

## 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**).

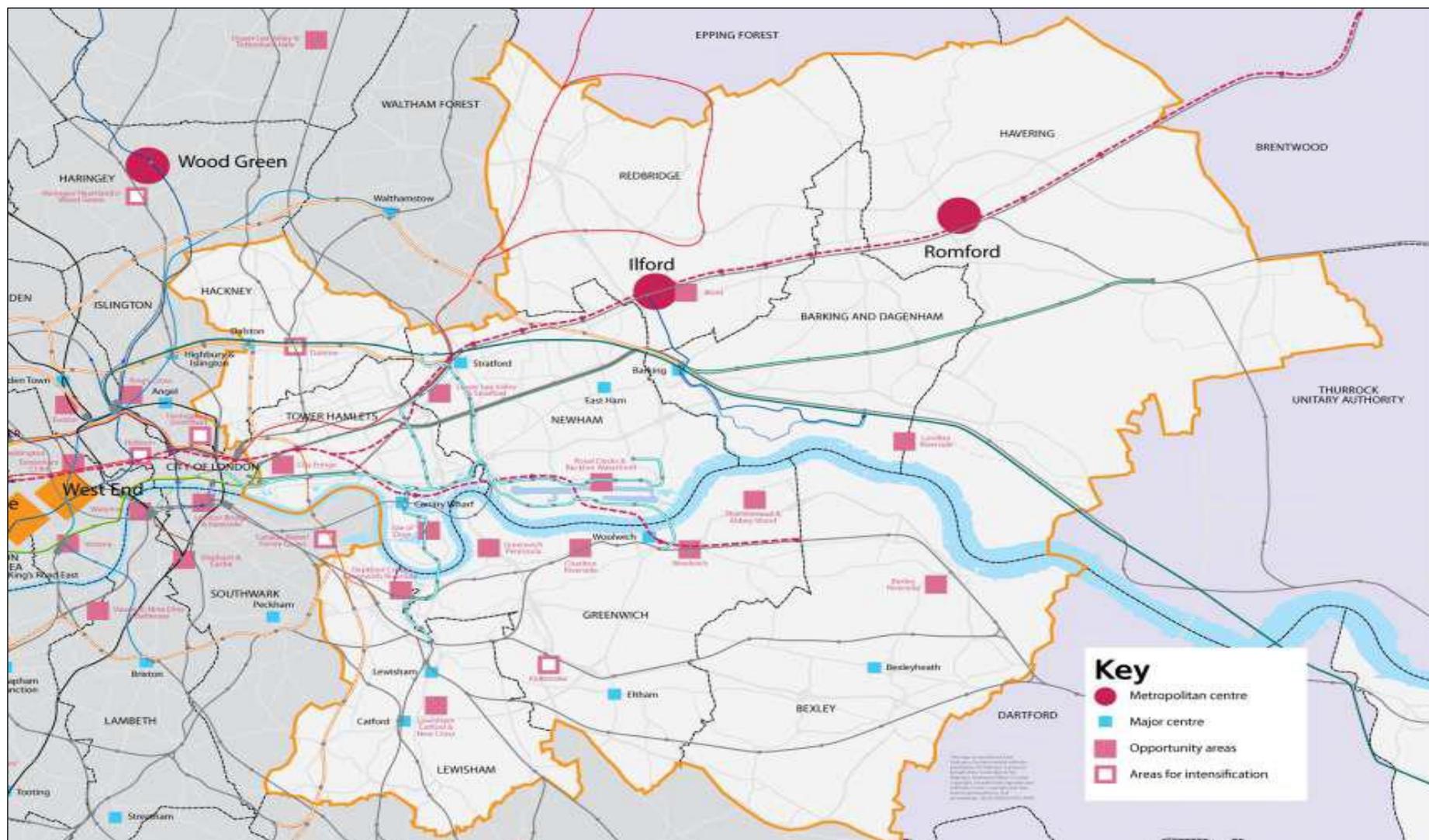
### 2.2 Borough Overview

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 7<sup>th</sup> 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.

