraging the implementation of ‘green’ infrastructure, including the greater use of ‘parklets’, street trees, green walls and Sustainable Drainage Systems (SuDS) as a means of improving air quality and reducing environmental impact. Through our partnership with University College London (UCL) we will also look to trial the use of ‘innovative’ surface materials as a means of improving local air quality and reducing disturbance from vehicle noise;
- Introducing vehicle management measures. Measures such as vehicle restrictions and better signing can help alleviate environmental concerns by routing HGVs and other high-polluting vehicles away from sensitive areas, such as residential streets and schools. We will also explore the potential for designating Low Emission Streets/Zones in those areas with particularly poor air quality, including the three Air Quality Focus Areas in the borough;
- Providing real time passenger information via new dynamic information systems at key destinations and trip generators. We will work closely with

TfL and transport operators to ensure all stations and bus stops are fitted with up-to-date maps, timetables and other travel information to provide passengers with clear information on destinations and service frequency.

Priority Project: Borough-wide Healthy/Active Travel Programme

To assist the Council in achieving its Borough Manifesto priorities of enabling social responsibility and keeping adults of all ages and children healthy and safe, and in line with the Growth Commission's recommendations that 'no one should be left behind', it is proposed to continue the successful programme of cycle training across the borough; and to assist schools and businesses with developing travel plans and delivering small scale physical measures such as cycle parking.



The Council will also continue its successful partnership agreement with Sustrans and Living Streets to deliver a range of cycling and walking events and initiatives which have proved popular amongst residents and schools and have helped to encourage the take-up of more healthy, active lifestyles. These include initiatives such as led cycle rides and walks around the borough; Walk Leader training to train volunteers to lead walks; and engagement with schools to promote events such as Walk to School week.

Priority Area: Improving Safety and Security

Key Delivery Plan Measures: *Highways/Public Realm Enhancements; Traffic Management/Reduction Measures; 'Behaviour Change' Initiatives; Cycling/Walking Schemes; Public Transport Initiatives*

Delivery Plan Approach:

- Adopting a 'Vision Zero' approach, with a focus on achieving safe speeds; safe streets; safe vehicles; and safe behaviours, to eliminate all road casualties;
- Reducing crime, and anti-social behaviour on buses/trains and at stations.

3.2.9 The Council's LIP priorities around safety and security include reducing the number of casualties on our roads (**Objective E**) and improving safety and security across the transport network (**Objective F**). Delivery Plan measures/interventions to achieve this typically include:

- Highways/public realm enhancements – (e.g. corridor/junction improvement schemes; new street lighting);
- Traffic management/reduction measures – (e.g. traffic calming/speed reduction measures; effective enforcement);
- 'Behaviour Change' initiatives – (e.g. road safety education/training programmes; publicity campaigns);
- Cycling and walking schemes – (e.g. enhanced cycle/pedestrian facilities);
- Public transport initiatives – (e.g. station access improvements).

3.2.10 Our short-medium term priorities include:

- Delivering improvements to the local road network to improve safety and reduce casualties, particularly along those corridors and at junctions experiencing a high number of collisions. Priority locations for the roll-out of 'safe streets' schemes include Longbridge Road in Barking and The Heathway, Green Lane and Whalebone Lane South in Dagenham;
- Implementing/upgrading crossing facilities, to improve conditions for pedestrians and cyclists, as well as other vulnerable road users, and to increase accessibility across busy roads. New crossing facilities will be considered where safety/accessibility problems are particularly prevalent;
- Exploring innovative traffic calming and reduction measures, such as filtered permeability schemes, to help meet the safety concerns of residents and vulnerable road users. Locations will be favoured where there is a good case on safety grounds, such as outside schools, combined with strong support from the local community;
- Implementing further 20 mph zones to help reduce traffic speeds on the borough's road network. A key focus will be on residential streets and areas outside schools. We will also explore the potential for introducing a borough-wide 20 mph zone if it can be demonstrated that it is cost effective and will result in significant reductions in vehicle speeds and the number and severity of collisions;
- Expanding our road safety education and training programmes to ensure we meet our targets to reduce the number and severity of casualties on our

roads. In line with the 'Vision Zero' approach, a key focus for road safety training will be on achieving 'safe behaviours'. For example, targeted enforcement, publicity and marketing campaigns will be carried out around speeding - a particular problem in some areas of the borough. In addition, as a means of reducing the danger posed by vehicles that present the greatest risk (principally cars, which are involved in a disproportionate amount of collisions in the borough), we will also continue the highly successful 'Safe Drive, Stay Alive' campaign targeted at new and pre-drivers in the borough;

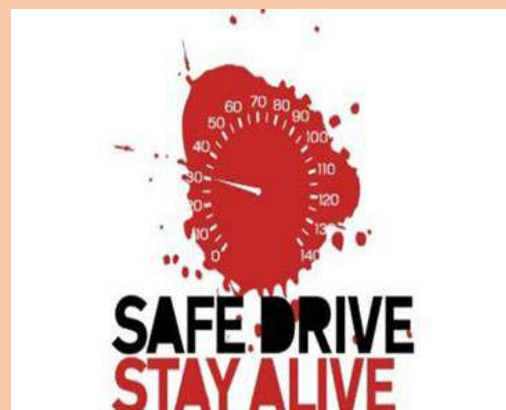
- Introducing CCTV cameras, new street lighting and other security measures as part of our ongoing work to improve conditions at stations, bus stops, car parks and shopping parades. In addition, we will continue to make sure new developments achieve the 'Secured by Design' standard and that car parks achieve the 'Park Mark' award, and that improved security information is provided for pedestrians, cyclist and other vulnerable transport users.

Priority Project: School Gate Safety and Access Improvements

We will continue our borough-wide school gate safety and access improvements programme in support of our LIP objectives of reducing the number of casualties on our roads; improving access for all; and promoting healthy, sustainable travel.

The programme will focus on the delivery of a programme of road safety, traffic management and access improvements outside and on the approach to all borough primary schools and at key secondary school locations. In addition to any physical improvements, we will also provide a definitive road safety education and active travel programme at all borough schools.

Locations will be selected on a priority basis, with those schools experiencing the most pressing road safety issues; problems with congestion/poor air quality; and poor access by cycling and walking and public transport dealt with first. The nature of the measures implemented will be determined by the type of issues faced. Community engagement will be undertaken to ensure that proposals are fully supported by the schools and local residents.



Priority Area: Creating Better Streets and Places

Key Delivery Plan Measures: *Highways/Public Realm Enhancements; Traffic Management/Reduction Measures; Cycling/Walking Schemes; Public Transport Initiatives*

Delivery Plan Approach:

- Securing improvements to the local street scene and historic environment, adopting the 'Healthy Streets' approach;
- Making the most effective and efficient use of existing infrastructure;
- Better management of the road network to reduce congestion and improve bus journey times.

3.2.11 The principal Delivery Plan measures to be adopted to help create better streets and places in Barking and Dagenham and to achieve our LIP objectives of managing our road space more efficiently to tackle congestion (**Objective G**) and transforming the public realm to create healthy, inclusive places (**Objective H**), are outlined below and typically include:

- Highways/public realm enhancements - (e.g. 'DIY streets' schemes);
- Traffic management/reduction measures - (e.g. vehicle restrictions; freight consolidation);
- Public transport initiatives - (e.g. bus priority measures);
- Cycling and walking schemes - (e.g. new/enhanced cycle and pedestrian facilities).

3.2.12 Our short-medium term priorities include:

- Developing a high-quality public realm through a programme of street scene enhancements, delivering improvements against the ten 'Healthy Streets' indicators. A key priority will be to implement further improvements to forecourt areas around stations, our main shopping centres/parades and other key trip generators such as schools and visitor attractions. A 'co-design' approach, involving the local community and other stakeholders, will be central to the development and delivery of all schemes;
- Securing improvements to the borough road network, particularly along key corridors and at junctions, in order to improve bus journey times, reduce severance and create 'liveable' places. Priority locations include Longbridge Road and Ripple Road in Barking; the Heathway and Ballards Road gyratory in Dagenham; Chadwell Heath High Road; and the 'Merry Fiddlers' junction in Becontree Heath;
- Developing a borough-wide freight strategy, setting out proposals to mitigate the impacts of freight activities and operations in Barking and Dagenham. Working closely with businesses, freight operators and other key stakeholders we will explore the benefits/practicalities of retiming deliveries; introducing freight consolidation initiatives; and examine the potential for moving more freight by rail and river;

- Maximising the potential of technology and intelligent transport systems, such as Variable Message Signing (VMS) in town centres and at car parks, and Split Cycle Offset Optimisation Technique (SCOOT) at traffic signals, as a means of helping to relieve the pressure on our busy road network;
- Implementing carriageway and footway resurfacing schemes. These will continue to be assessed and prioritised on a needs basis and implemented via the Council's Highway Improvement Programme. Packages of other highway maintenance schemes, including improvements to the Principal Road network in the borough, routine repairs and drainage improvements, will be undertaken, subject to the availability of funding;
- Reviewing and, where appropriate, updating the Council's Highways Asset Management Plan to ensure a more coordinated approach to the implementation of all transport schemes, maintenance programmes and utilities works to minimise the impact on the highway network and optimise the integrity, quality and value of our transport assets.

Priority Project: 'DIY' Healthy Streets

The 'DIY' Healthy Streets programme seeks to build on the success of our two previous DIY Streets projects, including the award-winning Marks Gate scheme, with the aim of increasing levels of walking and cycling across Barking and Dagenham.

Delivered in partnership with a range of stakeholders and combining community-led street design, behaviour change programmes and infrastructure improvements, the project will seek to identify and remove the barriers to walking and cycling at various locations in the borough.

As experts in their area, the local community hold the keys to change and interventions will vary from area to area. Measures may typically include traffic-calming/reduction measures; new cycling and walking facilities; and place-making features. To complement the infrastructure works, a range of active travel initiatives will be rolled out, including, for example, the setting up of cycle training and walking group programmes for adults and children.



Table 3.2: Delivery Plan measures and interventions

Delivery Plan Measures/ Interventions	MTS Priorities/Outcomes										Borough Manifesto Vision/Priorities						
	Changing the transport mix	Healthy Streets and healthy people				A good public transport experience			New homes and jobs		One Borough. One Community. No-one left behind.						
		Active	Safe	Efficient	Green	Connected	Accessible	Quality	Good Growth	Unlocking	Health and Wellbeing	Employment and Enterprise	Safety	Skills and Education	Environment	Community Engagement	Housing
LIP Priority: Connecting people and places					Objective A: Enhancing public transport connectivity to enable growth Objective B: Improving accessibility for all to key services and facilities												
Barking Station capacity/ access improvements	✓		✓			✓	✓✓	✓✓	✓	✓			✓✓		✓		✓
Bus route capacity enhancements	✓✓		✓	✓	✓	✓✓	✓✓	✓✓	✓✓	✓✓		✓	✓	✓	✓		✓
New cycling/walking links	✓✓	✓✓	✓	✓	✓✓	✓			✓✓		✓✓	✓	✓	✓	✓✓	✓	
Demand-responsive bus services	✓✓		✓	✓	✓	✓✓	✓✓	✓✓	✓✓	✓		✓	✓	✓	✓	✓	✓
Enhancing the borough's bespoke travel services	✓		✓	✓	✓	✓✓	✓✓	✓			✓	✓	✓	✓	✓	✓	
Bus stop accessibility enhancements	✓	✓	✓				✓✓	✓			✓	✓	✓	✓			
Station access/shopping parade improvements	✓		✓✓	✓	✓	✓	✓✓	✓				✓	✓✓	✓	✓✓	✓	

Delivery Plan Measures/ Interventions	MTS Priorities/Outcomes										Borough Manifesto Vision/Priorities											
	Changing the transport mix	Healthy Streets and healthy people				A good public transport experience			New homes and jobs		One Borough. One Community. No-one left behind.											
		Active	Safe	Efficient	Green	Connected	Accessible	Quality	Good Growth	Unlocking	Health and Wellbeing	Employment and Enterprise	Safety	Skills and Education	Environment	Community Engagement	Housing					
Highway crossing access improvements	✓	✓	✓✓			✓	✓					✓	✓✓	✓	✓✓	✓						
LIP Priority: Promoting healthy, sustainable travel										Objective C: Encouraging active travel to improve health and wellbeing							Objective D: Facilitating green travel to improve air quality and reduce the impact on the environment					
Sustainable transport strategies for schools/ businesses/developments	✓✓	✓✓	✓	✓✓	✓✓				✓			✓✓	✓	✓	✓	✓✓	✓					
Borough-wide active travel/cycle training programme	✓✓	✓✓	✓✓	✓	✓✓				✓			✓✓	✓	✓✓	✓	✓✓	✓					
Pedestrian/cycling improvements	✓✓	✓✓	✓	✓	✓✓	✓			✓✓			✓✓	✓	✓	✓	✓✓	✓					
Cleaner/environmentally friendly vehicles	✓	✓		✓	✓✓			✓				✓✓				✓✓	✓					
Implementing 'green' infrastructure	✓	✓			✓✓			✓				✓✓				✓✓	✓					
Selective vehicle management measures	✓✓	✓	✓✓	✓	✓✓				✓			✓✓		✓		✓✓	✓					

Delivery Plan Measures/ Interventions	MTS Priorities/Outcomes										Borough Manifesto Vision/Priorities							
	Changing the transport mix	Healthy Streets and healthy people				A good public transport experience			New homes and jobs		One Borough. One Community. No-one left behind.							
		Active	Safe	Efficient	Green	Connected	Accessible	Quality	Good Growth	Unlocking	Health and Wellbeing	Employment and Enterprise	Safety	Skills and Education	Environment	Community Engagement	Housing	
Real time passenger information	✓	✓		✓✓		✓	✓	✓✓	✓			✓		✓		✓	✓	
LIP Priority: Improving safety and security										Objective E: Reducing the number of casualties on our roads Objective F: Improving safety and security across the transport network								
Corridor/junction road safety improvements	✓	✓	✓✓				✓	✓				✓		✓✓			✓	
Pedestrian/cyclist crossing facilities	✓	✓	✓✓			✓	✓					✓		✓✓			✓	
Innovative traffic calming/ reduction measures	✓✓	✓	✓✓	✓	✓			✓				✓		✓✓		✓	✓	
20mph zones	✓	✓	✓✓		✓							✓		✓✓		✓	✓	
Road safety education/ training	✓	✓	✓✓									✓		✓✓			✓	
Public safety and security enhancements	✓	✓	✓✓					✓				✓		✓✓			✓	

Delivery Plan Measures/ Interventions	MTS Priorities/Outcomes										Borough Manifesto Vision/Priorities						
	Changing the transport mix	Healthy Streets and healthy people				A good public transport experience			New homes and jobs		One Borough. One Community. No-one left behind.						
		Active	Safe	Efficient	Green	Connected	Accessible	Quality	Good Growth	Unlocking	Health and Wellbeing	Employment and Enterprise	Safety	Skills and Education	Environment	Community Engagement	Housing
LIP Priority: Creating better streets and places					Objectives G: Managing our road space more efficiently to tackle congestion Objective H: Transforming the public realm to create healthy, inclusive places												
Street scene enhancements	✓✓	✓✓	✓✓	✓✓	✓✓		✓	✓			✓	✓	✓✓	✓	✓✓	✓	
Corridor/junction congestion improvements	✓✓	✓	✓	✓✓	✓✓	✓		✓✓		✓	✓	✓	✓	✓✓	✓	✓	
Borough-wide freight strategy	✓		✓	✓✓	✓✓				✓		✓	✓	✓		✓✓	✓	
Maximising technology/ intelligent transport systems	✓		✓	✓✓	✓	✓		✓				✓	✓		✓		
Carriageway/footway resurfacing schemes	✓	✓	✓✓	✓	✓			✓			✓	✓	✓✓		✓	✓	
Highways Asset Management Plan review	✓		✓	✓✓	✓			✓				✓	✓		✓	✓	
KEY: ✓✓ High contribution to priorities/outcomes ✓ Lower contribution to priorities/outcomes																	

TfL Business Plan

3.2.13 In developing the Delivery Plan, the Council has also considered the Mayor's aspirations to deliver the main projects in TfL's Business Plan and the milestones associated with these. Details of the TfL projects which have implications for the borough and the opportunities that exist for undertaking complementary works in support of these schemes are set out in **Table 3.3**.

Table 3.3: TfL Business Plan schemes in Barking and Dagenham

TfL Project	Date	Borough Implications	Complementary Works
Opening of Elizabeth Line	2019	Commencement of full services likely to result in significant increase in passenger numbers arriving at/departing Chadwell Heath station, particularly at peak travel times.	Various public realm/station accessibility enhancements undertaken along Station Road as part of Crossrail Complementary Measures Programme in 2017. Scope for further pedestrian/cyclist improvements along Valence Avenue and the High Road.
Barking Riverside Overground extension	2021	Opening of Overground extension forecast to result in significant additional passenger interchange movements at Barking station and potential overcrowding on platforms/footbridge.	Range of station capacity/access improvements will be delivered in 2019 as part of C2C franchise commitments. Recent Barking station capacity study identifies the need for additional footbridge and possible new entrance at the western end of the station.
Ultra Low Emission Zone (ULEZ) expansion	2021	Expansion of ULEZ to North Circular could result in additional traffic/congestion on the borough road network and worsening air quality, especially from non-compliant vehicles seeking to avoid the charging zone.	Potential for introducing Low Emission Neighbourhoods (LENs) in those parts of the borough bordering the ULEZ, particularly Barking Town Centre which is an Air Quality Focus Area.
Modernisation of the Circle, District, Hammersmith & City and Metropolitan lines	2023	The Four Line Modernisation programme will result in 32 trains per hour running on the Circle, District and Hammersmith & City lines, adding significant extra capacity to the Underground network in the borough. However, significant improvements to station capacity/access arrangements are also required to accommodate the expected increase in passenger numbers.	Station access improvements were delivered outside Becontree station in 2017. Potential for delivering similar improvements outside Upney, Dagenham Heathway and Dagenham East stations during the course of the LIP. In the longer-term step-free access improvements are required at Becontree and Dagenham East stations.

Long-term Interventions to 2041

3.2.14 In the longer-term the Council considers that a number of significant, but currently unfunded, transport schemes and interventions will be required to ensure the delivery of Mayoral and borough priorities. These are summarised in **Table 3.4**.

Table 3.4: Long-term interventions

Scheme/ Intervention	Scope/Outcomes	Timeframe	Indicative Cost (£m)	Funding Source(s)	Alignment to Mayoral/ Borough Priorities/Outcomes
Rail Network/Infrastructure Improvements					
Barking - Stratford Rail Link	<ul style="list-style-type: none"> A direct rail connection from Barking to Stratford, served by existing C2C or future Elizabeth line services, to enhance connectivity to this important sub-regional hub and maximise the economic regeneration/growth potential of Barking Town Centre. 	By 2026	TBC	TfL, Network Rail, Developers	<p><i>MTS Outcomes:</i> Connected; Good Growth; Unlocking</p> <p><i>Borough Priorities:</i> Employment & Enterprise; Housing</p>
New Overground Station at Castle Green	<ul style="list-style-type: none"> The provision of a station at Castle Green on the recently approved London Overground Extension, to support the delivery of over 15,000 new homes in the area. 	By 2026	TBC	TfL, Central Government, BRL, Other developers	<p><i>MTS Outcomes:</i> Connected; Good Growth; Unlocking</p> <p><i>Borough Priorities:</i> Employment & Enterprise; Housing</p>
New C2C Station at Dagenham East	<ul style="list-style-type: none"> A new C2C mainline rail stop at Dagenham East station to bolster the ambitious plans for Londoneast-uk including the planned development of film studios. 	By 2026	TBC	C2C, TfL, Network Rail, LBBD, Developers	<p><i>MTS Outcomes:</i> Connected; Good Growth; Unlocking</p> <p><i>Borough Priorities:</i> Employment & Enterprise; Housing</p>

Scheme/ Intervention	Scope/Outcomes	Timeframe	Indicative Cost (£m)	Funding Source(s)	Alignment to Mayoral/ Borough Priorities/Outcomes
Other Station Improvements	<ul style="list-style-type: none"> Improvements to and the longer-term redevelopment of key borough transport interchanges of Barking, Dagenham Dock, Dagenham Heathway and Becontree stations to improve access, meet future passenger demand and unlock new homes. 	By 2031	TBC	C2C, TfL, Network Rail, LBBB, Developers	<p><i>MTS Outcomes:</i> Accessible; Quality; Good Growth; Unlocking</p> <p><i>Borough Priorities:</i> Employment & Enterprise; Safety; Housing</p>
Overground Extension - Barking Riverside to Abbey Wood	<ul style="list-style-type: none"> A future onwards extension of the Barking-Gospel Oak line from Barking Riverside to Abbey Wood to link to Crossrail services and maximise the growth potential of London Riverside and the wider sub-region. 	By 2031	TBC	TfL, Network Rail, LBBB, RBG, LBB, Developers	<p><i>MTS Outcomes:</i> Connected; Good Growth; Unlocking</p> <p><i>Borough Priorities:</i> Employment & Enterprise; Housing</p>
DLR Extension – Galleons Reach – Barking Station	<ul style="list-style-type: none"> A future onwards extension of the DLR from Galleons Reach to Barking Station to enhance connectivity to the Royal Docks and maximise the economic regeneration/growth potential of Barking Town Centre/London Riverside. 	By 2036	TBC	Central Government, C2C, TfL, LBBB, Developers	<p><i>MTS Outcomes:</i> Connected; Good Growth; Unlocking</p> <p><i>Borough Priorities:</i> Employment & Enterprise; Housing</p>
HS1 Station at Barking/ Dagenham Dock	<ul style="list-style-type: none"> Provision of new interchange station at Barking Station and/or Dagenham Dock to provide improved links between east London and central London, SE England and Europe and maximise the growth potential of Barking Town Centre/London Riverside. 	By 2041	TBC	Central Government, TfL, Network Rail, LBBB, Developers	<p><i>MTS Outcomes:</i> Connected; Good Growth; Unlocking</p> <p><i>Borough Priorities:</i> Employment & Enterprise; Housing</p>

Scheme/ Intervention	Scope/Outcomes	Timeframe	Indicative Cost (£m)	Funding Source(s)	Alignment to Mayoral/ Borough Priorities/Outcomes
Bus and Transit Network/Infrastructure Improvements					
Upper Roding Crossing	<ul style="list-style-type: none"> A new bus/transit river crossing between Abbey Road and Quay Road/Freshwharf Road in Barking Town Centre to link Barking to Gallions Reach and the Royal Docks and support the development of new homes/jobs in the Town Centre. 	By 2021	£5m – £7m	TfL, LBBD, Central Government, Developers	<p><i>MTS Outcomes:</i> Connected; Accessible; Quality; Good Growth; Unlocking</p> <p><i>Borough Priorities:</i> Employment & Enterprise; Environment; Housing</p>
Lower Roding Crossing	<ul style="list-style-type: none"> A new bus/transit river crossing, linking Barking Riverside with Beckton in Newham, to address the significant severance issues caused by the River Roding; link London Riverside to the Royal Docks, including Crossrail at Custom House and the DLR extension to Thamesmead; and act as a catalyst for the regeneration of existing industrial areas around Creekmouth/River Road and help the delivery of Stage 4 of Barking Riverside. 	By 2026	TBC	TfL, LBBD, Central Government, BRL, Other developers	<p><i>MTS Outcomes:</i> Connected; Accessible; Quality; Good Growth; Unlocking</p> <p><i>Borough Priorities:</i> Employment & Enterprise; Environment; Housing</p>
'City in the East' Transit	<ul style="list-style-type: none"> A north-south transit system connecting Marks Gate/Chadwell Heath to Barking Riverside/Dagenham Dock to address severance and support modal shift; An east-west transit system connecting the key town centres and growth areas in London Riverside to kick-start new developments and support modal shift. 	By 2031	TBC	TfL, LBBD, Developers	<p><i>MTS Outcomes:</i> Connected; Accessible; Quality; Good Growth; Unlocking</p> <p><i>Borough Priorities:</i> Employment & Enterprise; Environment; Housing</p>
New/Improved Bus Connections	<ul style="list-style-type: none"> New/Improved bus connections to stations and other public transport 	By 2031	TBC	TfL, LBBD, Developers	<p><i>MTS Outcomes:</i></p>

Scheme/ Intervention	Scope/Outcomes	Timeframe	Indicative Cost (£m)	Funding Source(s)	Alignment to Mayoral/ Borough Priorities/Outcomes
	interchanges and health and education facilities across the borough and wider sub-region to support modal shift, improve accessibility and support growth.				Connected; Accessible; Quality; Good Growth; Unlocking <i>Borough Priorities:</i> Employment & Enterprise; Skills & Education; Environment; Housing
River Navigation/Infrastructure Improvements					
River Passenger Services to/from Barking Riverside	<ul style="list-style-type: none"> Introduction of timetabled river passenger services to/from Barking Riverside to provide the borough with additional cross-river connectivity, a direct transport link to the key employment hubs of Canary Wharf and central London and relieve pressure on the local road/public transport networks. 	By 2021	TBC	GLA, TfL, PLA, Service Operators, Pier Owners, BRL, Other developers	<i>MTS Outcomes:</i> Green; Connected; Quality; Good Growth; Unlocking <i>Borough Priorities:</i> Health & Wellbeing; Employment & Enterprise; Safety; Environment; Housing
Highway Network/Infrastructure Improvements					
A13 Junction Improvements	<ul style="list-style-type: none"> Securing improvements to the Movers Lane, Lodge Avenue, Renwick Road and Goresbrook Interchange junctions on A13 to address issues of congestion, road safety and poor air quality and to enhance north/south connectivity. 	By 2026	TBC	TfL, LBBB, BRL, Other developers	<i>MTS Outcomes:</i> Safe; Efficient; Green; Connected; Quality; Unlocking <i>Borough Priorities:</i> Health & Wellbeing; Employment & Enterprise; Safety; Environment
A13 Riverside Tunnel	<ul style="list-style-type: none"> Relocating a 1.3km stretch of the A13 at Castle Green into a tunnel to improve congestion and air quality and to reduce severance in the area. Also offers the potential to deliver up to 15,000 new homes and 7,000 new jobs in the area, as well as helping to improve the 	By 2031	TBC	TfL, LBBB, Developers	<i>MTS Outcomes:</i> Safe; Efficient; Green; Connected; Quality; Unlocking <i>Borough Priorities:</i>

Scheme/ Intervention	Scope/Outcomes	Timeframe	Indicative Cost (£m)	Funding Source(s)	Alignment to Mayoral/ Borough Priorities/Outcomes
	character of the surrounding environment for the benefit of existing communities.				Health & Wellbeing; Employment & Enterprise; Safety; Environment; Community Engagement
Cycling and Walking Network/Infrastructure Improvements					
Barking - Chadwell Heath Strategic Cycle Link	<ul style="list-style-type: none"> A new segregated cycleway linking Barking to Crossrail services at Chadwell Heath to promote sustainable mode shift, help reduce congestion on the borough road network, improve local air quality and assist in the development of an attractive, healthy and active borough. 	By 2026	TBC	TfL, LBBD, Developers	<p><i>MTS Outcomes:</i> Active; Safe; Efficient; Green; Connected; Good Growth</p> <p><i>Borough Priorities:</i> Health & Wellbeing; Safety; Environment; Community Engagement</p>
Cycle Superhighway 3 Extension	<ul style="list-style-type: none"> An eastwards extension of Cycle Superhighway 3 to Dagenham Dock to encourage greater levels of cycling and enhance connectivity to and within the London Riverside Opportunity Area. 	By 2026	TBC	TfL, Developers	<p><i>MTS Outcomes:</i> Active; Safe; Efficient; Green; Connected; Good Growth</p> <p><i>Borough Priorities:</i> Health & Wellbeing; Safety; Environment; Community Engagement</p>

Source: LBBD Emerging Draft Local Plan/Infrastructure Delivery Plan (2018)

3.3 Funding Sources

- 3.3.1 The principal source of funding to implement the Delivery Plan will be the three-year Healthy Streets funding allocation from TfL, which comprises a range of formula, discretionary and strategic funding sources. The breakdown of the allocation for Barking and Dagenham is set out in **Table 3.5** and currently comprises £1.477 million in 2019/20 (through the formula-based Corridors, Neighbourhoods and Supporting Measures Programme and Local Transport Fund) and an indicative £2.954 million for the period 2020/21 – 2021/22.
- 3.3.2 Funding support for the upkeep of borough assets, such as the principal road network and bridge structures, has been reduced across London while TfL identifies a new, long-term funding stream for this work. Consequently, there is no funding available for the borough in 2019/20 and funding for subsequent years is still to be confirmed. In addition, the Council is not currently in receipt of any Liveable Neighbourhoods funding, but plans to submit a bid for funding in 2019 and will look to make additional funding bids in subsequent years.
- 3.3.3 The Council is currently working with TfL to develop a number of strategic cycling and bus priority schemes to be implemented in Barking and Dagenham over the course of the Delivery Plan (see paragraphs 3.4.5 – 3.4.8 for details). Specific funding allocations for these schemes are still to be confirmed.

Table 3.5: LBBB Healthy Streets funding allocation: 2019/20 – 2021/22

Funding Type	Programme	2019/20 (Confirmed)	2020/21 (Indicative)	2021/22 (Indicative)
Formula	Corridors, Neighbourhoods and Supporting Measures	£1,377,000	£1,377,000	£1,377,000
	Local Transport Fund	£100,000	£100,000	£100,000
Discretionary	Liveable Neighbourhoods	-	-	-
	Borough Assets	£0	TBC	TBC
Strategic*	Bus Priority	-	-	-
	Borough Cycling	-	-	-
	Other Healthy Streets	-	-	-
TOTAL:		£1,477,000	£1,477,000	£1,477,000

* Strategic schemes subject to separate allocations/bidding process with funding formally approved at the start of each financial year.

3.3.4 To support the implementation of the Delivery Plan, there is a range of other transport and related funding available to the Council from various sources, including the GLA, developers and other third parties. In addition, the Council's capital budget is a potential source of funding for projects, particularly highways maintenance schemes. **Table 3.6** provides a summary of the sources and levels of funding available over the next three years which includes:

- Circa £2.9 million in 2019/20 towards footway reconstruction and carriageway resurfacing works as part of the Council's Borough-wide Highways Improvement Programme;
- Around £400,000 through the GLA's 'Green Capital' initiative to implement a new cycling and walking greenway and linear park in Thames View in the south of the borough;
- Over £1.1 million through the Heritage Lottery Fund towards streetscape and conservation area improvements in Barking Town Centre;
- Over £800,000 of S106 funding for a range of transport, highways and public realm improvements across the borough, including locations in and around Barking Town Centre and Dagenham Dock.

Table 3.6: Other funding sources: 2019/20 – 2021/22

Funding Source	Programme	2019/20	2020/21	2021/22
Council Capital/ Revenue	Highways Improvement Programme	£2,920,000	TBC	TBC
GLA	Green Capital Grant (The Ripple Nature Reserve and Greenway)	£397,000	-	-
Heritage Lottery Fund (HLF)	Barking Town Centre Heritage Project	£500,000	£370,000	£275,000
Developer Funding (e.g. S106/CIL)	Various highways/public realm improvements	TBC	TBC	TBC
TOTAL:		£3,817,000	£370,000	£275,000

3.3.5 During the course of the LIP, we will look to secure additional funding through our partnership with a range of other stakeholders, including:

- **The Greater London Authority (GLA):** GLA Investment is targeted through a number of areas, including regeneration and economic development schemes; environmental projects; and arts, culture and health initiatives. The Council has recently submitted a bid for funding through the Mayor's Air Quality Fund (MAQF) as a means of implementing measures to address poor air quality in Becontree Heath – one of the borough's worst pollution hot spots and identified as a priority area for improvement by the GLA;

- **Central Government (e.g. DfT/DeFRA):** Working closely with the GLA and TfL, the Council has submitted a circa £180 million forward funding bid to the Housing and Community Agency (HCA) through the Housing Infrastructure Fund to deliver several key pieces of transport infrastructure as a means of unlocking upwards of 20,000 new homes in the borough. Priority schemes for the Council include the construction of the A13 Riverside Tunnel and the development of a new upper Roding bus/transit river crossing in Barking Town Centre.
- **London European Partnership for Transport (LEPT)/European Union:** The Council recently completed a European funded project to develop a Freight Travel Plan in Barking Riverside with the aim of mitigating the impact of commercial freight traffic in the area. We will consider submitting bids for additional funding for transport and related schemes over the course of this Delivery Plan;
- **Sustrans/Living Streets:** Funding is often available through these charitable organisations/campaign groups to undertake a variety of cycling and walking initiatives and promotions. We also have a Service Level Agreement in place with Sustrans and Living Streets to undertake a variety of cycling and walking promotions and activities within the Borough and will look at ways of expanding the remit of these over the course of the LIP.

3.4 Programme of Investment: 2019/20 – 2021/22

- 3.4.1 A summary of the schemes that the Council will deliver under the formula-based Corridors, Neighbourhoods and Supporting Measures Programme and Local Transport Fund programmes for 2019/20 – 2021/22 is set out in **Table 3.8**. Information on the detailed annual spending programme for 2019/20 is set out in **Annex F**. For each scheme an indication of costs and sources of funding are given. It is considered that the programme will go some way to addressing a variety of local issues, whilst also being consistent with the MTS.
- 3.4.2 The LIP Programme of Investment has been put together on the basis that funding will be as indicated in the latest TfL guidance. If a higher level of funding is available, then the programme will be extended. Similarly, if funding is lower than the indicative amount, then the programme will be reduced. In any event, the LIP programme is sufficiently flexible to allow resources to be transferred between projects or enable alternative schemes to be delayed/ brought forward.

Liveable Neighbourhoods Programme

- 3.4.3 In support of our plans for growing the borough, to enhance transport connectivity and accessibility, and to promote healthy, sustainable travel practices, we intend to submit a number of detailed bids for Liveable Neighbourhoods funding during the course of the LIP, including proposals for transformational schemes focused in and around the following areas:

- **Becontree Estate:** Transformational area-based scheme centred around the Council's plans to make Barking and Dagenham the 'Green Capital' of London. Involving radically improved conditions for walking and cycling; greening measures to improve air quality; 'smart city' measures to help drive modal shift; and improvements to neighbourhood centres, the aim is to make this iconic estate an exemplar of 21st century sustainable living in the same way it embodied 20th century garden city ideals;
- **Beam Park/A1306:** Area improvement scheme to tackle long-standing severance, congestion and safety issues caused by the A1306 and to improve connectivity between the existing communities to the north of the road and the planned new developments at Beam Park and the former Fords Stamping Plant site to the south. A key element of any scheme will be the removal of the busy Ballards Road gyratory to improve safety for pedestrians and cyclists and improve accessibility to local services.

Borough Assets – Key Priorities

3.4.4 Whilst there is no funding available from TfL in 2019/20 for the ongoing maintenance of the borough principal road network and assessment/strengthening of bridge and other highways structures, the Council has set out its priorities for investment for subsequent years should funding become available (see **Table 3.7**).

Table 3.7: Borough assets – priorities for investment: 2019/20 – 2021/22

Asset Type	Priority Locations	Indicative Cost
Principal Road Network	<ul style="list-style-type: none"> • St.Paul's Road – Ripple Road to Gascoigne Road, • St Paul's Road Roundabout; • Ripple Road – Upney Lane to Lodge Avenue; • Ripple Road - Movers Lane to Westbury Road; • Heathway – Oxlow Lane to Wood Lane; • Rainham Road South – Bull Roundabout to Shafter Road; • Abbey Road – London Road to Highbridge Road; • Wood Lane Roundabout (Civic Centre); • Wood Lane – Valence Wood road to Rowlands Road; • High Road – Mill Lane to Whalebone Lane North. 	TBC.
Bridge Structures*	<ul style="list-style-type: none"> • Ripple Road Flyover and Footbridge; • Queen's Road Bridge/Subway; • London Road Bridge; • Beam Bridge; • Gores Bridge; • Various highways culverts. 	TBC.

* Funding for Bridge assessment/strengthening coordinated through London Bridges Engineering Group (LoBEG).

Strategic Funding Programmes

- 3.4.5 The Borough Cycling programme is by far the largest of TfL's strategic funding programmes and is focused on improving conditions and facilities for cyclists as a means of encouraging more people to cycle in London. It forms a key component of the Mayor's vision for cycling in the capital. Circa £169 million has been earmarked in TfL's Business Plan for investment in schemes across London in the three-year period to 2021/22.
- 3.4.6 The Council is working closely with TfL to deliver elements of the Borough Cycling Programme in Barking and Dagenham, including developing options for a future route linking Ilford to Barking Riverside via Barking Town Centre. Details of routing, costs and timescales for delivery of this scheme are still to be determined.
- 3.4.7 The Council is currently working with TfL to develop a number of strategic bus priority schemes in Barking and Dagenham as a means of improving bus route connectivity and improving bus journey times in the borough. High profile schemes include:
- A corridor enabling scheme with road safety measure along Goresbrook Road which will increase the number of people within 400m of a bus stop;
 - A corridor based scheme with a range of complementary cycling and road safety improvements along Longbridge Road to reduce bus delays and improve conditions for vulnerable road users;
 - A corridor enabling scheme, including the potential for a new bridge over the River Roding as a means of increasing bus patronage in new development areas within Barking Town Centre.
- 3.4.8 A number of other, smaller, bus priority improvements across the borough are also being developed, including for locations along Ripple Road at St Paul's Road/Axe Street, King Edward's Road and Movers Lane; and at the junction of London Road/Abbey Road/Gurdwara Way in Barking Town Centre. These improvements were identified in TfL's 'City in the East' Growth Study which highlights the need for increased/improved bus services across East London. Details of specific measures, costs and timescales for delivery of these improvements are still to be determined. During the course of the LIP the Council will work with TfL to identify other locations within the borough where bus priority improvements may be beneficial.