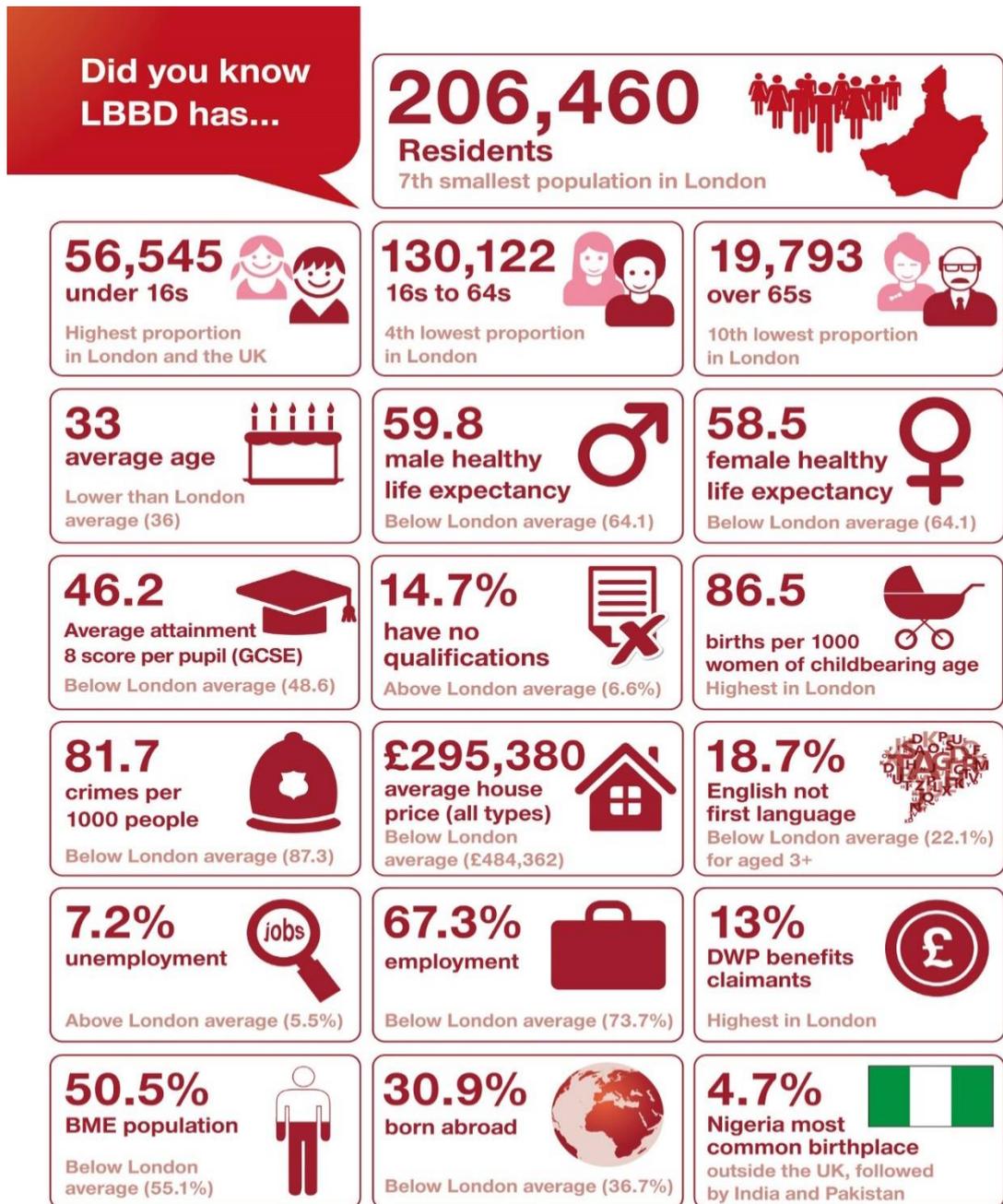
2.2.3 Barking and Dagenham's key advantages are its proximity to the main employment, retail and leisure centres of Docklands, Stratford and Romford; its good road and rail links to central London; and its proximity to the Thames, Crossrail, the M25 Motorway and London City Airport. In addition, the 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