Table 3.8: LIP Programme of Investment: 2019/20 – 2021/22

Scheme Name/ Location	Scheme Summary	Ward(s) Affected	Link to LIP Objectives, MTS Outcomes, Borough Manifesto Priorities	Indicative Costs 2019/20*	Indicative Costs 2020/21*	Indicative Costs 2021/22*
Corridors, Neighbourhoods and Supporting Measures Programme Indicative Allocation:				£1,377,000	£1,377,000	£1,377,000
Barking Station Improvements	Contribution to redevelopment costs of Barking Station to improve accessibility, passenger safety and relieve overcrowding. Key priority is the provision of step-free access between the station concourse and platforms. Improvements to be delivered by end of 2019/20 in line with C2C franchise requirements.	Abbey	<p><i>LIP Objectives:</i> Connecting people and places; Improving safety and security</p> <p><i>MTS Outcomes:</i> Accessible; Quality; Safe</p> <p><i>Manifesto Priorities:</i> Safety</p>	£875,000	-	-
Dagenham Heathway 'Healthy Streets' Corridor Improvements	Development/delivery of range of 'Healthy Streets' measures identified in recent scoping reports produced by Sustrans/ Living Streets to address a range of safety issues/road user conflicts in the area and increasing levels of walking and cycling to this major District centre. Focus will be on the provision of safe, accessible facilities for pedestrians/cyclists; introduction of measures to tackle localised congestion and improve air quality; and delivery of enhancements to the public realm. 2-year collaborative design and build scheme with main works undertaken in 2020/21.	Alibon, River, Village	<p><i>LIP Objectives:</i> Promoting healthy, sustainable travel; Improving safety and security; Creating better streets and places</p> <p><i>MTS Outcomes:</i> Active; Safe; Efficient; Green; Accessible</p> <p><i>Manifesto Priorities:</i> Health and Wellbeing; Safety; Environment; Community Engagement</p>	£50,000	£500,000	-

Scheme Name/ Location	Scheme Summary	Ward(s) Affected	Link to LIP Objectives, MTS Outcomes, Borough Manifesto Priorities	Indicative Costs 2019/20*	Indicative Costs 2020/21*	Indicative Costs 2021/22*
Valence Avenue 'Healthy Streets' Corridor Improvements	Development/delivery of range of 'Healthy Streets' measures with the aim of improving walking and cycling links between the Becontree Estate and the Elizabeth Line (Crossrail) station at Chadwell Heath. Focus will be on the provision of safe, accessible facilities for pedestrians/cyclists, including the potential for dedicated cycle facilities on the central reservation along Valence Avenue. 2-year collaborative design and build scheme with main works undertaken in 2021/22.	Valence, Parsloes	<p><i>LIP Objectives:</i> Promoting healthy, sustainable travel; Improving safety and security; Creating better streets and places</p> <p><i>MTS Outcomes:</i> Active; Safe; Efficient; Green; Accessible</p> <p><i>Manifesto Priorities:</i> Health and Wellbeing; Safety; Environment; Community Engagement</p>	-	£50,000	£500,000
'Greening the Fiddlers' - Becontree Heath Low Emission Neighbourhood	Community-led neighbourhood improvements scheme focused on reducing the dominance of vehicular traffic in Becontree Heath and creating a more welcoming, healthy place for everyone to enjoy; with the aim of encouraging more active, sustainable travel and delivering improvements to air quality in the area. Key elements include the creation of a 'Green Corridor' along Whalebone Lane South; the delivery of a 'Green Living Room' centred on the Merry Fiddlers shopping parade; and supported with a range of complementary behavioural and regulatory measures. Allocation represents match funding commitment in support of recent funding bid through the Mayor's Air Quality Fund.	Whalebone, Heath, Valence	<p><i>LIP Objectives:</i> Promoting healthy, sustainable travel; Improving safety and security; Creating better streets and places</p> <p><i>MTS Outcomes:</i> Active; Safe; Efficient; Green; Accessible</p> <p><i>Manifesto Priorities:</i> Health and Wellbeing; Safety; Environment; Community Engagement</p>	£100,000	£250,000	£100,000

Scheme Name/ Location	Scheme Summary	Ward(s) Affected	Link to LIP Objectives, MTS Outcomes, Borough Manifesto Priorities	Indicative Costs 2019/20*	Indicative Costs 2020/21*	Indicative Costs 2021/22*
Eastbury Manor House Access Improvements	Public realm enhancement scheme aimed at improving visitor access to and reflecting the Grade 1 listed status of Eastbury Manor House. Focused on Eastbury Square and surrounding streets, the scheme will deliver a range of 'Healthy Streets' improvements which will better meet the needs of visitors and reflect the requirements of residents. Priorities include the need to reduce the speed/dominance of vehicles; improve conditions for pedestrians/cyclists; and improve the quality of the street scene. The scheme will complement wider improvements underway at the manor house aimed at providing an enhanced visitor experience.	Eastbury	<p><i>LIP Objectives:</i> Connecting people and places; Improving safety and security; Creating better streets and places</p> <p><i>MTS Outcomes:</i> Active; Safe; Efficient; Green; Accessible</p> <p><i>Manifesto Priorities:</i> Health and Wellbeing; Safety; Community Engagement</p>	-	£50,000	£250,000
Station Access Improvements Programme – Upney and Dagenham East	Continuation of station access improvements programme aimed at providing high quality, attractive approaches to the borough's transport interchanges. Focusing on Upney and Dagenham East stations schemes will deliver improved walking, cycling and bus access to stations; improved safety and security and an enhanced public realm. Utilising our preferred approach of collaborative design and build, scheme delivery will be undertaken in 2020/21 (Upney) and 2021/22 (Dagenham East).	Longbridge, Eastbury, Eastbrook, Village	<p><i>LIP Objectives:</i> Connecting people and places; Promoting healthy, sustainable travel; Improving safety and security; Creating better streets and places</p> <p><i>MTS Outcomes:</i> Active; Safe; Connected; Accessible; Quality</p> <p><i>Manifesto Priorities:</i> Health and Wellbeing; Safety; Environment; Community Engagement</p>	£50,000	£250,000	£250,000

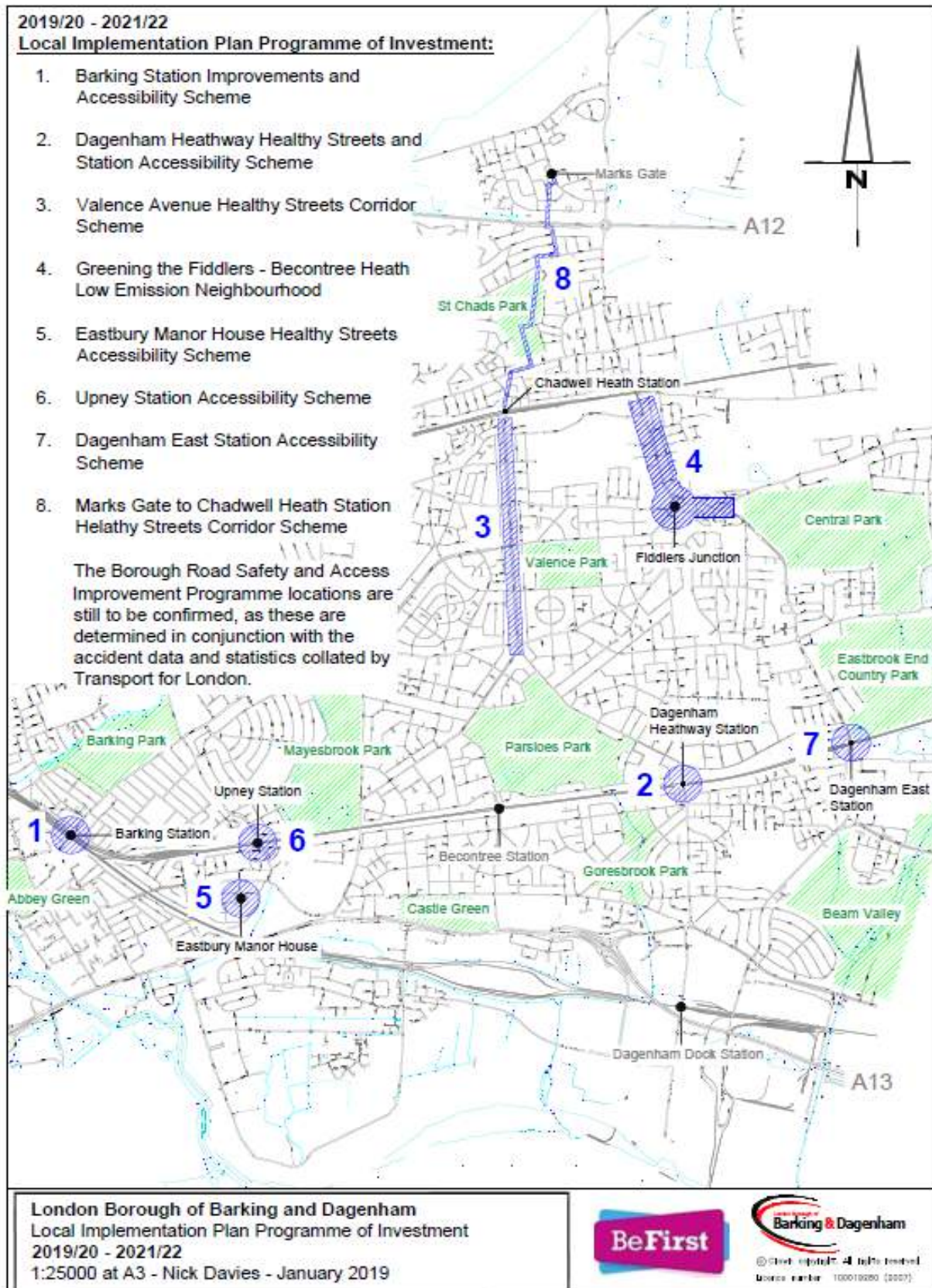
Scheme Name/ Location	Scheme Summary	Ward(s) Affected	Link to LIP Objectives, MTS Outcomes, Borough Manifesto Priorities	Indicative Costs 2019/20*	Indicative Costs 2020/21*	Indicative Costs 2021/22*
Marks Gate – Chadwell Heath Cycling Link	Introduction of a dedicated cycle route linking the Marks Gate Estate to the Elizabeth Line (Crossrail) station at Chadwell Heath, as a means of encouraging healthy, sustainable travel. Scheme will utilise the existing quiet, green routes of St. Chad's Park to provide a safe, direct cycle link, whilst seeking to address some of the key barriers/ accessibility issues.	Chadwell Heath	<p><i>LIP Objectives:</i> Connecting people and places; Promoting healthy, sustainable travel; Improving safety and security; Creating better streets and places</p> <p><i>MTS Outcomes:</i> Active; Safe; Green</p> <p><i>Manifesto Priorities:</i> Health and Wellbeing; Safety; Environment</p>	£75,000	-	-
Road Safety and Access Improvement Programme (Various Locations)	Small-medium scale, site specific road safety and access improvements in support of LIP objectives around reducing the number of casualties on our roads, improving access for all and promoting healthy/sustainable travel; and to complement the various corridor/ neighbourhood initiatives. Priorities tbc, but likely to focus on proposals for new neighbourhood 20mph zones, filtered permeability schemes and 'school gate' road safety/access improvements. Schemes will be guided by TfL 'Healthy Streets' and 'Vision Zero' approach.	All	<p><i>LIP Objectives:</i> Connecting people and places; Promoting healthy, sustainable travel; Improving safety and security; Creating better streets and places</p> <p><i>MTS Outcomes:</i> Active; Safe; Efficient; Green</p> <p><i>Manifesto Priorities:</i> Health and Wellbeing; Safety; Environment; Community Engagement</p>	£100,000	£150,000	£150,000

Scheme Name/ Location	Scheme Summary	Ward(s) Affected	Link to LIP Objectives, MTS Outcomes, Borough Manifesto Priorities	Indicative Costs 2019/20*	Indicative Costs 2020/21*	Indicative Costs 2021/22*
Borough-wide Healthy/Active Travel Programme	Continuation of work with borough schools, businesses and residents to promote healthy, active and sustainable travel practices. Funding earmarked for: <ul style="list-style-type: none"> Provision of cycle training to people of all ages/abilities and the delivery of various walking events/initiatives; Review/update of school and workplace travel plans, including funding for promotional events and small-scale physical measures. Includes contribution towards appointment of London Riverside Travel Coordinator. 	All	<i>LIP Objectives:</i> Promoting healthy, sustainable travel; Improving safety and security	£127,000	£127,000	£127,000
			<i>MTS Outcomes:</i> Active; Safe; Green			
			<i>Manifesto Priorities:</i> Health and Wellbeing; Safety; Environment; Community Engagement			
TOTAL:				£1,377,000	£1,377,000	£1,377,000
Local Transport Funding Indicative Allocation:				£100,000	£100,000	£100,000
Future Scheme Development (Various Locations)	Investigative studies to inform future LIP Corridor/Liveable Neighbourhood schemes. Focus will be on promoting healthy, active travel and on securing road safety/accessibility improvements.	All	<i>LIP Objectives:</i> Connecting people and places; Promoting healthy, sustainable travel; Improving safety and security; Creating better streets and places	£60,000	£60,000	£60,000
			<i>MTS Outcomes:</i> Active; Safe; Efficient; Green; Connected; Accessible; Quality			
			<i>Manifesto Priorities:</i>			

Scheme Name/ Location	Scheme Summary	Ward(s) Affected	Link to LIP Objectives, MTS Outcomes, Borough Manifesto Priorities	Indicative Costs 2019/20*	Indicative Costs 2020/21*	Indicative Costs 2021/22*
			Health and Wellbeing; Safety; Environment; Community Engagement			
Minor Works (Various Locations)	Ad-hoc measures such as pedestrian access improvements; small-scale public realm enhancements; implementation of cycle parking; reviews of parking and waiting/loading restrictions; etc.	All	<i>LIP Objectives:</i> Connecting people and places; Promoting healthy, sustainable travel; Improving safety and security; Creating better streets and places	£40,000	£40,000	£40,000
			<i>MTS Outcomes:</i> Active; Safe; Efficient; Green; Connected; Accessible; Quality			
			<i>Manifesto Priorities:</i> Health and Wellbeing; Safety; Environment; Community Engagement			
TOTAL:				£100,000	£100,000	£100,000
GRAND TOTAL:				£1,477,000	£1,477,000	£1,477,000

* Schemes funded through LIP Corridors, Neighbourhoods and Supporting Measures Programme unless otherwise stated.

Figure 3.2: Programme of Investment locations



3.5 Programme Prioritisation and Monitoring Arrangements

3.5.1 The processes involved in the prioritisation and management of the delivery programme comprise a number of interwoven strands:

- An agreed scheme prioritisation process;
- A clearly defined process to monitor programme progress;
- A robust system for reviewing the programme;
- Methods to identify and manage the risks to programme delivery.

Scheme Prioritisation

3.5.2 A simple scheme prioritisation process, based loosely on the DfT's New Approach to Appraisals (NATA) methodology, was used to determine the LIP Programme of Investment. This has helped ensure that schemes reflect the MTS vision/priorities; are consistent with the LIP objectives and delivery programme; address local problems and priorities (including those set out in the Borough Manifesto); provide value for money; and, above all, are deliverable. **Table 3.8** sets out how each of the schemes in the Programme of Investment links to the overarching LIP Objectives, MTS Outcomes and Borough Manifesto Priorities – the principal determinants of scheme selection.

Programme Monitoring and Review

3.5.3 Monitoring of the delivery of the LIP programme is currently achieved through regular contact between the Programme Manager and the teams/individuals responsible for the delivery of the various schemes. Monthly project management meetings are held where information on costs and progress of all schemes, both current and planned, is obtained. The availability of up to date information is integrated into the risk management process (see below).

3.5.4 The process of reviewing the overarching programme through the period of the LIP emerges, in part, from the above monitoring system. The programme could be amended, with schemes added/removed or brought forward/put back as a result of a change in Mayoral or borough priorities; the availability of funding; or the capacity of the Council and its partners to deliver schemes.

Managing Risk

3.5.5 As part of the Council's internal Capital Programme Monitoring (CPM) process, a risk assessment of the LIP Delivery Plan and Programme of Investment has been undertaken. The principal risks associated with the Delivery Plan include the failure to deliver planned measures; the relative effectiveness of selected measures; the quality of the data/information supplied; the roles/actions of others; and changes to funding levels. **Table 3.9** summarises the principal risks and mitigation measures in place to address these at a programme-wide level, whilst **Table 3.10** identifies the key risks/mitigation measures associated with individual scheme.

Table 3.9: LIP Delivery Plan – principal risks and mitigation measures

Risk	Impact	Likelihood	Mitigation Measures	Controls/Impacts
Schemes delayed/not completed	High	Low	<ul style="list-style-type: none"> Robust scheme prioritisation. Monthly project management meetings. Adequate staff resources to deliver schemes. 	<ul style="list-style-type: none"> Assessing schemes to ascertain their deliverability from the outset (both in terms of available resources and buildability) will prevent abortive work or uncompleted schemes. Regular project management meetings will help ensure that programme slippage is identified at an early stage so that remedial action can be taken to bring delivery back on track.
Schemes not effective	High	Low	<ul style="list-style-type: none"> Robust scheme prioritisation/review process. Fully flexible Delivery Plan. 	<ul style="list-style-type: none"> Scheme effectiveness determined at outset and reviewed regularly by observing best practice elsewhere and noting effectiveness of different types of intervention. Flexible Delivery Plan will enable emphasis/resources to be switched between schemes or new programmes considered where necessary.
Reliability of information/data	Medium	Low	<ul style="list-style-type: none"> Robust data collection/analysis techniques. 	<ul style="list-style-type: none"> Wide range of modern data sources available will ensure supply of more consistent data for identifying/assessing schemes. Council's Data Insight Hub also enables greater understanding of the significance/trends in data available.
Lack of support/cooperation from key stakeholders	High	Medium	<ul style="list-style-type: none"> Strong cooperative/partnership working arrangements. Stakeholder management plans 	<ul style="list-style-type: none"> Some aspects of programme delivery are dependent on close partnership working with neighbouring authorities and TfL (in the case of the TLRN). The support/cooperation of other stakeholders (e.g. developers, businesses, transport operators, residents) is also crucial.
Changes to funding levels	High	Medium	<ul style="list-style-type: none"> Confirmed funding allocation(s). 	<ul style="list-style-type: none"> Delivery Plan determined on the basis that funding will be as indicated in the original settlement letter from TfL. If a higher level of funding is available, then the programme can be extended. Similarly, if funding is lower than the indicative amount, then the programme will need to be reduced.

Table 3.10: LIP Programme of Investment – principal risks and mitigation measures

LIP Scheme	Key Risks	Overall Impact	Overall Likelihood	Mitigation Measures	Controls/Impacts
Barking Station Improvements	Programme delays/project overruns	High	Medium	<ul style="list-style-type: none"> Strong cooperative/partnership working arrangements. Monthly project management meetings. 	<ul style="list-style-type: none"> Scheme delivery is dependent on close partnership working with C2C. Regular project management meetings will help ensure that programme slippage is identified at an early stage so that remedial action can be taken to bring delivery back on track.
Dagenham Heathway 'Healthy Streets' Corridor Improvements	Adverse public reaction to proposed changes	High	Low	<ul style="list-style-type: none"> Strong cooperative/partnership working arrangements. Stakeholder management plans 	<ul style="list-style-type: none"> Potential lack of community buy-in to other aspects of LIP Programme. Appointment of experienced project partners using proven public engagement techniques.
Valance Avenue 'Healthy Streets' Corridor Improvements	Adverse public reaction to proposed changes	High	Low	<ul style="list-style-type: none"> Strong cooperative/partnership working arrangements. Stakeholder management plans 	<ul style="list-style-type: none"> Potential lack of community buy-in to other aspects of LIP Programme. Appointment of experienced project partners using proven public engagement techniques.
'Greening the Fiddlers' - Becontree Heath Low Emission Neighbourhood	MAQF bid not successful	Medium	Medium	<ul style="list-style-type: none"> Fully flexible Delivery Plan. Other funding sources. 	<ul style="list-style-type: none"> Flexible Delivery Plan will enable emphasis/resources to be switched between schemes or scheme priorities reviewed where necessary. Range of other potential funding sources currently being explored.
Eastbury Manor House Access Improvements	Increased demand for parking and/or parking pressures spread to adjoining areas	Medium	Low	<ul style="list-style-type: none"> Regular dialogue with residents/Eastbury Manor House 	<ul style="list-style-type: none"> Increase in localised congestion and journey time delays. Worsening of road safety conditions. Robust review of current parking supply/requirements planned.

LIP Scheme	Key Risks	Overall Impact	Overall Likelihood	Mitigation Measures	Controls/Impacts
Station Access Improvements Programme – Upney and Dagenham East	Adverse public reaction to proposed changes	High	Low	<ul style="list-style-type: none"> Strong cooperative/ partnership working arrangements. Stakeholder management plans. 	<ul style="list-style-type: none"> Potential lack of community buy-in to other aspects of LIP Programme. Appointment of experienced project partners using proven public engagement techniques.
Marks Gate – Chadwell Heath Cycling Link	Infrastructure does not have anticipated impact of raising awareness of and participation in cycling	Medium	Low	<ul style="list-style-type: none"> Consider alternative measures and/or use of incentives. 	<ul style="list-style-type: none"> Infrastructure delivery programme supported by comprehensive training and active travel programme.
Road Safety and Access Improvement Programme	Schemes not effective in reducing casualties	High	Low	<ul style="list-style-type: none"> Regular review of delivery/monitoring programme and dialogue with relevant stakeholders. 	<ul style="list-style-type: none"> Scheme effectiveness determined at outset and reviewed regularly by observing best practice elsewhere and noting effectiveness of different types of intervention. Infrastructure delivery programme supported by comprehensive training and active travel programme.
Borough-wide Healthy/Active Travel Programme	Fail to deliver expected behaviour change	High	Medium	<ul style="list-style-type: none"> Consider alternative campaigns and/or use of incentives. 	<ul style="list-style-type: none"> Potential that anticipated benefits are not realised. Appointment of experienced project partners using proven public engagement techniques.

4. Performance Management and Monitoring

4.1 Introduction

4.1.1 This chapter sets out the performance management and monitoring arrangements for the LIP. This is an essential element of the LIP process and will contribute to understanding progress in delivering the borough's objectives and, ultimately, the MTS outcomes.

Chapter 4 sets out:

- The targets and trajectories for the overarching MTS mode-share aim and nine outcome indicators (**section 4.2**);
- A summary of the systems in place for monitoring and reporting progress of the delivery indicators and targets (**section 4.3**).

4.2 LIP Indicators and Targets

4.2.1 The following section provides information on the LIP outcome indicators for which targets have been set. It includes details of the target value and date by which each target is to be reached, along with a summary of the actions needed and risks to achieve the targets. The indicators/targets are summarised in **Table 4.1**.

Overarching mode share aim – changing the transport mix

4.2.2 A key aim of the MTS is for 80% of all journeys to be made by active, efficient and sustainable modes – public transport, walking and cycling - by 2041. In recognition of this, boroughs have been set ambitious targets to increase walking, cycling and public transport mode share over this period.

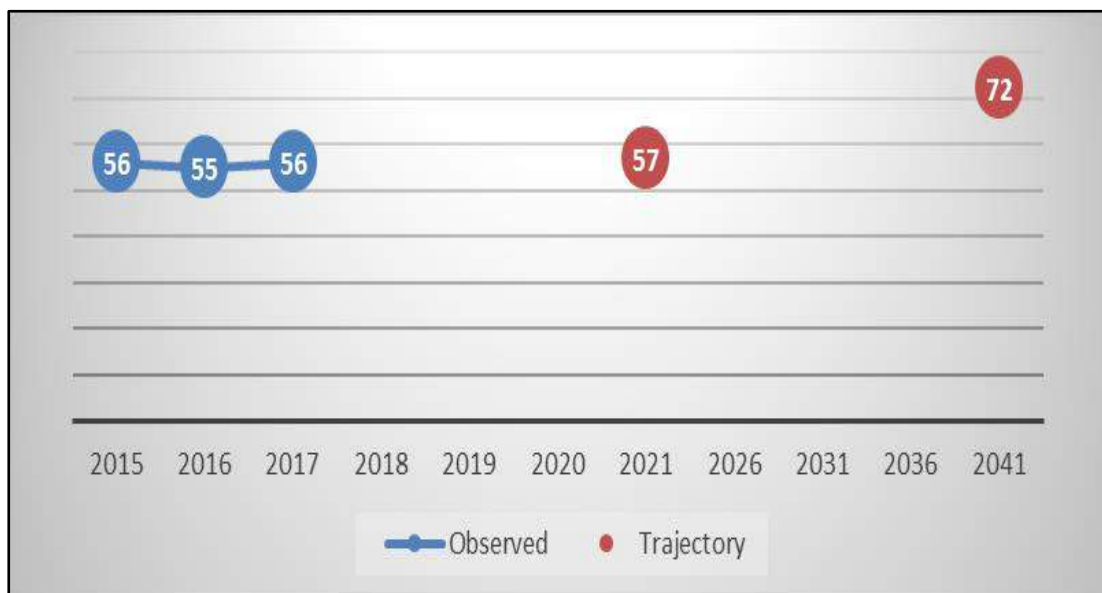
4.2.3 Figures for Barking and Dagenham reveal that currently 55% of average daily trips are made by walking, cycling and public transport. Our targets for sustainable mode share are 57% by 2021 and 72% by 2041 (see **Figure 4.1**).

4.2.4 As set out in **Chapter 3**, a variety of public transport initiatives; cycling and walking schemes; 'behaviour change' initiatives; traffic management/reduction measures; and highways and public realm enhancements will inform our approach to increase the proportion of travel by these modes. This in turn will help us achieve our LIP priorities of promoting healthy, sustainable travel and creating better streets and places and our Borough Manifesto priorities of improving health and wellbeing and improving the environment.

4.2.5 Achieving an increase in walking, cycling and public transport mode share is dependent on successful partnerships with a range of stakeholders, including

schools, residents, businesses and developers. We will also need to understand better the factors that influence travel mode. Another important factor is the significant levels of new development planned in the borough which, if not planned correctly, could impact on the Council's ability to increase sustainable mode share.

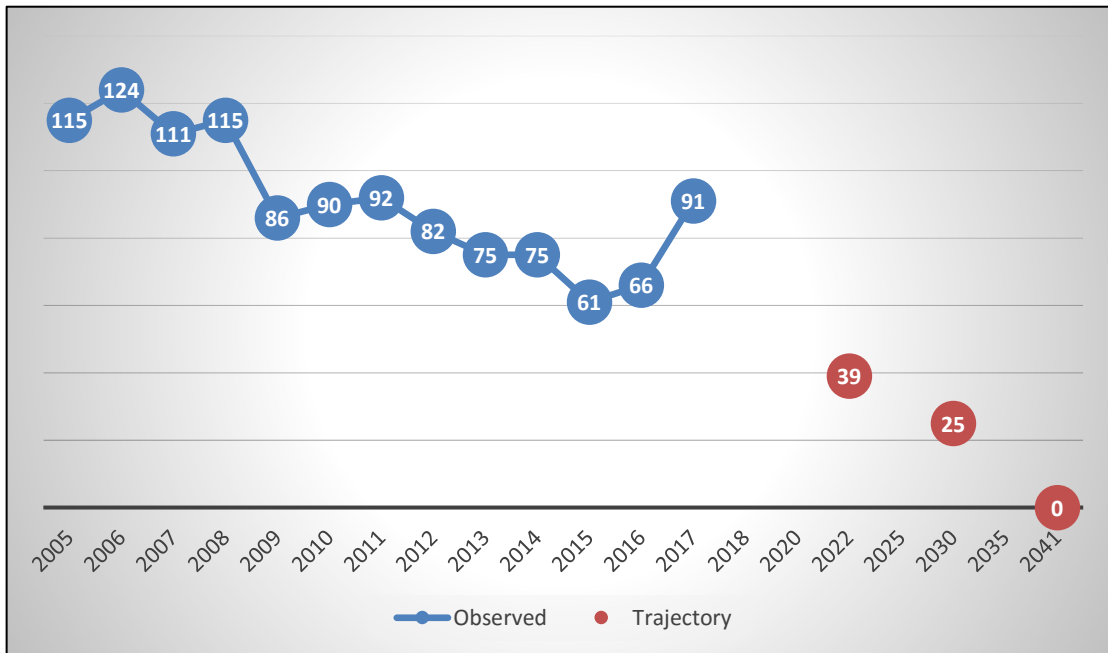
Figure 4.1: Borough Walking, cycling and public transport % mode share



MTS Priority: Healthy Streets and healthy people

- 4.2.6 Reducing casualties is at the heart of the Mayor's policies on road safety, and the number of people killed or seriously injured on London's roads continues on a downward trend. However, it is clear that more still needs to be done.
- 4.2.7 In line with the Mayor of London's 'Vision Zero' approach – which seeks to eliminate deaths and serious injuries from all road collisions across London (Outcome 2), Barking and Dagenham has been set a target of zero killed and seriously injured (KSI) casualties by 2041 (see **Figure 4.2**).

Figure 4.2: Borough Killed and seriously injured (KSI) casualties



Background to borough trajectories for Outcome 2 and Vision Zero

The Metropolitan Police Service (MPS) introduced a new collision reporting system in November 2016 - the Case Overview and Preparation Application (COPA). The City of London Police also moved to the Collision Reporting And SHaring (CRASH) system in October 2015. This has had a number of impacts on the data that is available to Transport for London (TfL), and the London Boroughs in the ACCSTATS database for collision investigation.

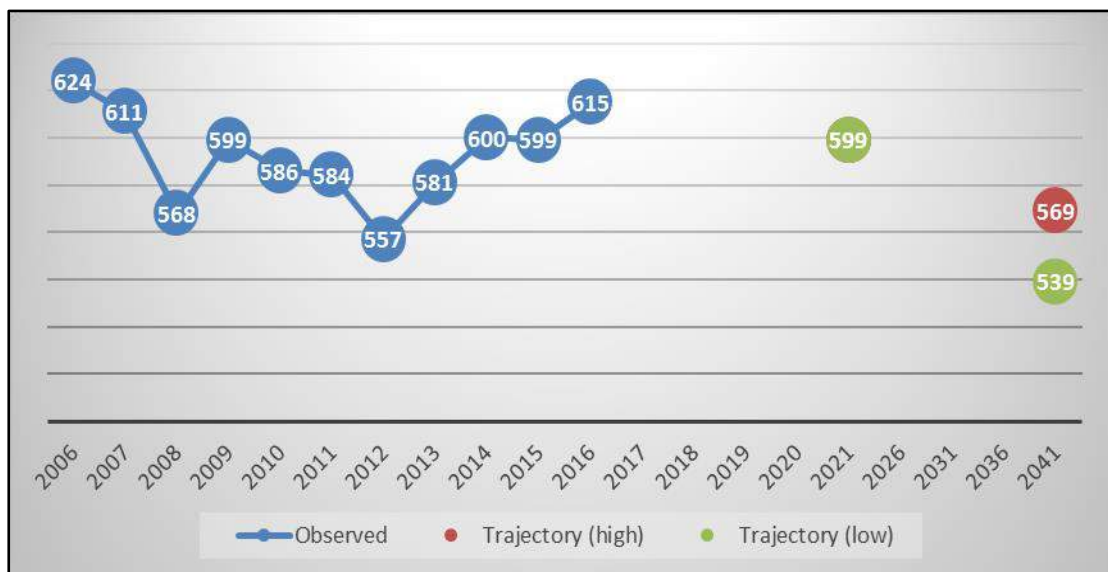
Under the new systems officers use an 'injury-based assessment' in line with DfT STATS 20 guidance and online self-reporting is available. Both of these changes are expected to provide a better assessment of injury occurrence and severity but have made data collected from November 2016 onwards difficult to compare with earlier data.

TfL commissioned the Transport Research Laboratory (TRL) to undertake a back-casting exercise to enable pre-November 2016 data to be compared with post November 2016 data. These initial back cast estimates include the number of people killed or seriously injured (KSI) for each borough between 2005 and 2017 and this data has been used to update borough targets to align with those contained in the Mayor's Transport Strategy, namely a 65 percent reduction in KSIs by 2022 against the 2005-09 baseline, a 70 percent reduction in KSIs by 2030 against the 2010-14 baseline and zero KSIs by 2041. The targets contained in this final version of our LIP have been set against Outcome 2 for Vision Zero to reflect the reporting changes. The level of ambition remains unchanged, despite these revised figures.

4.2.8 The Mayor has also set the borough ambitious targets against a range of other ‘Healthy Streets’ outcomes, including achieving by 2041:

- An increase in the percentage of people doing at least 20 minutes of active travel a day (MTS Outcome 1a);
- A 5-10% reduction in the volume of traffic on our roads (MTS Outcome 3a) (see **Figure 4.3**);
- A reduction in CO₂, NO_x, and particulate emissions (MTS Outcomes 4a–4d).

Figure 4.3: Borough traffic volumes – annual vehicle kms (millions)



4.2.9 As set out in **Chapter 3**, a variety of public transport initiatives; cycling and walking schemes; ‘behaviour change’ initiatives; traffic management/reduction measures; and highways and public realm enhancements will inform our approach to delivering these MTS outcomes. This in turn will help us achieve our LIP priorities of improving safety and security; promoting healthy, sustainable travel; and creating better streets and places and our Borough Manifesto priorities of improving safety; improving health and wellbeing; and improving the environment.

4.2.10 The main factors that could influence whether we achieve our casualty, traffic and emissions reduction targets are:

- The accuracy of the data recorded;
- The ability of TfL to reduce casualties, traffic levels and emissions on the TLRN;
- The level of planned growth in the borough and wider sub-region. If the Council’s ambitious plans for 50,000 new homes and 20,000 new jobs is not planned correctly this could increase congestion and air pollution and impact on the Council’s ability to reduce traffic growth and casualties.

MTS Priority: A good public transport experience

4.2.11 Providing a good public transport experience is one of the Mayor’s key priorities. Improving public transport reliability, particularly on the bus network, is one of the ways to achieve this and boroughs have been set targets to increase average bus speeds by between 5% and 15% by 2041 (Outcome 7). Average bus speeds in Barking and Dagenham are currently 10.6 mph. The aim is to achieve an increase in speeds to between 11.2 mph (based on a 5% increase) and 12.2 mph (a 15% increase) by 2041 (see **Figure 4.4**). The Mayor has also set the borough ambitious targets against two other public transport outcomes – increasing public transport use (Outcome 5) and making public transport safe, affordable and accessible to all (Outcome 6).

Figure 4.4: Borough average bus speeds (mph)



4.2.12 As set out in **Chapter 3**, a number of public transport initiatives; traffic management/reduction measures; highways and public realm enhancements and ‘behaviour change’ initiatives will inform our approach to delivering these MTS outcomes. This in turn will help us achieve our LIP priorities of connecting people and places; and promoting healthy, sustainable travel and our Borough Manifesto priority of improving the environment.

4.2.13 The main threats to our ability to increase bus speeds and improve bus service reliability include rising traffic levels, particularly along roads where congestion is sensitive to small increases; and the location and duration of road closures by statutory undertakers for the repair/upgrade of utilities. Where these problems occur along roads which fall outside the borough’s control (e.g. the TLRN, neighbouring borough roads), this has the potential to further impact on service reliability. As such a ‘whole corridor’ approach to improving bus service reliability, in partnership with TfL and neighbouring boroughs, is required.

MTS Priority: New jobs and homes

4.2.14 There are no indicators or targets set for the two outcomes under the MTS priority for delivering new jobs and homes.

Local targets

4.2.15 The Council has the option to set and monitor its own local targets for a number of MTS delivery indicators if required. Owing to pressures on resources, the decision has been taken not to set any at this stage. However, this will be kept under review and we will consider setting locally specific targets for a number of indicators during the course of this LIP. **Table 4.2** details the potential local targets for inclusion in the LIP.

4.3 Performance and Monitoring

4.3.1 The processes involved in performance management of the LIP targets are similar to that for the Delivery Plan and Programme of Investment (**see Chapter 3, Section 3.5**). It comprises a clearly defined processes to monitor target progress and methods to identify and manage the risks to targets. Monitoring of each indicator/target will be coordinated by the LIP Programme Manager, who will report progress to TfL using Proforma C each year.

4.3.2 As with the Delivery Programme, the principal risks associated with the delivery of the LIP targets include the quality of the data/information supplied; the failure to deliver planned measures; the relative effectiveness of selected measures; the role(s) of partners/stakeholders; and changes to funding levels. The principal risks and potential mitigation measures are summarised in **Table 3.9 in Chapter 3**.