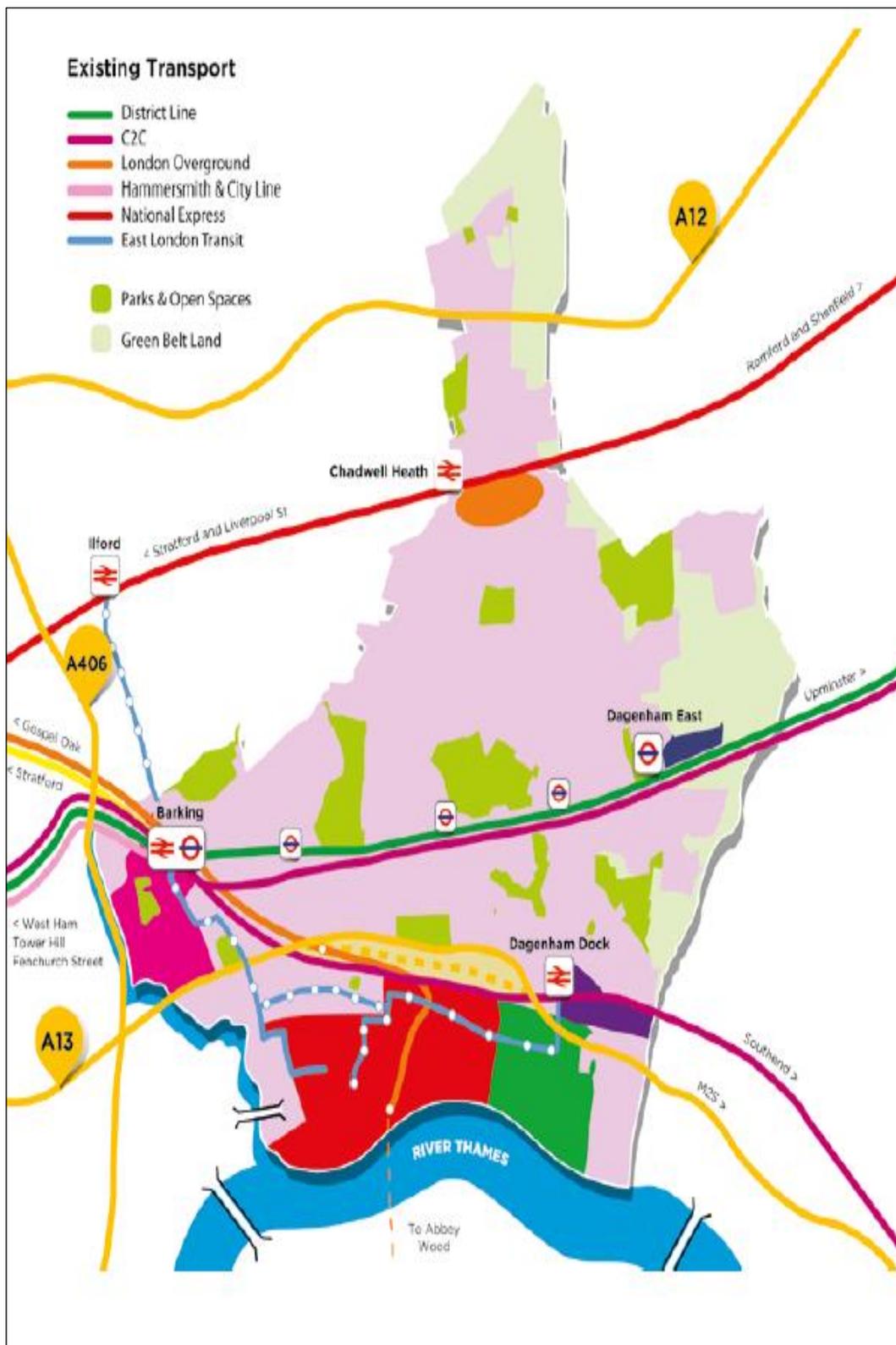
2.3.1 **Table 2.1** and **Figure 2.3** provide an overview of the nature and extent of the key transport networks and services in Barking and Dagenham, including the highways, public transport and cycling/walking networks serving the borough.