Table 4.1: Borough outcome indicator targets

MTS Objective	Metric	Borough Baseline	2021 Target	2041 Target	Delivery Plan Measures to Achieve Targets
Overarching mode share aim – changing the transport mix					
Londoners' trips to be on foot, by cycle or by public transport	Active, efficient and sustainable (walking, cycling and public transport) mode share (by borough resident) based on average daily trips. Base period 2013/14 - 2015/16.	55%	57%	72%	<ul style="list-style-type: none"> • Public Transport Initiatives; • Cycling/Walking Schemes; • 'Behaviour Change' Initiatives; • Traffic Management/Reduction Measures; • Highways/Public Realm Enhancements.
MTS Priority: Healthy Streets and healthy people					
MTS Outcome 1: London's streets will be healthy and more Londoners will travel actively					
Londoners to do at least the 20 minutes of active travel they need to stay healthy each day	Proportion of London residents doing at least 2x10 minutes of active travel a day (or a single block of 20 minutes or more).	18% (2013/14 – 2015/16 observed)	28%	70%	<ul style="list-style-type: none"> • Cycling/Walking Schemes; • 'Behaviour Change' Initiatives; • Highways/Public Realm Enhancements.
Londoners have access to a safe and pleasant cycle network	Proportion of Londoners living within 400m of the London-wide strategic cycle network.	1% (2016 base)	4%	54%	<ul style="list-style-type: none"> • Cycling/Walking Schemes;
MTS Outcome 2: London's streets will be safe and secure					
Deaths and serious injuries from all road collisions to be eliminated from our streets	Deaths and serious injuries (KSIs) from road collisions, base year 2005/09 (for 2022 target).	110	39 (2022)	0	<ul style="list-style-type: none"> • Highways/Public Realm Enhancements; • Traffic Management/Reduction Measures; • 'Behaviour Change' Initiatives; • Cycling/Walking Schemes.
	Deaths and serious injuries (KSIs) from road collisions base year 2010/14 (for 2030 target).	83	25 (2030)	0	

MTS Objective	Metric	Borough Baseline	2021 Target	2041 Target	Delivery Plan Measures to Achieve Targets
MTS Outcome 3: London's streets will be used more efficiently and have less traffic on them					
Reduce the volume of traffic in London.	Vehicle kilometres in given year. Base year 2015. Reduce overall traffic levels by 10-15 per cent.	599 million	599 million	569m (high) 539m (low)	<ul style="list-style-type: none"> • Traffic Management/Reduction Measures; • 'Behaviour Change' Initiatives; • Public Transport Initiatives; • Cycling/Walking Schemes.
Reduce the number of freight trips in the central London morning peak.	10 per cent reduction in number of freight vehicles crossing into central London in the morning peak period (07:00am - 10:00am) by 2026.	N/A	N/A	N/A	N/A
Reduce car ownership in London.	Total cars owned and car ownership per household, borough residents. Quarter of a million fewer cars owned in London. Base period 2013/14 - 2015/16.	64,323 (avg)	63,800	64,100	<ul style="list-style-type: none"> • Traffic Management/Reduction Measures; • 'Behaviour Change' Initiatives; • Public Transport Initiatives; • Cycling/Walking Schemes.
MTS Outcome 4: London's streets will be clean and green					
Reduced CO ₂ emissions.	CO ₂ emissions (in tonnes) from road transport within the borough. Base year 2013.	135,600 tonnes	123,800 tonnes	41,100 tonnes	<ul style="list-style-type: none"> • Public Transport Initiatives; • Cycling/Walking Schemes; • 'Behaviour Change' Initiatives; • Traffic Management/Reduction Measures; • Highways/Public Realm Enhancements.
Reduced NO _x emissions.	NO _x emissions (in tonnes) from road transport within the borough. Base year 2013.	470 tonnes	190 tonnes	30 tonnes	
Reduced particulate emissions.	PM ₁₀ and PM _{2.5} emissions (in tonnes) from road transport within borough. Base year 2013.	46 (PM ₁₀) 26 (PM _{2.5})	40 (PM ₁₀) 19 (PM _{2.5})	29 (PM ₁₀) 14 (PM _{2.5})	

MTS Objective	Metric	Borough Baseline	2021 Target	2041 Target	Delivery Plan Measures to Achieve Targets
MTS Priority: A good public transport experience					
MTS Outcome 5: The public transport network will meet the needs of a growing London					
More trips by public transport - 14-15 million trips made by public transport every day by 2041.	Trips per day by borough of residence. Reported as 3yr moving average. Base year 2013/14 - 2015/16.	108,000	118,000	214,000	<ul style="list-style-type: none"> Public Transport Initiatives; 'Behaviour Change' Initiatives; Traffic Management/Reduction Measures.
MTS Outcome 6: Public transport will be safe, affordable and accessible to all					
Everyone will be able to travel spontaneously and independently.	Reduce the difference between total public transport network journey time and total step-free public transport network.	9 minutes (2015 observed)	-	4 minutes	<ul style="list-style-type: none"> Public Transport Initiatives; Traffic Management/Reduction Measures; Highways/Public Realm Enhancements.
MTS Outcome 7: Journeys by public transport will be pleasant, fast and reliable					
Bus journeys will be quick and reliable, an attractive alternative to the car.	Annualised average bus speeds, base year 2015/16.	10.6 mph	11.0 mph (high) 10.7 mph (low)	12.2 mph (high) 11.2 mph (low)	<ul style="list-style-type: none"> Public Transport Initiatives; Traffic Management/Reduction Measures.
MTS Priority: New homes and jobs					
MTS Outcome 8: Active, efficient and sustainable travel will be the best options in new developments					
No outcome indicators					
MTS Outcome 9: Transport investment will unlock the delivery of new homes and jobs					
No outcome indicators					

Table 4.2: Potential borough local targets

Target	Rationale	Link to MTS Priorities/Outcomes	Link to LIP and Borough Manifesto Priorities/Objectives
Increasing the percentage of trips to school by non-car modes.	A key aim of our active travel and school travel programmes is to increase the number of children who walk or cycle to school and considerable success has been achieved in recent years. However, travel by car is still high in some parts of the borough and we are keen to reduce this.	<ul style="list-style-type: none"> • Changing the transport mix • Active (Outcome 1) • Safe (Outcome 2) • Efficient (Outcome 3) • Green (Outcome 4) • Connected (Outcome 5) 	<p><i>LIP Priorities:</i></p> <ul style="list-style-type: none"> • Promoting healthy, sustainable travel • Improve safety and security <p><i>Borough Manifesto Priorities:</i></p> <ul style="list-style-type: none"> • Improving health and wellbeing • Improving safety • Improving the environment
Reducing the rate of pedestrian and cyclist casualties on the borough's roads.	This is a key aspect of our Delivery Plan approach to improving safety across the local transport network, particularly as the borough is amongst the poorest performing in London in terms of the rate of casualties in these areas when taking into consideration the relatively low number of walking and cycling trips..	<ul style="list-style-type: none"> • Changing the transport mix • Active (Outcome 1) • Safe (Outcome 2) • Green (Outcome 4) 	<p><i>LIP Priorities:</i></p> <ul style="list-style-type: none"> • Promoting healthy, sustainable travel • Improve safety and security <p><i>Borough Manifesto Priorities:</i></p> <ul style="list-style-type: none"> • Improving health and wellbeing • Improving safety • Improving the environment
Reducing average bus journey times/increasing average bus speeds on specific borough bus routes.	TfL has recently undertaken analysis of those bus routes in the borough that experience journey time reliability issues or are subject to frequent delays and have identified a range of improvements for delivery through the Bus Priority Programme. We will consider setting a local bus journey time/speed target to determine the effectiveness of these measures.	<ul style="list-style-type: none"> • Changing the transport mix • Connected (Outcome 5) • Quality (Outcome 7) 	<p><i>LIP Priorities:</i></p> <ul style="list-style-type: none"> • Connecting people and places • Promoting healthy, sustainable travel <p><i>Borough Manifesto Priorities:</i></p> <ul style="list-style-type: none"> • Improving the environment

Annex A: LIP Mandatory Requirements

A.1 Introduction

A.1.1 As part of the development of the LIP, the Council is required to address a number of mandatory requirements, including the need to identify a set of transport objectives and to produce a costed and funded Delivery Plan and to set out how these will help deliver the MTS policies and proposals. **Table A1** identifies where in the LIP the requirements have been addressed.

Table A1: LIP Mandatory Requirements

Requirement	Where addressed in the LIP
Mandatory Requirements	
1. Where boroughs do not use the model template and provide their submission in a different format, they must provide an index to their responses cross-referenced to all the mandatory requirements as defined in this guidance.	Cpt 1, S 1.1, Para 1.1.4, Annex A
2. Boroughs are required to include in their LIP an explanation of the statutory background of the LIP process.	Cpt 1, S 1.1, Para 1.1.2,
3. Boroughs are required to outline the democratic processes taken to approve the submission of the LIP at a borough level.	Cpt 1, S 1.3, Para 1.3.3, Table 1.2
4. Boroughs are required to provide evidence to show that all statutory consultees and any other organisations/groups have been engaged with during the formal statutory consultation period. They must also demonstrate how the views of their consultees have been taken into account.	Cpt 1, S 1.3, Para 1.3.2, Annex C
5. There is a requirement to undertake a Strategic Environmental Assessment and it is recommended that an Equalities Impact Assessment is also done (which addresses the borough's Public Sector Equality Duty). The boroughs are required to consider whether it is appropriate for the LIP to be assessed against other matters, for example crime and disorder, health, economic and business issues, air quality and climate change.	Cpt 1, S 1.4, Para 1.4.1, Table 1.3, Annex D and E
6. Boroughs must meet all of the following requirements for the submission of their LIP set out below under the following headings: <ul style="list-style-type: none"> a. Name of document; b. Submitting the document to TfL; c. Submission milestones. 	Title Page, Cpt 1, S 1.3, Para 1.3.3, Table 1.2

Requirement	Where addressed in the LIP
7. Boroughs are required to set out the local context including the geographical, demographic and other characteristics of their boroughs, cross-referencing existing policy and context documents as appropriate.	Cpt 2, S 2.2 – 2.3, Paras 2.2.1 – 2.3.2, Figures 2.1 – 2.3, Tables 2.1 – 2.2
8. Boroughs are required to identify key opportunities for shifting trips and journey stages to walking, cycling and public transport to contribute to achieving the overarching aim for 80 per cent of trips to be made by active, efficient and sustainable modes by 2041.	Cpt 2, S 2.4, Paras 2.4.2 – 2.4.3, Table 2.3
9. Boroughs are required to set out local issues, challenges and opportunities within the context of contributing towards the achievement of the nine Mayor’s Transport Strategy outcomes and the relevant policies and proposals.	Cpt 2, S2.4, Paras 2.4.4 – 2.4.23, Figures 2.4 – 2.9
10. Boroughs are required to set objectives that explicitly assist with meeting the Mayor’s Transport Strategy aim of increasing the sustainable travel mode share.	Cpt 2, S 2.5, Para 2.5.11, Table 2.4
11. Boroughs are required to identify a set of locally specific LIP objectives that contribute to achieving the nine outcomes of the Mayor’s Transport Strategy, and the relevant policies and proposals.	Cpt 2, S 2.5, Para 2.5.7 – 2.5.10, Table 2.4
12. Other Mayoral strategies are also relevant to LIPs, and boroughs should have regard to these as they are published.	Cpt 1, S 1.2, Para 1.2.1, Figure 1.2, Annex B
13. Boroughs are required to outline projects and programmes that contribute to the delivery of the Mayor’s Transport Strategy – including the overarching mode share aim, each of the nine outcomes and the relevant policies and proposals – in preparing a Delivery Plan.	Cpt 3, S 3.2, Paras 3.2.3 – 3.2.12, Table 3.2
14. When preparing their LIPs, boroughs are required to take into account the major projects and investment in all modes of transport, as well as the investment in the road network that may impact on their borough, as set out in the TfL Business Plan.	Cpt 3, S 3.2, Para 3.2.13, Table 3.3
15. Boroughs are required to identify all interventions that are intended to be wholly or partly funded using LIP funding in the borough’s Programme of Investment. Boroughs should identify the proposed funding source for each of these interventions, i.e. how much is from LIP funding allocations and how much comes from other sources (for example, the council’s own capital and revenue sources, Section 106/CIL contributions, or other sources of TfL/GLA funding, such as Growth Areas).	Cpt 3, S 3.3, Paras 3.3.1 – 3.3.5 Tables 3.5 and 3.6
16. Boroughs are required to provide a list of potential schemes up until 2041, together with a short explanation of the reasons for their inclusion in the Delivery Plan.	Cpt 3, S 3.2, Para 3.2.14, Table 3.4

Requirement	Where addressed in the LIP
17. Boroughs are required to produce a costed and funded high-level indicative Programme of Investment that covers, by year, the three-year period 2019/20 to 2021/22.	Cpt 3, S 3.4, Paras 3.4.1 – 3.4.8 Tables 3.7 and 3.8
18. Boroughs are required to provide supporting commentary on: <ul style="list-style-type: none"> a. How the three-year Programme of Investment has been derived, including how potential interventions have been identified and prioritised, and practical considerations relating to timescales, capacity and consultation; b. The role of revenue-based investment, policy decisions, and third-party actions (including commitments outlined in TfL’s Business Plan and investment programme) in delivering the borough’s LIP objectives; c. How the delivery of the Mayor’s priorities will be supported at a local level. 	Cpt 3, S 3.5, Paras 3.5.2 – 3.5.4 Cpt 3, S 3.2 Paras 3.2.3 – 3.2.12, Table 3.2
19. Boroughs are required to include a concise section on risk assessment and mitigation in preparing and considering options for their Delivery Plan.	Cpt 3, S 3.5, Para 3.5.5, Table 3.9
20. Boroughs are required to provide a detailed and costed programme of schemes and initiatives for the first year of the plan, with the programme to be updated in subsequent years. Boroughs should submit their Programme of Investment using Proforma A (as shown at Part three – Appendix F). Proformas will need to be uploaded to the Borough Portal.	Annex F
21. Boroughs are required to provide supporting commentary on: <ul style="list-style-type: none"> a. How the annual Programme of Investment has been derived, including how potential interventions have been identified and prioritised, and practical considerations relating to timescales, capacity and consultation; b. The role of revenue-based investment, policy decisions, and third-party actions (including commitments outlined in TfL’s Business Plan and investment programme) in delivering the borough’s LIP objectives; c. How the delivery of the Mayor’s priorities will be supported at a local level. 	Cpt 3, S 3.5, Paras 3.5.2 – 3.5.4 Cpt 3, S 3.2 Paras 3.2.3 – 3.2.12, Table 3.2
22. Boroughs are required to identify any projects that have significant potential of risk within the planned programme of works and identify any mitigation measures for these high-risk projects.	Cpt 3, S 3.5, Para 3.5.5, Table 3.9
23. Boroughs are required to set targets against the overarching mode share aim and the nine outcomes using their respective outcome indicators.	Cpt 4, S 4.2, Paras 4.2.1 – 4.2.15 Tables 4.1 and 4.2 Figures 4.1 – 4.4
24. Boroughs are required to collect this information and submit it to TfL using Proforma C on at least an annual basis.	Cpt 4, S4.3, Para 4.3.1

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Annex B: LIP Policy and Programme Influences

Plan/Strategy	Key Issues/Opportunities	LIP Approach
Mayoral Plans/Policies		
<p>The Draft London Plan (December 2017)</p>	<p>The draft London Plan places a strong emphasis on sustainable infrastructure, efficiency and resilience and seeks to capitalise on ‘good growth’ opportunities to become a smart and sustainable city, requiring developments to contribute towards becoming a zero-carbon city by 2050. A key policy in the draft Plan is the healthy streets approach which is designed to improve air quality, reduce congestion and help make London’s diverse communities greener, healthier and more attractive places to live, work, play and do business.</p>	<p>The LIP advocates close partnership working with developers to ensure the delivery of patterns of land use that facilitate residents making shorter, regular trips by walking or cycling. Key priorities include the need for development proposals to deliver improvements that support the Healthy Streets Indicators; reduce the dominance of vehicles on the borough’s streets; and provide a high quality, attractive public realm which designs physical activity back into people’s everyday lives.</p>
<p>London Environment Strategy (May 2018)</p>	<p>The London Environment Strategy highlights the need for significant improvements to the Capital’s environment to ensure that London’s growth is good growth and to transform Londoners’ health and wellbeing. Central to the strategy is the need to make the city greener, cleaner and more resilient – all with the aim of making London a zero-carbon city by 2050. Key priorities include the need to dramatically improve air quality, reduce noise and waste.</p>	<p>Our approach to improving the local environment and improving the health and wellbeing of the borough’s residents is closely aligned to that of the London Environment Strategy. Our aim is to make Barking and Dagenham greener - by planting more trees and making green spaces more accessible; and cleaner – by cleaning up the air around schools and rolling out sustainable drainage systems. Above all, we aim to make the borough’s streets and public spaces accessible to all, rather than just for cars and other vehicles to move through.</p>
<p>London Housing Strategy (May 2018)</p>	<p>Building the right number and the right mix of new homes, and addressing the consequences of the housing crisis, are part of the Mayor’s vision for good growth as set out in the London Housing Strategy. Among the key priorities include the need to build more homes for Londoners – to be achieved, in part, through investment in new transport infrastructure and services; and developing high-quality homes and inclusive neighbourhoods – for which securing improvements to the public realm and green infrastructure within which housing is set is critical.</p>	<p>The LIP outlines the need for the Council to work closely with partners, including TfL and developers to secure a range of new transport infrastructure to support the development of 50,000 new homes in Barking and Dagenham. Over the course of the LIP schemes such as new rail, bus and transit links; river crossings; and the undergrounding of a section of the A13 will all be critical to support the borough’s ambitious growth and homes targets. In addition, to ensure high-quality and inclusive neighbourhoods are achieved, the LIP also proposes greater investment in cycling and walking infrastructure.</p>

Plan/Strategy	Key Issues/Opportunities	LIP Approach
The London Health Inequalities Strategy (September 2018)	Addressing the wider determinants of health to improve conditions for Londoners sits at the heart of the London Health Inequalities Strategy. Among the key aims identified to tackle inequalities and achieve the Mayor's vision include ensuring that every child has a healthy start in life; all Londoners benefit from an environment and economy that promotes good mental and physical health; and the healthy choice is the right choice for all Londoners. Key ambitions include for the Capital to have the best air quality of any major global city and for all Londoners to do the physical activity they need to stay healthy.	A key ambition of the LIP is to make it easy for all those living and working in Barking and Dagenham to live healthier everyday lives. This includes enabling people to be more physically active - including through opportunities for active travel; and ensuring that the borough's 'places' – where people live, work and play - support good health. This means ensuring that people have access to green spaces and clean air. A key priority is the need for more children to achieve a healthy weight and reduce childhood obesity. Providing children in the borough with environments that help them to play and socialise healthily and safely will help achieve this.
The Mayor's Economic Development Strategy for London (December 2018)	The Economic Development Strategy highlights that despite its international connections, London's transport system faces major capacity constraints, including growing levels of overcrowding on the rail network and congestion on the streets. The Capital's future success will therefore depend on investing in new public transport capacity and encouraging more people to switch from private vehicles to walking and cycling.	The LIP highlights how the Council will work closely with the GLA, TfL and a range of other stakeholders to secure the investment in the borough's transport network and services as a means of helping sustain London's competitiveness, whilst ensuring that Barking and Dagenham residents can access work and study opportunities.
Mayor of London's Culture Strategy (December 2018)	The Culture Strategy recognises the vital role that culture can play in retaining London's status as a cultural powerhouse. However, achieving this will require a range of inequalities to be addressed. This will require investment in infrastructure and planning. Among the key priorities set out in the strategy are the need for more people to experience culture and to support, save and sustain cultural places and spaces.	The Council has an important role to play in enabling residents and visitors to access and experience the borough's various cultural experiences, including its parks, museums and leisure facilities. Through the LIP we will seek to secure investment in the local transport network and services as a means of improving access to and preserving the status of our cultural places and spaces.