Table 2.1: Borough transport provision

Mode/Network	Provision
	<ul style="list-style-type: none"> <li>• There are 396 km (248 miles) of roads in Barking and Dagenham comprising 3km of trunk roads managed by TfL; 51km of borough principal and 342km of minor roads managed by the Council.</li> <li>• 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.</li> <li>• A network of 39 on-street electric vehicle charging points at 13 locations across the borough is managed by Source London.</li> </ul>
 	<ul style="list-style-type: none"> <li>• Barking and Dagenham is served by an extensive east-west radial rail network, comprising: <ul style="list-style-type: none"> <li>▪ National Rail services, operated by C2C, connecting London and Southend and calling at Barking and Dagenham Dock;</li> <li>▪ London Underground services via the District and Hammersmith &amp; 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 &amp; City Line trains terminate at Barking;</li> <li>▪ London Overground, which connects Barking to Gospel Oak and provides a connection to the North London Line;</li> <li>▪ TfL Rail, which runs suburban services between London and Shenfield and calls at Chadwell Heath.</li> </ul> </li> <li>• There are several active rail freight facilities in the borough, including the Freightliner/P&amp;O intermodal terminal and the Ford intermodal terminal in Dagenham. These account for a growing proportion of rail freight movements in the borough.</li> </ul>
	<ul style="list-style-type: none"> <li>• The bus network in Barking and Dagenham comprises: <ul style="list-style-type: none"> <li>▪ 26 bus routes providing links to a range of destinations within the borough, as well as to the major centres of Rainham, Romford, Ilford and Stratford in neighbouring boroughs;</li> <li>▪ 23 routes run daily services across the borough. A number of night bus services are also in operation;</li> <li>▪ 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;</li> <li>▪ There are no bus stations in the borough. However, it is served by two main bus depots based in Barking and Creekmouth.</li> </ul> </li> </ul>

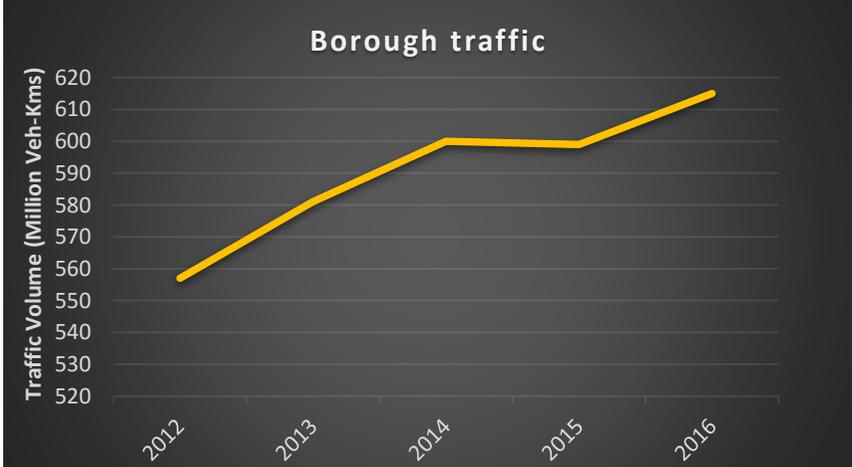
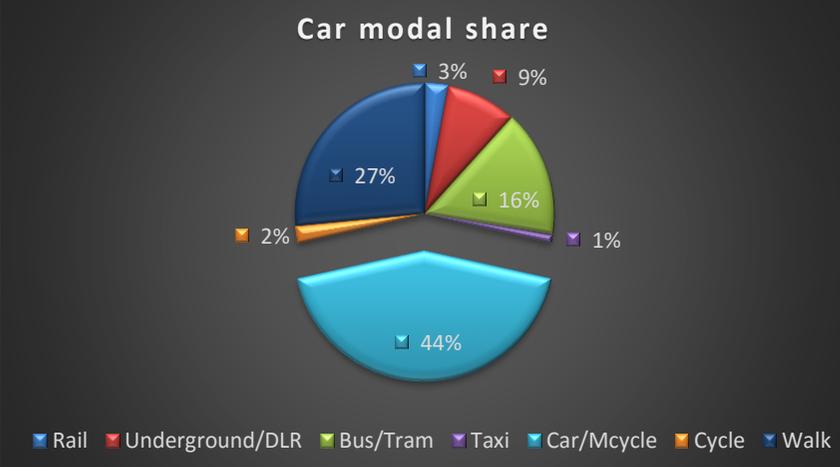
Mode/Network	Provision
	<ul style="list-style-type: none"> <li>• The River Thames remains largely underutilised as a transport network in East London, with no passenger services in operation east of the Thames Flood Barrier at Woolwich.</li> <li>• Significant freight activity occurs on the Thames around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

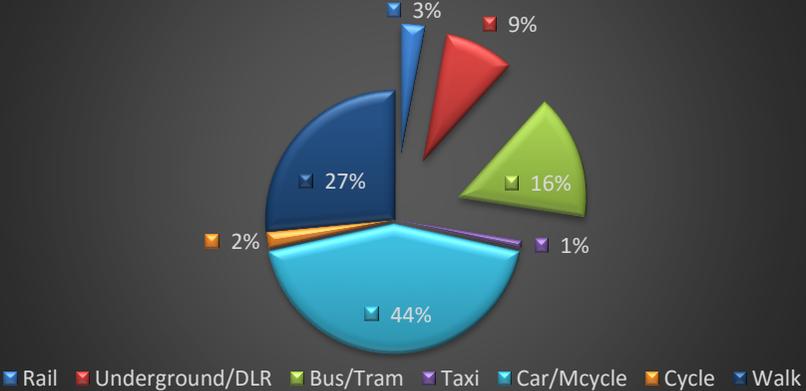
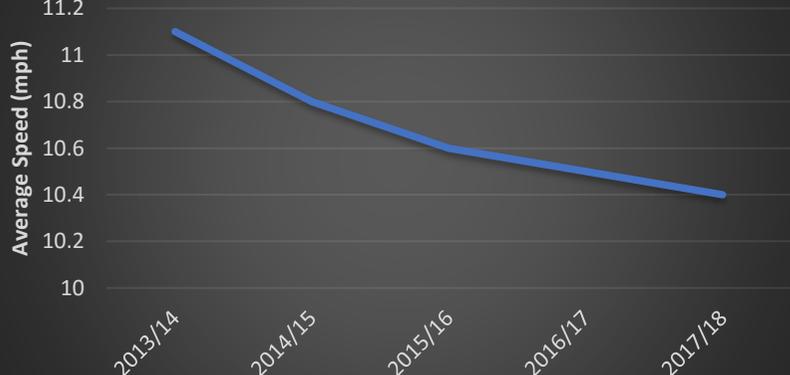
Figure 2.3: Borough transport networks and services

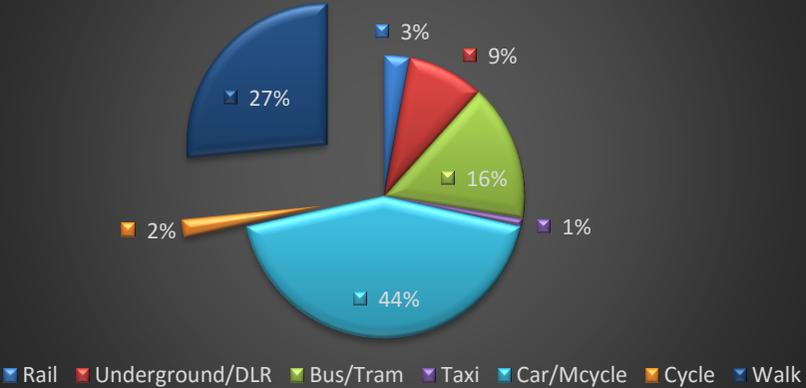
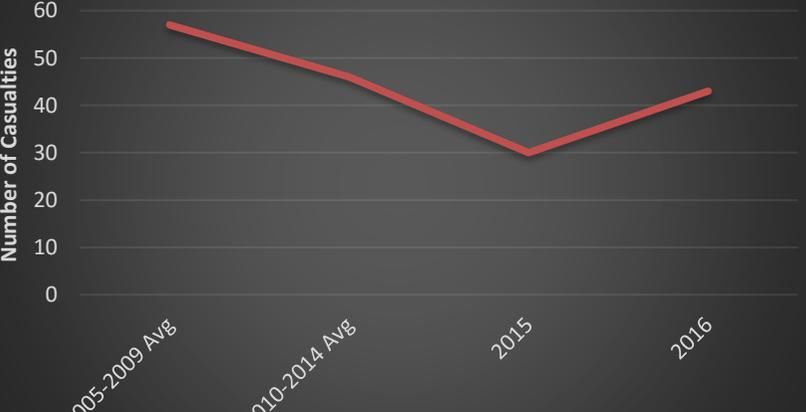


2.3.2 **Table 2.2** provides a summary of the key trends and developments relating to transport and travel in Barking and Dagenham.