Plan/Strategy	Key Issues/Opportunities	LIP Approach
Borough Plans/Policies		
Corporate Plan (2018-2022)	The Corporate Plan sets out the vision and priorities for Barking and Dagenham based on how those living and working in the borough would like to see it develop. The overarching vision is to ensure 'no one left behind' and is underpinned by four core priorities – including encouraging civic pride; enabling social responsibility; and growing together. Key objectives include the need to enhance the borough's image to attract investment and business growth; and growing the borough in an inclusive and environmentally sustainable way.	The LIP has been guided by the Corporate Plan with many of its commitments imbedded into the LIP Delivery Plan. For example, the LIP details how the Council will seek to implement its Highways Improvement Strategy and funded programme with the intention of improving conditions and perceptions of the quality of roads and pavements as a means of encouraging civic pride; and implement behavioural change campaigns to improve health outcomes and help tackle issues such as obesity – as a means of enabling social responsibility. The LIP also highlights a range of significant, longer-term transport schemes required to grow the borough.
Growth Strategy (2013-2023)	The Growth Strategy sets out how the Council intends to capitalise on the borough's excellent location, the availability of land, and affordable prices locally to drive growth and deliver 50,000 new homes and 10,000 new jobs over the next 20 years. Among the key priorities are the need to attract investment; create a higher skilled workforce; build businesses; and widen the housing choice.	Transport is critical to achieving a number of the objectives of the Growth Strategy and this is reflected in the LIP. For example, significant investment in new transport infrastructure and services, in particular, new rail, bus and transit routes is critical for ensuring that the Council can deliver new homes and widen housing choice. Similarly, securing improvements to the borough road network - to reduce traffic bottlenecks and vehicle delays, will help us build businesses.
Emerging Draft Local Plan (2019)	Underpinning the Growth Strategy is the Council's emerging Local Plan - the key strategic planning document used to shape growth in the borough. When completed, the Local Plan will include targets for the number of homes and jobs to be delivered in the borough over a 15-year period. It will also set out the Council's requirements for new transport links and facilities such as schools and health centres to meet the needs of new and existing residents; and its approach to protecting and enhancing those features in the borough which people cherish - such as parks and historic buildings.	The ambitious growth plans set out in the Local Plan, including significant new housing and employment provision, will bring new populations into the borough and intensify the use of the transport network in east London. In this context, the LIP highlights the need for investment in the strategic transport network - including the need for high quality strategic transport connections into, out of and through Barking and Dagenham. In addition, the requirement in the Local Plan for a more joined-up and sustainable local transport network that maximises opportunities for walking, cycling and using public transport sits at the heart of the LIP.

Plan/Strategy	Key Issues/Opportunities	LIP Approach
<p>Health and Wellbeing Strategy (2015-2018); Healthy Weight Strategy (2016-2020)</p>	<p>The two strategies set out the vision for improving the health and wellbeing of residents in Barking and Dagenham and reducing inequalities at every stage of people's lives. Among the challenges to be addressed include population growth, driven by a high birth rate; high levels of lifestyle risk including obesity and physical inactivity; continued high death rates from various diseases, especially heart and chronic lung disease. Key priorities of the strategies include ensuring more children, adults and elderly people take part in regular physical activity, including active forms of travel such as cycling and walking.</p>	<p>The LIP has an important role to play in helping to deliver the objectives of the Health and Wellbeing and Healthy Weight Strategies, including increasing the life expectancy of the borough's residents and promoting physical activity. For example, the implementation of new pedestrian and cycling schemes; the development of sustainable travel strategies for schools and businesses; and the continuation of our highly successful borough-wide 'Active Travel' and cycle training programmes will help facilitate healthier and 'greener' travel practices amongst children and adults.</p>
<p>Culture Strategy (2017-2022); Heritage Strategy (2016-2020)</p>	<p>The Culture and Heritage Strategies outline the ambitions for culture in Barking and Dagenham and to promote the borough's diverse heritage. The strategies highlight the role that culture and heritage can play in supporting the local economy; strengthening the distinctive identity of the borough; and breaking down barriers between people. In particular, the strategies emphasis how culture and heritage have a critical part to play in ensuring that communities benefit from the new opportunities that will arise from the major physical changes that are occurring in the borough.</p>	<p>The objectives of the Culture and Heritage Strategies are embedded into the LIP. Securing investment in our major cultural and heritage sites is a key priority, as is improving access by public transport, cycling and walking to local leisure facilities and cultural attractions. Among the proposal included in the LIP Delivery Plan are a range of public realm enhancements to improve visitor access to and reflect the Grade 1 listed status of Eastbury Manor House. A 'co-design' approach, involving the local community and other stakeholders, will be central to the development and delivery of the scheme.</p>
<p>Parks and Open Spaces Strategy (2017-2027)</p>	<p>The Parks and Open Spaces Strategy outlines the Council's ambitions for green spaces in the borough. The strategy assesses the quality, quantity and accessibility of existing provision for parks and open space and provides an assessment of future needs. It highlights the need for new public open space to be provided to support the borough's ambitious housing targets and for existing parks and green spaces to benefit local communities.</p>	<p>Providing safe and secure infrastructure to encourage greater levels of cycling and walking, especially for shorter journeys, represents one of the best ways of addressing challenges around poor health and inactivity. The borough's extensive network of parks and green spaces provide an excellent opportunity to achieve this. The LIP sets out the Council's ambitions to develop a network of safe, continuous cycle routes and to create attractive, safe and accessible walking routes, including to and through our parks and green spaces. The implementation of new green spaces, such as 'parklets' will also help improve air quality and reduce environmental impact.</p>

Annex C: Consultation and Engagement

C.1 Introduction

C.1.1 Wide-ranging consultation, participation and partnership working have been central to the development of the LIP. Details of the various engagement and consultation activities undertaken and the outcomes of these are summarised below.

C.2 Pre-Consultation Engagement

C.2.1 A number of public engagement exercises to inform the development of the draft LIP were undertaken in Spring 2018. These included a series of meetings and workshops involving representatives of local interest/amenity groups; and an online questionnaire seeking the views of the wider public on the transport issues that most affected them.

C.2.2 Consultees were asked a series of questions (below) concerning their experience of travel and transport in Barking and Dagenham; their travel habits; and their willingness, or otherwise, to consider making more sustainable travel choices. The outcomes of the various engagement exercises are summarised in **Table C1**.

Likes/Dislikes:

1. What aspects of the transport system and services in Barking and Dagenham do you **most** like or think work well?
2. What aspects of the transport system and services in Barking and Dagenham do you **least** like or think require improvement?

Travel Habits:

3. What mode of transport do you mainly use for getting around and in/out of the borough for work/education purposes? What is the **main** factor influences your choice?
4. What mode of transport do you mainly use for getting around and in/out of the borough for shopping/leisure purposes? What is the **main** factor influences your choice?

Encouraging Active, Sustainable Travel:

5. How often do you walk, cycle or use public transport?
6. What would encourage you to make more journeys:
a) on foot? b) by cycle? c) by public transport?
7. What would encourage you to make **fewer** journeys by car?

Key Priorities:

8. Do you have any other views on how the borough's transport services could be improved?

C.3 Formal Consultation

C.3.1 A formal five-week consultation exercise on the draft LIP was undertaken between 2 November and 7 December 2018. Consultees, including a range of statutory and local stakeholders and the wider public, were asked to give their views on the various aspects of the plan via an online questionnaire and a series of stakeholder meetings.

C.3.2 During the course of the consultation 13 responses to the online questionnaire were submitted. Written representations were also received from a number of stakeholders including TfL; the Metropolitan Police; the local branch of the London Cycling Campaign; and the London Borough of Bexley. One stakeholder meeting was carried out during the course of the consultation exercise - a question and answer session with the Barking and Dagenham Access Group. Details of the various representations made and the Council's response to these are set out in **Tables C2 and C3**.

Table C1: Pre-Consultation Engagement Summary

Consultee	Date/Method of Engagement	Summary of Outcomes
Barking and Dagenham Access Group	16/01/18 - Access and Planning Review Forum	<p><i>Like/Works Well:</i></p> <ul style="list-style-type: none"> • The group considered that the borough is well connected by public transport, with a high frequency of train and bus services available to a range of destinations. • Staff on bus/train services and at stations are generally helpful and accommodating when it came to dealing with individuals' access requirements. • Interventions such as the introduction of audio announcements and giving priority for wheelchair users on buses are seen as particularly helpful in improving the overall journey experience for disabled passengers. <p><i>Dislike/Requires Improvement:</i></p> <ul style="list-style-type: none"> • Crime and personal safety on the transport network is a big concern for many elderly and disabled people and often discourages people for walking/cycling and using public transport. • Despite some improvements, physical access on and to the transport network remains poor. The lack of step-free access at stations is a big concern. The use of shared surfaces, positioning of street furniture and poor quality street lighting is a particular concern to those with visual impairments. • Other concerns raised included illegal/inconsiderate parking – especially on footways; cycling on footways; the need for more consistent staff training on the bus and rail network; and alternative means of providing travel information at bus stops – such as audio announcements. <p><i>Key Priorities:</i></p> <ul style="list-style-type: none"> • Improving access on and to the transport network – particularly at stations and on public transport services remains the key priority for most users with a disability. • The need for dedicated door-to-door transport is critical for those people with disabilities who are unable to use conventional public transport. An increase in the number of dial-a-ride services and accessible public hire vehicles would help in this regard.

Consultee	Date/Method of Engagement	Summary of Outcomes
Trinity School	23/04/18 – Student Workshop	<p><i>Like/Works Well:</i></p> <ul style="list-style-type: none"> The group considered that the borough is well connected by public transport, with a high frequency of train and bus services available to a range of destinations. <p><i>Dislike/Requires Improvement:</i></p> <ul style="list-style-type: none"> Crime and personal safety on the transport network is a concern for many of the students and often discourages people from walking/cycling and using public transport – especially when travelling alone or at night. The lack of staff presence on buses/trains and at stations was also highlighted as an issue. Although many considered that the borough was well connected by public transport, a number of students felt that there was a need for more frequent and bigger buses and/or dedicated school buses to help alleviate issues of overcrowding, especially at peak travel times. A number of students highlighted the fact that the regularly unable to board buses because they were full or because drivers didn't stop at the bus stop. <p><i>Key Priorities:</i></p> <ul style="list-style-type: none"> Many students travel to school by public transport – principally because travel is free. In addition, a number use specialist borough transport provision or are driven to school by parents/carers because they have disabilities which often makes using public transport difficult. However, several stated they would consider using public transport – particularly buses - more frequently if there was better wheelchair access and seat belts were provided. Students stated that they would be encouraged to cycle more if more dedicated infrastructure was provided (e.g. secure cycle parking, segregated cycle lanes). Other priorities for improvements include the need for greater staff awareness/training when it comes to dealing with people with disabilities/specialist needs; the need for buses and trains to be kept clean and for roads and footways to be better maintained; and the need for more places to top up Oyster travel cards.

Consultee	Date/Method of Engagement	Summary of Outcomes
Raised Voices Theatre Group	02/05/18 – Student Workshop	<p><i>Like/Works Well:</i></p> <ul style="list-style-type: none"> The group considered that the borough is well connected by public transport, with a high frequency of train and bus services available to a range of destinations. <p><i>Dislike/Requires Improvement:</i></p> <ul style="list-style-type: none"> A key concern raised by the group included the amount of litter on the streets and lack of cleanliness on trains/buses. Many in the group also felt that bus/train staff attitudes towards young people were often quite negative. Increased traffic congestion and resultant delays to bus services were a growing concern for many of the students, with several highlighting they often arrived late to school/college. <p><i>Key Priorities:</i></p> <ul style="list-style-type: none"> The majority of people in the group travelled everywhere using public transport as they received free travel. However, to maintain the attractiveness of public transport – in particular travel by bus – there is a need to provide more reliable services, less prone to delays. The group stated that they would be encouraged to walk/cycle more provided if improvements to safety and security were made. Specific priorities include the need to reduce crime and enhance the public realm and provide better infrastructure for cyclists.
General Public	19/03/18 – 20/05/18 – Online Questionnaire 117 responses received	<p><i>Like/Works Well:</i></p> <ul style="list-style-type: none"> 46% of respondents considered that Barking and Dagenham is well connected by public transport – with many citing good train links to Central London and good local bus connections as major plus points. A large number of respondents (33%) felt that the borough had, on the whole, frequent and reliable bus services – making travel by this mode an attractive option for many. The proximity of the major road network (e.g. A12, A13), providing good access to Central London and a range of other destinations, was seen as a major advantage by 16% of respondents.

Consultee	Date/Method of Engagement	Summary of Outcomes
		<p><i>Dislike/Requires Improvement:</i></p> <ul style="list-style-type: none"> • A wide range of issues/criticisms were raised regarding transport and travel in Barking and Dagenham. Just over a quarter (27%) of respondents highlighted poor accessibility to and unreliability of public transport as being big issues. Overcrowding and the high cost of travel were frequent cited as key concerns. A further 12% of respondents felt that north/south and orbital public transport connections were poor – with lack of direct links to key destinations such as Stratford and Canary Wharf identified as particular issues. • 26% of respondents to the survey felt that congestion on the road network was a major issue – with increased delays/longer journey times and worsening air quality seen as major consequences of this. • Other principal concerns raised by respondents included safety/security on the transport network (13%); the poor state of repair of the borough road network (13%) and lack of safe, continuous provision for cyclists and pedestrians (9%). <p><i>Travel Habits:</i></p> <ul style="list-style-type: none"> • 52% of those travelling for work/education purposes went by public transport (train/bus), with 36% travelling by car/motorcycle and only 12% choosing to cycle or walk to their destination. Convenience was cited as the major factor by those travelling by public transport or by car/motorcycle (60% and 49% respectively), whilst the biggest influencing factor for those cycling or walking was primarily cost (50%). • Slightly more people travelled by car/motorcycle (43%) for shopping or leisure purposes than did by public transport (40%). Again, convenience was cited as the principal reason behind the preferred mode of travel (35% and 24% respectively). Of the 17% of people choosing to cycle or walk for shopping/leisure purposes, health (31%) was cited as the major determining factor, although cost (25%) was also an important consideration. <p><i>Encouraging Active, Sustainable Travel:</i></p> <ul style="list-style-type: none"> • 39% of respondents said they walked, cycled or used public transport all the time when travelling to/from and around the borough. 28% stated that they travelled by these modes

Consultee	Date/Method of Engagement	Summary of Outcomes
		<p>frequently (at least 3 or more times a week) whilst 27% said they walked, cycled or used public transport only occasionally (1-2 times a week).</p> <ul style="list-style-type: none"> • When asked what would encourage people to walk more, over a third (35%) stated the need for a better maintained environment and public realm. Dog fouling and litter were cited as particular concerns and poorly maintained footways and street lighting was also raised as an issue. Crime and security was raised as an issue by 23% of respondents, whilst 15% felt that the roads were too unsafe with too much traffic. • More and better facilities for cyclists – such as dedicated or segregated cycle paths and safe, secure cycle parking were seen by 36% of respondents as crucial for encouraging more people to cycle. Safer roads, with less traffic, was another important factor – 18% of respondents felt that this was important. Interestingly, some 20% of those surveyed said that they would not consider cycling under any circumstances – regardless of what improvements were made. • According to 24% of survey respondents, the key to increasing the number of journeys made by public transport is to provide more frequent, reliable services. Particular concerns were expressed regarding the frequency/reliability of District Line Underground services between Barking and Upminster and with bus services in some parts of the borough. A similar amount of people (23%) considered that lower fares would encourage more people to travel by public transport, whilst 22% cited overcrowding on train and bus services as a major issue. • Of the respondents who stated that they owned or used a car, 37% said they would consider using it less if there was better public transport provision. Particular issues included the lack of public transport connections in some parts of the borough; poor frequency/reliability of services and high fares. 19% of those surveyed said that better provision/facilities for cycling and walking would encourage them to make fewer journeys by car, whilst 10% suggested that less crime/better security would make them reconsider how they travelled. Only 4% of respondents supported the introduction of road user charging or increased restrictions/charges for parking as a means of restricting car use. 19% of those surveyed stated that nothing would encourage them to make fewer journeys by car – the principal reasons being that a car was required for work purposes or because health issues/disabilities meant there was no realistic alternative.

Consultee	Date/Method of Engagement	Summary of Outcomes
		<p><i>Key Priorities:</i></p> <ul style="list-style-type: none"> • According to respondents, the top three priorities for improving transport and travel in Barking and Dagenham are: <ul style="list-style-type: none"> ▪ better public transport provision – in particular, the need for better north/south and orbital connections and more frequent/reliable services (44%); ▪ reducing road traffic volumes – especially as a means of improving road safety, tackling congestion and improving air quality (20%); and ▪ better, more frequent maintenance of the borough’s highway network and the public realm – to improve safety and journey experience (15%).

Table C2: Formal Consultation Summary

Consultee	Date/Method of Engagement	Summary of Response/Issues Raised	Council Response/Actions
General Public	02/11/18 – 07/12/18 - Online Questionnaire 13 responses received	<ul style="list-style-type: none"> • There was some support for the overall approach adopted in the draft LIP, with over half of the respondents either ‘strongly agreeing’ or ‘agreeing’ with the proposed objectives. • There was broad support for additional transport links/services to places such as Stratford and Canary Wharf, as well as measures to improve safety and security on the local transport network and improve the local street scene. • There was less support for the proposed Delivery Plan and three-year Programme of Investment, with only a third of respondents either ‘strongly agreeing’ or ‘agreeing’ with the proposals. • Chief among the concerns raised were the potential impacts on general traffic as a result of proposals to implement bus priority schemes and the potential for further conflict between pedestrian and cyclists with the introduction of new cycling schemes. 	<ul style="list-style-type: none"> • Given the very low response rate to the online questionnaire, it is not possible to draw any meaningful conclusions from the consultation exercise. • No changes are proposed to the draft LIP as a result of the feedback received from the general public. However, the Council is mindful of the concerns raised by respondents around the potential impacts/conflicts of new bus priority and cycling schemes and will ensure that detailed public engagement is undertaken as part of all scheme development/ implementation work to allay these concerns and ensure measures are fully supported by the wider community.
Barking and Dagenham Access Group	19/11/18 - Access and Planning Review Forum	<ul style="list-style-type: none"> • There was broad support for the approach adopted in the draft LIP, with forum members welcoming investment in measures and interventions that would result in improved accessibility; improved safety and security; and the creation of healthy, inclusive places. 	<ul style="list-style-type: none"> • Comments noted. Additional text to be included in the final draft LIP highlighting how the ‘co-design’ approach to scheme development/ implementation can address perceptions of safety. • Adoption of ‘Healthy Streets’ approach will

Consultee	Date/Method of Engagement	Summary of Response/Issues Raised	Council Response/Actions
		<ul style="list-style-type: none"> Forum members highlighted the need for people's perceptions of safety to be addressed as much as actual safety issues themselves and for all schemes to be designed taking into consideration the needs of the least abled. 	<p>ensure that the needs of the least abled are taken into consideration during scheme development/ implementation.</p>
Metropolitan Police	19/11/18 – Written Representation	<ul style="list-style-type: none"> Response highlighted the need for a greater commitment to be made in the LIP to adopting 'Secured by Design' principles as a proven means of reducing crime and fear of crime within the borough. Adoption of SBD principles would bring a number of benefits to the Council and the wider community, including the creation of areas in which resident feel safe and secure and the promotion of healthy, sustainable living. 	<ul style="list-style-type: none"> Comments noted. Adoption of 'Healthy Streets' approach will ensure that issues around crime and fear of crime are taken into consideration during scheme development/implementation. However, additional text to be included in final draft LIP highlighting a greater commitment to adopting key SBD principles.
London Cycling Campaign	03/12/18 – Written Representation	<ul style="list-style-type: none"> LCC generally encouraged by the many mentions of cycling throughout the document, accepting that it is a vital form of transport. However, has some concerns about the specifics of some proposals, the lack of specifics in others and the absence of some projects from the LIP. Key issues/considerations include: <ul style="list-style-type: none"> Lack of clarity and ambition on targets, especially interim targets; Insufficient detail on/weight given to proposed new strategic cycling and Quietway 	<ul style="list-style-type: none"> <u>Targets</u>: Interim/final targets align to those set by TfL. Proposed small increase to cycle mode share reflects existing low-level mode share figure and availability of funding to affect change. <u>Routes</u>: Alterations to text proposed to clarify position on/add weight to borough commitments around existing/proposed new cycle routes. <u>Cycling schemes</u>: Scheme design/ implementation will be informed by 'Healthy Streets' and 'Vision Zero' approach, with all

Consultee	Date/Method of Engagement	Summary of Response/Issues Raised	Council Response/Actions
		<p>routes and existing LCN/LCN+ routes;</p> <ul style="list-style-type: none"> ▪ Need for good quality and safe cycle connections to/from Barking Riverside; ▪ Proposals to use central reservations to provide fully-segregated cycling facilities problematic – would involve additional carriageway crossings, deplete greenery and unlikely to be comfortable/legible; ▪ Pledge needed to fix legacy permeability and maintenance issues; ▪ Important that proposed river crossings incorporate cycling from the outset. 	<p>schemes built to London Cycling Design Standards. ‘Co-design’ approach also central to successful development/delivery of all schemes.</p> <ul style="list-style-type: none"> • <u>Legacy issues</u>: LIP scheme design process will address legacy permeability/maintenance issues in specific areas. Councils HIP programme will also address long-standing carriageway maintenance issues. Local Transport Fund ‘Minor Works’ programme will look to address all other small-scale legacy issues. • <u>River crossings</u>: Proposed crossings will accommodate pedestrians/cyclists and would feed into the long-planned National Cycle Network route along the Thames north bank and River Roding.
LB Bexley	11/12/18 – Written Representation	<ul style="list-style-type: none"> • Welcomes proposals to extend riverboat services to Barking Riverside as this could lead to future services calling at wharves and piers along Bexley’s riverfront. • Notes that draft LIP does not include any commitment to petition TfL to continue to consider further road-based Thames river crossings at Belvedere/Rainham and Gallions Reach/Thamesmead. Consider a missed opportunity given the potential for such crossings to enable and support significant 	<ul style="list-style-type: none"> • Comments noted. Introduction of timetabled river passenger services to/from Barking Riverside would provide the borough with additional cross-river connectivity, a direct transport link to the key employment hubs of Canary Wharf and central London and relieve pressure on the local road/public transport networks. • Focus of long-term schemes/ interventions listed in cpt3 is mainly on those schemes that would directly impact on the borough and

Consultee	Date/Method of Engagement	Summary of Response/Issues Raised	Council Response/Actions
		economic growth in east and southeast London.	which support the Council's wider growth ambitions. The Council is broadly supportive of additional Thames River crossings and will continue to lobby for these key infrastructure improvements.
TfL City Planning	12/12/18 – Written Representation	<ul style="list-style-type: none"> • TfL considered that the LIP aligned with the MTS and welcomed the Council's commitment to increasing sustainable travel and seeking to reduce traffic and levels of car ownership across the borough. • TfL also welcomed the borough's adoption of the 'Vision Zero' approach as a means of seeking to eliminate all deaths and serious injuries from the local transport network. • A number of recommendations have been made on how aspects of the plan could be strengthened. These include: <ul style="list-style-type: none"> ▪ Providing additional information on how the borough will achieve 'Vision Zero'; ▪ Providing further information on how LIP schemes/programmes are/will be prioritised, both in scale/geographical location; ▪ Updating a number of charts/graphs to provide clarity and to reflect recently published data. 	<ul style="list-style-type: none"> • This content/direction of the LIP reflects the Council's commitment to looking at new and innovative ways of addressing the various transport, environmental, health and inequality issues that affect the borough and large parts of London. • Following further discussions with the City Planning team, the Council accepts the recommended changes/additions and the draft LIP has been updated to reflect these comments/suggestions. Details of how/where these changes have been made are set out in Table C3.

Table C3: TfL Consultation Feedback

TfL Comment/Recommendations	Council Response/Actions	Where Addressed
LIP Guidance Requirements/General Feedback		
<ul style="list-style-type: none"> The LIP does not follow the structure in the template but includes a table in Annex A that identifies where in the document each of the LIP mandatory requirements can be found. Each requirement has been addressed. 	<ul style="list-style-type: none"> Current structure represents preferred approach to LIP development. 	N/A
Chapter 1: Introduction and Wider Context		
<ul style="list-style-type: none"> The democratic process taken to approve the submission of the LIP is well set out. It may be beneficial to name the portfolio holder that initially approves the document. 	<ul style="list-style-type: none"> LIP document approved by Council Cabinet and Assembly. Relevant portfolio holder is acknowledged in Foreword. 	Foreword
<ul style="list-style-type: none"> Statutory consultees have been referenced although this section will read differently following consultation. Any amendments to the document based on feedback should be noted in the final version, along with the naming of groups consulted (as opposed to generic terms). 	<ul style="list-style-type: none"> Text updated to highlight additional consultation/engagement undertaken in November 2018 and the outcomes of this. Details of specific individuals/groups consulted provided. 	Section 1.3 (Formal Consultation) – Paras 1.3.4 – 1.3.7; Annex C
Chapter 2: Borough Transport Issues and Objectives		
<ul style="list-style-type: none"> Figures have been provided within this chapter to set out the local context but several of the maps / images (e.g. Figures 2.1 and 2.5) are unclear and their quality / resolution should be improved in the final LIP. 	<ul style="list-style-type: none"> Maps/images reviewed and updated to provide greater clarity. 	Section 2.2 (Borough Overview) – Figure 2.1; Section 2.4 (Challenges and Opportunities) – Figure 2.5
<ul style="list-style-type: none"> Additional analysis and information on casualties in the borough to show that Barking and Dagenham have understood their local 	<ul style="list-style-type: none"> Additional information on borough casualties provided, including 2017 casualty figures and 	Section 2.3 (Local Transport Context) - Table 2.2;

TfL Comment/Recommendations	Council Response/Actions	Where Addressed
issues to show further commitment to the Vision Zero approach.	details of those vehicles which present the greatest risk.	Section 2.4 (Challenges and Opportunities) – Paras 2.4.7 – 2.4.9
<ul style="list-style-type: none"> Point of accuracy on 2.5.9, KSIs in Barking and Dagenham rose in 2017 by 38%, 42% for serious injuries. 	<ul style="list-style-type: none"> Erroneous reference removed. Chapter updated to reflect 2017 casualty figures. 	Section 2.3 (Local Transport Context) - Table 2.2
Chapter 3: LIP Delivery Plan and Programme of Investment		
<ul style="list-style-type: none"> The LIP states adoption of the Healthy Streets Approach under the priority area of 'Creating Better Streets and Places' however adopting the approach implies all schemes delivered on the borough's streets should encourage more walking, cycling and public transport use and deliver improvements against the ten 'Healthy Streets' indicators. As such, 'improvements to traffic flow' and 'reducing traffic bottlenecks' should not be priorities in themselves. 	<ul style="list-style-type: none"> Text updated to highlight all-encompassing nature of the Health Streets Approach. Reference to 'improvements to traffic flow' and 'reducing traffic bottlenecks' removed and replaced with 'improvements to bus journey times' and 'creating liveable spaces'. 	Section 3.2 (Measures and Interventions) – Para 3.2.12
<ul style="list-style-type: none"> Additional details on how casualty savings will be made and how the borough will deliver according to the Vision Zero approach should be included to show a thorough understanding and commitment, for example there is no mention of adopting a Safe Systems Approach, road risk or tackling danger at the source in the document. 	<ul style="list-style-type: none"> Text updated to include details on how the Council will achieve casualty savings and deliver Vision Zero approach. 	Section 3.2 (Measures and Interventions) – Paras 3.2.9 – 3.2.10
<ul style="list-style-type: none"> With further regards to Vision Zero the focus of the 2019/20 delivery plan is heavily on engineering with no mention of analysis of riskiest locations such as town centres and no mention of vehicle improvements, work related road risk (or FORS). Also, education appears to focus on vulnerable road users and not those who cause harm. 	<ul style="list-style-type: none"> Text updated to highlight different range of road safety measures/interventions the Council will implement in line with the Vision Zero approach. 	Section 3.2 (Measures and Interventions) – Paras 3.2.9 – 3.2.10

TfL Comment/Recommendations	Council Response/Actions	Where Addressed
<ul style="list-style-type: none"> It would be helpful to include details on how programmes are, and will be, prioritised both in terms of scale and geographical location (as per requirement 21a). For example, how would the prioritisation process be used if schemes need to be added / removed. 	<ul style="list-style-type: none"> Details of how Delivery Plan is prioritised by geographical location already provided in Section 3.2. Further clarification provided on how prioritisation process would be used for adding/removing schemes. 	Section 3.2 (Principles and Priorities) – Paras 3.2.1 – 3.2.2; Table 3.1; Figures 3.1; Section 3.5 (Programme Prioritisation and Monitoring Arrangements) – Paras 3.5.2 – 3.5.4
<ul style="list-style-type: none"> Despite no bus priority funding in table 3.5 the borough could show commitment to bus priority highlighting where new measures would be sought e.g. pinch points, as part of future scheme development etc. 	<ul style="list-style-type: none"> Text updated highlighting how the Council will work with TfL to identify other locations within the borough where bus priority improvements may be beneficial. 	Section 3.4 (Strategic Funding Programmes) – Para 3.4.8
<ul style="list-style-type: none"> Table 3.9, stakeholder management plan(s) may be helpful and could also include producing risk assessments at a scheme level. 	<ul style="list-style-type: none"> Table updated to include reference to stakeholder management plans. New table added containing risk assessment at scheme level. 	Section 3.5 (Managing Risk) Tables 3.9 and 3.10
<ul style="list-style-type: none"> Points of accuracy: <ul style="list-style-type: none"> Figure 3.1 is unclear and should be improved in the final LIP; In 3.3.5 the new bus/transit river crossing is expected to be part of a Housing Infrastructure Fund bid rather than a Growth Fund bid; In 3.4.6 the Ilford to Barking cycle route should be referred to as a 'Future Route' as opposed to a 'Quietway'; 3.4.8 Suggestion to mention the City in the East growth study that identified the need for increased bus services for Barking Town Centre and measures being developed as a result; Make it clear if 'The Heathway' in row two of Table 3.8 is the same as point 2 in Figure 3.2. 	<ul style="list-style-type: none"> Relevant text has been updated to reflect correct terminology. Maps/images reviewed and updated to provide greater clarity. 	Section 3.3 (Funding Sources) – Para 3.3.5; Section 3.4 (Strategic Funding Programmes) – Paras 3.4.6 and 3.4.8; Figures 3.1; 3.2; Table 3.8

TfL Comment/Recommendations	Council Response/Actions	Where Addressed
Chapter 4: Performance Management and Monitoring		
<ul style="list-style-type: none"> • Targets follow the TfL trajectories issued in the borough data pack. However, two targets have been set for KSIs in 2041, there should only be one of zero. 	<ul style="list-style-type: none"> • Erroneous target removed. 	Section 4.2 (LIP Indicators and Targets) – Table 4.1
<ul style="list-style-type: none"> • A revised set of borough trajectories for Outcome 2 and Vision Zero have been issued and boroughs need to update their targets to reflect these new trajectories in their final LIP for 2022 and 2030 (2041 is unchanged at 0). The borough is also asked to include additional text in the final LIP under Outcome 2 explaining the reasoning for the change in trajectories and targets. 	<ul style="list-style-type: none"> • Road safety targets updated to reflect revised borough trajectories and additional explanatory text added. 	Section 4.2 (LIP Indicators and Targets) – Figure 4.2 (+ new text box) and Table 4.1
<ul style="list-style-type: none"> • To demonstrate commitment to and understanding of the targets set commentary around Figure 4.1 and 4.3 should include the impact of growth and housing delivery on these targets e.g. an increasing mode share in the context of increasing trips. 	<ul style="list-style-type: none"> • Text update to highlight impacts of growth/ housing delivery on targets. 	Section 4.2 (LIP Indicators and Targets) – Paras 4.2.5 and 4.2.10

Annex D: Strategic Environmental Assessment (SEA)

D.1 Introduction

D.1.1 The Council has a legal duty to undertake a Strategic Environmental Assessment (SEA) as part of the development of the LIP. This Environmental Statement summarises how the SEA process has been taken into account in the development of the LIP and covers:

- An overview of the SEA process and a summary of the main findings of the Environmental Report;
- Changes to/deletions from the LIP in response to the main findings of the Environmental Report;
- Ways in which responses to consultation have been taken into account;
- Performance monitoring recommendations.

D.2 Overview of the SEA process

Purpose of the assessment

D.2.1 Under the terms of the Environmental Assessment of Plans & Programmes Regulations 2004, Local Implementation Plans are identified as one of the types of plans and programmes that need to undergo Strategic Environmental Assessment.

D.2.2 The purpose of an SEA is to determine whether a plan could place the environment at risk of damage and to identify opportunities for the environment to be improved. By identifying the risks of environmental damage and the opportunities for environmental benefit that might arise from a plan, SEA helps to identify changes that could be made to improve the plan's environmental performance. In other words, SEA can be used to find ways of reducing the risks of damage and increasing the chances of a plan delivering environmental improvements.

Method of assessment

D.2.3 The SEA of the LIP was carried out by the consultants Project Centre between October and December 2018. As part of the SEA process, an Environmental Report was produced that highlighted the likely significant environmental effects of the measures contained within the LIP and proposed suitable alternatives. The full Environmental Report is available on the Council website at www.lbbd.gov.uk/roads-and-transport-policy

D.2.4 The SEA examined the extent to which the individual components of the LIP and the LIP as a whole could present risks of damage and opportunities for benefit to a number of different aspects of the environment, specifically:

- Biodiversity, flora and fauna
- Population and human health
- Air quality
- Climate change
- Soil and contaminated land
- Water
- Preparation for flooding
- Cultural heritage, landscape and townscape
- Noise
- Accessibility
- Congestion
- Road safety

D.2.5 The extent to which each of the identified risks and opportunities could be considered to be 'significant' was assessed, using ranks ranging from 'very high significance' to 'very low significance'. The findings of those assessments were used to determine which aspects of the environment might be placed at greatest risk and which were most likely to benefit from the LIP.

D.3 Summary of Main Findings

D.3.1 The SEA examined two main components of the draft LIP – namely the Plan objectives and the main transport interventions for delivering those objectives. Alternatives and a 'do nothing' option were also assessed. The results of the assessment are set out in Tables 10 and 11 of the Environmental Report. In general, all LIP objectives had a largely positive or neutral relationship with the SEA objectives, whilst the majority of interventions were deemed to have a largely positive or neutral impact on the different aspects of the environment.

D.4 SEA Recommendations/Development of the Final LIP

D.4.1 The SEA found very little evidence of significant environmental impacts as a result of the measures proposed in the draft LIP. Where potential adverse impacts were identified, a range of mitigation measures were

presented to minimise these impacts. Consequently, the Environmental Report concludes that no significant changes to the draft LIP are required.

D.5 Consultation

D.5.1 Consultation on the Environmental Report was carried out in November 2018, alongside the public consultation exercise on the draft LIP. Consultation was undertaken with three key statutory bodies - Natural England, English Heritage and the Environment Agency. Only one response was received and a number of recommendations were made. These were considered and, where appropriate, taken on board in the development of the final LIP (see **Annex C** for further details).

D.6 Performance Monitoring Recommendations

D.6.1 Under the SEA Directive there is a statutory requirement to monitor the environmental impacts of the implementation of the LIP, with a specific focus on those that give rise to significant or irreversible impacts upon environmental attributes in the area. However, given the lack of significant environmental impacts that would result from the LIP, no specific monitoring arrangements are required on this occasion, beyond established LIP annual monitoring requirements.

D.7 Summary

D.7.1 In general, the LIP has a largely positive or neutral effect on most aspects of the environment and the population. The LIP will promote public transport, walking and cycling and seek to reduce congestion. These measures should benefit the community by improving health and wellbeing. The SEA has not identified any significant negative impacts arising from the measures proposed in the LIP.

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Annex E: Equality Impact Assessment (EIA)

E.1 Introduction

E.1.1 The Council has a duty under the Equalities Act 2010 to carry out an Equality Impact Assessment (EIA) of the LIP. This is to determine whether the policies and proposals contained within the LIP are likely to have significant positive, negative or adverse impacts on the different groups in our community.

E.1.2 The Mayor's Vision, as set out in his Transport Strategy, is to create a future London that is home to more people and a better place for people to live in. The Council supports this aspiration and is also fully committed to the promotion of equality and opportunity. Indeed, this aspiration and the wider MTS priorities are reflected in the LIP, with the overarching aim of ensuring 'no one is left behind'.

E.2 LIP EIA

E.2.1 To meet EIA guidelines, a Full Impact Assessment was carried out in December 2018, following the completion of the public consultation exercise on the draft LIP. This comprised an assessment of the LIP objectives, Delivery Plan and three-year Programme of Investment, and looked at:

- Positive impacts – where the impact will benefit different groups, or improve equal opportunities/or relationships between groups;
- Negative/adverse impacts – where the impact could disadvantage different groups.

E.2.2 As best practice, the EIA of the LIP looked at the potential impacts on the following protected characteristics – age, disability, gender re-assignment, marriage and civil partnership, pregnancy and maternity, race, religion, sex and sexual orientation.

E.2.3 The results of the EIA are shown in **Table E1**. The assessment indicates that the overall impact of the LIP on different groups is likely to be positive. There are no negative impacts shown, and the remainder are judged either positive or neutral. To a large extent this is to be expected because:

- The LIP is driven by the Council's Borough Manifesto in which a key ambition is to deliver inclusive, sustainable growth in the borough;
- The LIP is focussed on securing improvements to transport in the borough for all. In particular, measures aimed at connecting people

and places and creating better streets and places are likely to benefit all target groups;

- Improving safety and security is a key aim of the LIP - often of particular significance for the welfare of more vulnerable groups, such as the young, elderly and women;
- Whilst measures to promote healthy, sustainable travel will benefit everyone, they are likely to have a more differential impact for certain target groups (e.g. the young and the elderly).

E.3 Action Plan

E.3.1 An Action Plan, based on the challenges and opportunities identified in the EIA is set out in Table E2.

Table E2: LIP EIA - Action Plan

Category	Actions	Target date
Improving involvement and consultation	More regular dialogue/engagement via fora such as PTLG with different equality groups to ensure we take on board their issues/concerns when developing/implementing transport schemes/measures.	Dec 2019
Improving data collection and evidence	Liaise with partners/stakeholders to ascertain what transport/service user data exists and identify any gaps that exist.	Dec 2019
Improving assessment and analysis of information	Closer partnership working with access groups to monitor effectiveness of policies/measures and to identify areas of weakness. Include Learning Disabilities users on Access Groups.	Dec 2019
Developing procurement and partnerships arrangements to include equality objectives and targets within all aspects of the process (including monitoring of the contract/commission)	Ensure that staff have sufficient knowledge of procurement requirements and follow best practice at all times.	Dec 2019
How will you monitor evaluate and review this EIA (including publishing the results)?	Review of EIA to be undertaken in partnership with stakeholders/user groups by Dec 2020 to ensure relevant issues are being addressed.	Dec 2020

Table E1: LIP EIA – Full Impact Assessment

LIP Objective/Proposal	Protected Characteristic									Comment
	Age	Disability	Gender re-assignment	Marriage and civil partnership	Pregnancy and maternity	Race	Religion	Sex	Sexual orientation	
LIP Objectives										
A. Enhancing public transport connectivity to enable growth	P	P	P	P	P	P	P	P	P	• Key LIP priority – relevant to all target groups
B. Improving accessibility for all to key services and facilities	P	P			P					• Cheap, independent travel of particular benefit to young, elderly and disabled
C. Encouraging active travel to improve health and wellbeing	P	P	P	P	P	P	P	P	P	• Key LIP priority – relevant to all target groups
D. Facilitating green travel to improve air quality and reduce the impact on the environment	P				P					• Health benefits from improved air quality important to all, especially young and elderly
E. Reducing the number of casualties on our roads	P	P				P				• Accidents have differential impacts on groups, particularly young and minority ethnic groups
F. Improving safety and security across the transport network	P		P			P		P	P	• Creation of safe, secure transport network of particular importance to women and children
G. Managing our road space more efficiently to tackle congestion	P	P	P	P	P	P	P	P	P	• Reduced congestion and journey time savings will benefit all groups

LIP Objective/Proposal	Protected Characteristic									Comment
	Age	Disability	Gender re-assignment	Marriage and civil partnership	Pregnancy and maternity	Race	Religion	Sex	Sexual orientation	
H. Transforming the public realm to create healthy, inclusive places	P	P			P					<ul style="list-style-type: none"> • Creation of safe, attractive street scene important to all, especially elderly and disabled
LIP Delivery Plan										
Public transport initiatives – <ul style="list-style-type: none"> • new/improved infrastructure and services; • introduction/expansion of bespoke travel services; • improved passenger information; • low emission/quieter vehicles; • station access improvements; • bus priority measures. 	P	P			P			P	P	<ul style="list-style-type: none"> • Physical access improvements to public transport of particular benefit to elderly and disabled. • Safety/security enhancements at stations and bus stops important for women and young people. • Journey time savings as a result of bus priority measures will benefit all groups.
Cycling and walking schemes – <ul style="list-style-type: none"> • new or enhanced cycle/walking routes; • new or enhanced cycle/pedestrian facilities; • cycle training programmes. 	P	P			P					<ul style="list-style-type: none"> • All groups will benefit from improved health through increased cycling/walking. Elderly/disabled most likely to benefit from footway improvements.

LIP Objective/Proposal	Protected Characteristic									Comment
	Age	Disability	Gender re-assignment	Marriage and civil partnership	Pregnancy and maternity	Race	Religion	Sex	Sexual orientation	
Highways/public realm enhancements - <ul style="list-style-type: none"> • station access/town centre improvements; • 'green' infrastructure; • corridor/junction improvement schemes; • new street lighting; • 'DIY streets' schemes. 	P	P			P			P		<ul style="list-style-type: none"> • All groups will benefit from better maintained highways and enhanced public realm, but of particular benefit to elderly and disabled. Women and children likely to benefit from improved security.
'Behaviour Change' initiatives – <ul style="list-style-type: none"> • 'active'/'green' travel programmes; • travel plans; • road safety education/training programmes; • publicity campaigns. 	P	P			P	P	P	P	P	<ul style="list-style-type: none"> • Accidents have differential impacts on groups, with young and minority ethnic groups likely to benefit most from road safety programmes. • Active travel programmes aimed at all groups, however, children and young people likely to benefit most through school travel plan programmes.
Traffic management/reduction measures – <ul style="list-style-type: none"> • vehicle restrictions; • 'cleaner' fleets/vehicles; • traffic calming/speed reduction measures; • effective enforcement; • freight consolidation 	P	P			P					<ul style="list-style-type: none"> • Strategy measures likely to benefit young and elderly most through improved safety and reduced pollution levels. • Improved journey times as a result of reduced congestion will benefit all.

LIP Objective/Proposal	Protected Characteristic									Comment
	Age	Disability	Gender re-assignment	Marriage and civil partnership	Pregnancy and maternity	Race	Religion	Sex	Sexual orientation	
LIP Programme of Investment										
Barking Station Improvements	P	P			P	P	P	P	P	<ul style="list-style-type: none"> Improvements to concourse/gateline and the installation of lifts will make the station more pedestrian and wheelchair-friendly, which will have a positive impact on accessibility for all, particularly the elderly and disabled. Security improvements, such as improved lighting, will benefit women and young people, particularly at night.
The Heathway and Valence Avenue 'Healthy Streets' Corridor Improvements; 'Greening the Fiddlers' - Becontree Heath Low Emission Neighbourhood; Eastbury Manor House Access Improvements	P	P			P			P		<ul style="list-style-type: none"> Improving the streets and their environs will make these areas safer, will improve access for pedestrians and cyclists and reduce congestion and improve air quality to the benefit of all. Measures such as improved crossings will help to make the elderly/disabled feel safer. Any negative impacts, such as narrowing of footways will be short term. Diversion routes/improved signage will be put in place where appropriate.
Station Access Improvements Programme – Upney and Dagenham East	P	P			P	P	P	P	P	<ul style="list-style-type: none"> Improvements to forecourts/footways will make the stations more pedestrian and wheelchair-friendly, which will have a positive impact on accessibility for all, particularly the elderly and disabled.

LIP Objective/Proposal	Protected Characteristic									Comment
	Age	Disability	Gender re-assignment	Marriage and civil partnership	Pregnancy and maternity	Race	Religion	Sex	Sexual orientation	
										<ul style="list-style-type: none"> Security improvements, such as improved lighting, will benefit women and young people, particularly at night.
Marks Gate – Chadwell Heath Cycling Link										<ul style="list-style-type: none"> Improvements to cycle network, particularly off-road connections will improve accessibility to a range of services and facilities for all. A range of safety/security measures (e.g. cycle parking, lighting, etc.) will benefit cyclists.
Road Safety and Access Improvement Programme	P	P			P	P	P			<ul style="list-style-type: none"> Local safety schemes will help to reduce the number and severity of road traffic accidents, to the benefit of everyone. The implementation of 20mph Zones will help to reduce the number and severity of road traffic accidents, particularly amongst children. Improvements such as tactile paving, dropped kerbs, de-cluttering of footways, etc. will help to make streets more accessible, particularly for the elderly and disabled people.
Borough-wide Healthy/Active Travel Programme	P	P			P	P	P			<ul style="list-style-type: none"> Travel awareness events/travel planning activities can help to promote active, sustainable travel practices and reduce the number of journeys by car. This in turn improves people's health and reduces congestion/pollution, to the benefit of everyone.

LIP Objective/Proposal	Protected Characteristic									Comment
	Age	Disability	Gender re-assignment	Marriage and civil partnership	Pregnancy and maternity	Race	Religion	Sex	Sexual orientation	
										<ul style="list-style-type: none"> Road safety campaigns will help to reduce the number and severity of road traffic accidents, particularly amongst children and minority ethnic groups where there are a disproportionate number of casualties.
Future Scheme Development	P	P	P	P	P	P	P	P	P	<ul style="list-style-type: none"> Improvements that promote healthy, active travel and secure road safety and accessibility improvements will benefit everyone.
Minor Works	P	P			P			P		<ul style="list-style-type: none"> Various measures, but likely focus on small-scale safety/accessibility improvements. Will particularly benefit young, elderly and mobility impaired groups.
KEY: P: Positive impact N: Negative impact Blank: Neutral impact										

Annex F: LIP Annual Spending Submission - 2019/20



London Borough of Barking and Dagenham
Local Implementation Plan (LIP) 2019/20 Annual Spending Submission and Programme of Investment Form

Borough officer contact details	
Name	
Contact Number	
Email	

Financial Summary Information				
Year		Corridors Neighbourhoods and Supporting Measures	Major Schemes / Liveable Neighbourhoods	Total
2019/20	Confirmed Allocation £k	1,377	0	1377
	Submission £k	1,477	0	1,477
2020/21	Indicative Allocation £k	0	0	0
	Submission £k	0	0	0
2021/22	Indicative Allocation £k	0	0	0
	Submission £k	0	0	0

Mayoral Priority	no.	Mayoral Outcomes
Healthy Streets & healthy people	1	Active: London's streets will be healthy and more Londoners will travel actively
	2	Safe: London's streets will be safe and secure
	3	Green: London's streets will be clean and green
	4	Efficient: making more efficient use of our street network
A Good Public Transport Experience	5	Connected Public Transport: more people will travel on an expanded public transport network
	6	Quality Public Transport: journeys by public transport will be fast, comfortable and reliable
	7	Accessible Public Transport: public transport will be affordable and accessible to all
New Homes & New Jobs	8	Unlocking: support delivery of homes and provide better access to jobs, customers and suppliers
	9	Good Growth: developments are sustainable, supported by public transport and active travel options

Programme	Scheme Title	Scheme Description	Funding Source (list multiple)	Portal ID of an on going scheme	Scheme Location and Extent. Coordinates and/or description	Funding £000's										Outcome Mapping - Please indicate which (inc. combinations) Healthy Streets Outcomes each scheme delivers							Street Type	Does the scheme impact on the TLRN or other TL infrastructure	Does the scheme involve bus route diversions permanent or temporary?	Will the scheme be LCDS compliant	Would you like the following to be carried out by TLF?		
						FY 19/20	FY 20/21	FY 21/22	Sub-Total	Grand Total	Active	Safe	Green	Efficient	Connected PT	Quality PT	Accessible PT	Unlocking	Good Growth	Casualty Data monitoring (TADS)	Bus Journey Times monitoring	Press coverage							
						Corridors Neighbourhoods and Supporting Measures	Barking Station Improvements	Contribution to redevelopment costs of Barking Station to improve accessibility and passenger safety and relieve overcrowding. A key priority is the provision of step-free access between the station concourse and platforms. Improvements to be delivered by December 2019 in line with C2C franchise requirements.	LIP Allocation		Station Parade, Barking	875			875		875	yes	yes	-	-	-					yes	yes	-

Programme	Scheme Title	Scheme Description	Funding Source (list multiple)	Portal ID of an on going scheme	Scheme Location and Extent. Coordinates and/or description	Funding £000's				Outcome Mapping - Please indicate which (inc. combinations) Healthy Streets Outcomes each scheme delivers							Street Type	Does the scheme impact on the TLRN or other TIL infrastructure	Does the scheme involve bus route diversions permanent or temporary?	Will the scheme be LCDS compliant	Would you like the following to be carried out by TIL?					
						FY 19/20	FY 20/21	FY 21/22	Sub-Total	Grand Total	Active	Safe	Green	Efficient	Connected PT	Quality PT					Accessible PT	Unlocking	Good Growth	Casualty Data monitoring (TADS)	Bus Journey Times monitoring	Press coverage
Corridors Neighbourhoods and Supporting Measures	The Heathway 'Healthy Streets' Corridor Improvements	Development and delivery of range of 'Healthy Streets' measures identified in recent scoping reports produced by Sustrans and Living Streets with the aim of addressing a range of safety issues and road user conflicts in the area and increasing levels of walking and cycling to this major District centre. A key focus will be on the provision of safe, accessible facilities for pedestrians and cyclists; introduction of measures to tackle localised congestion and improve air quality; and the delivery of enhancements to the public realm. Two-year collaborative design and build scheme with main works undertaken in 2020/21.	LIP Allocation			50		50		50	yes	yes	yes	yes	-	yes	yes	-	-	City Hubs (M3/P3)	Infrastructure	No	Yes	Yes	Yes	Yes
Corridors Neighbourhoods and Supporting Measures	'Greening the Fiddlers' - Becontree Heath Low Emission Neighbourhood	Community-led neighbourhood improvements project focused on reducing the dominance of vehicular traffic in Becontree Heath and creating a more welcoming, healthy place for everyone to enjoy, with the aim of encouraging more active, sustainable travel and delivering tangible improvements to air quality in the area. Specific interventions tbc, but likely to comprise a range of complementary physical, behavioural and regulatory/enforcement measures. Allocation represents match funding commitment required in support of recent funding bid through the Mayor's Air Quality Fund. Three-year collaborative design and build scheme with main works undertaken from 2020/21 onwards.	LIP Allocation			100		100	100		yes	yes	yes	yes	-	yes	yes	-	yes	High Roads (M3/P2)	Infrastructure	No	Yes	Yes	Yes	Yes
Corridors Neighbourhoods and Supporting Measures	Station Access Improvements Programme – Upney Station	Continuation of our station access improvements programme aimed at providing high quality, attractive approaches to our key transport interchanges. Focusing on Upney station the scheme will deliver improved walking, cycling and bus access to the station; improved safety and security and an enhanced public realm. Utilising our preferred approach of collaborative design and build, scheme delivery will be undertaken in 2020/21.	LIP Allocation			50		50		50	yes	yes	yes	yes	-	yes	yes	-	-	Connector (M2/P1)	Infrastructure	No	Yes	Yes	Yes	Yes

Programme	Scheme Title	Scheme Description	Funding Source (list multiple)	Portal ID of an on going scheme	Scheme Location and Extent. Coordinates and/or description	Funding £000's					Outcome Mapping - Please indicate which (inc. combinations) Healthy Streets Outcomes each scheme delivers							Street Type	Does the scheme impact on the TLRN or other TLR infrastructure	Does the scheme involve bus route diversions permanent or temporary?	Will the scheme be LCDS compliant	Would you like the following to be carried out by TfL?					
						FY 19/20	FY 20/21	FY 21/22	Sub-Total	Grand Total	Active	Safe	Green	Efficient	Connected PT	Quality PT	Accessible PT					Unlocking	Good Growth	Casualty Data monitoring (TADS)	Bus Journey Times monitoring	Press coverage	
Corridors Neighbourhoods and Supporting Measures	Marks Gate – Chadwell Heath Cycling Link	Introduction of a dedicated cycle route linking the Marks Gate Estate to the Elizabeth Line (Crossrail) station at Chadwell Heath, as a means of encouraging healthy, sustainable travel in the area. It is proposed to better utilise the existing quiet, green routes of St. Chad's Park to provide a safe, direct cycle link, whilst seeking to address some of the key barriers/accessibility issues present in the wider area.	LIP Allocation		East Road/St. Chad's Park	75			75		75	yes	yes	yes	yes	-	-	-	-	-	Local Streets (M1/P1)	No	No	Yes	Yes	No	Yes
Corridors Neighbourhoods and Supporting Measures	Road Safety and Access Improvement Programme	Small-medium scale, site specific road safety and access improvements in support of our LIP objectives of reducing the number of casualties on our roads, improving access for all and promoting healthy/sustainable travel; and to complement our various corridor/neighbourhood initiatives. Priorities tbc, but likely to focus on proposals for new neighbourhood 20mph zones, filtered permeability schemes and 'school gate' road safety/access improvements.	LIP Allocation		Various Locations	100			100		100	yes	yes	yes	yes	-	yes	-	-	-	Local Streets (M1/P1)	No	No	Yes	Yes	No	No
Corridors Neighbourhoods and Supporting Measures	Borough-wide Healthy/Active Travel Programme	Continuation of work with borough schools, businesses and residents to promote healthy, active and sustainable travel practices. Funding earmarked for: •Provision of cycle training to cyclists of all ages and the delivery of walking events/initiatives to promote cycling and walking as healthy/sustainable modes of travel; •Review/update of school and workplace travel plans, including funding for promotional events and small-scale physical measures (e.g. cycle parking). Includes contribution towards the cost of employing London Riverside Travel Plan Coordinator.	LIP Allocation		Various Locations	127			127		127	yes	yes	yes	yes	-	-	-	yes		Not Applicable	No	No	N/A	No	No	Yes

Programme	Scheme Title	Scheme Description	Funding Source (list multiple)	Portal ID of an on going scheme	Scheme Location and Extent. Coordinates and/or description	Funding £000's				Outcome Mapping - Please indicate which (inc. combinations) Healthy Streets Outcomes each scheme delivers								Street Type	Does the scheme impact on the TLRN or other TL infrastructure	Does the scheme involve bus route diversions permanent or temporary?	Will the scheme be LCDS compliant	Would you like the following to be carried out by TFL?				
						FY 19/20	FY 20/21	FY 21/22	Sub-Total	Grand Total	Active	Safe	Green	Efficient	Connected PT	Quality PT	Accessible PT					Unlocking	Good Growth	Casualty Data monitoring (LCDS)	Bus Journey Times monitoring	Press coverage
Future Schemes Development (Local Transport Fund)		Investigative studies to inform future LIP Corridor and Liveable Neighbourhood schemes. Focus will be on promoting healthy, active travel and on securing road safety and accessibility improvements.	LIP Allocation		Various Locations	60			60	60	yes	yes	yes	yes	yes	yes	yes	yes	Not Applicable	No	No	N/A	No	No	No	
								0																		
Minor Works (Local Transport Fund)		Ad-hoc measures such as pedestrian access improvements; small-scale public realm enhancements; implementation of cycle parking; reviews of parking and waiting/loading restrictions; etc.	LIP Allocation		Various Locations	40			40	40	yes	yes	yes	-	yes	yes	-	-	Local Streets (M1/P1)	No	No	N/A	No	No	No	
								0																		





working on behalf of Barking and Dagenham