Table 2.2: Borough transport and travel trends

Mode/Network	Key Trends																												
	<ul style="list-style-type: none"> <li>• 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.</li> <li>• 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).</li> <li>• 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%.</li> </ul>																												
<p style="text-align: center;"><b>Borough traffic</b></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>585</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	585	2014	600	2015	598	2016	615	<p style="text-align: center;"><b>Car modal share</b></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>1%</td> </tr> </tbody> </table>	Mode	Share (%)	Rail	3%	Underground/DLR	9%	Bus/Tram	16%	Taxi	1%	Car/Mcycle	44%	Cycle	2%	Walk	1%
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	<ul style="list-style-type: none"> <li>Public transport mode share in Barking and Dagenham is high in comparison with most Outer London boroughs. In the period 2014/15 – 2016/17, 28% (circa 72,000) of daily trips were made by rail, underground or bus – well above the Outer London average of 22%.</li> <li>Patronage on the Underground has grown steadily (23%) since 2012/13. There were around 34,000 daily trips originating in Barking and Dagenham in the period 2014/15 - 2016/17, up from just under 28,000 in the period 2012/13 – 2014/15.</li> <li>The number of passengers using C2C services from Barking and Dagenham Dock stations has increased by 41% from circa 7.3 million in 2013/14 to around 10.3 million in 2016/17.</li> <li>Between 2012/13 and 2016/17 the number of daily trips made on bus services in the borough fell by 25% - mirroring the trend across large parts of London.</li> <li>Bus journey time reliability across the borough has worsened, with average bus speeds falling by 6% between 2013/14 and 2017/18, whilst bus average excess waiting times have increased by 38% over the same period.</li> </ul>																												
<p data-bbox="495 895 954 927"><b>Public transport modal share</b></p>  <table border="1" data-bbox="331 1302 1137 1326"> <thead> <tr> <th>Mode</th> <th>Share (%)</th> </tr> </thead> <tbody> <tr> <td>Rail</td> <td>27%</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>3%</td> </tr> </tbody> </table>	Mode	Share (%)	Rail	27%	Underground/DLR	9%	Bus/Tram	16%	Taxi	1%	Car/Mcycle	44%	Cycle	2%	Walk	3%	<p data-bbox="1514 895 1682 927"><b>Bus speeds</b></p>  <table border="1" data-bbox="1205 951 1995 1326"> <thead> <tr> <th>Year</th> <th>Average Speed (mph)</th> </tr> </thead> <tbody> <tr> <td>2013/14</td> <td>11.1</td> </tr> <tr> <td>2014/15</td> <td>10.8</td> </tr> <tr> <td>2015/16</td> <td>10.6</td> </tr> <tr> <td>2016/17</td> <td>10.5</td> </tr> <tr> <td>2017/18</td> <td>10.4</td> </tr> </tbody> </table>	Year	Average Speed (mph)	2013/14	11.1	2014/15	10.8	2015/16	10.6	2016/17	10.5	2017/18	10.4
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	<ul style="list-style-type: none"> <li>• The mode share for cycling trips originating in Barking and Dagenham is 2% - on a par with the Outer London average.</li> <li>• 27% of all trips originating in the borough are made on foot – slightly lower than the Outer London average of 28%.</li> <li>• The number of people killed and seriously injured on the borough's roads has fallen by a quarter in recent years (down from 57 based on the 2005 – 2009 average to 43 in 2016). However, at the same time, the number slightly injured has risen by 15% and the high number of pedestrian and cycle casualties is a particular cause for concern.</li> </ul>																										
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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"> <li>• 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;</li> <li>• 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.</li> </ul>	<ul style="list-style-type: none"> <li>• The introduction of new or enhanced bus services (MTS Proposal 57);</li> <li>• The development of multi-modal interchange hubs (MTS Proposal 67);</li> <li>• The extension of river transport services to Barking Riverside by the early 2020s (MTS Proposal 73);</li> <li>• The extension of Night Tube/Night Bus services (MTS Policy 19).</li> </ul>
<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"> <li>• 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.</li> </ul>	<ul style="list-style-type: none"> <li>• The roll-out of improved journey planning tools and the provision of travel mentoring (MTS Proposal 53);</li> <li>• 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);</li> <li>• 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).</li> </ul>
<p>The fragmented nature of the borough's cycling and walking links.</p>	<ul style="list-style-type: none"> <li>• 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.</li> </ul>	<ul style="list-style-type: none"> <li>• Delivery of a London-wide strategic cycle network (MTS Proposal 3a).</li> </ul>
<p>Worsening of the performance of the road network.</p>	<ul style="list-style-type: none"> <li>• 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.</li> </ul>	<ul style="list-style-type: none"> <li>• Making greater use of the rail and river network to transport freight (MTS Proposal 16);</li> <li>• Improving the efficiency of last mile deliveries and servicing (MTS Proposal 17);</li> <li>• Applying road user charging/workplace parking levy schemes as a means of reducing traffic and</li> </ul>

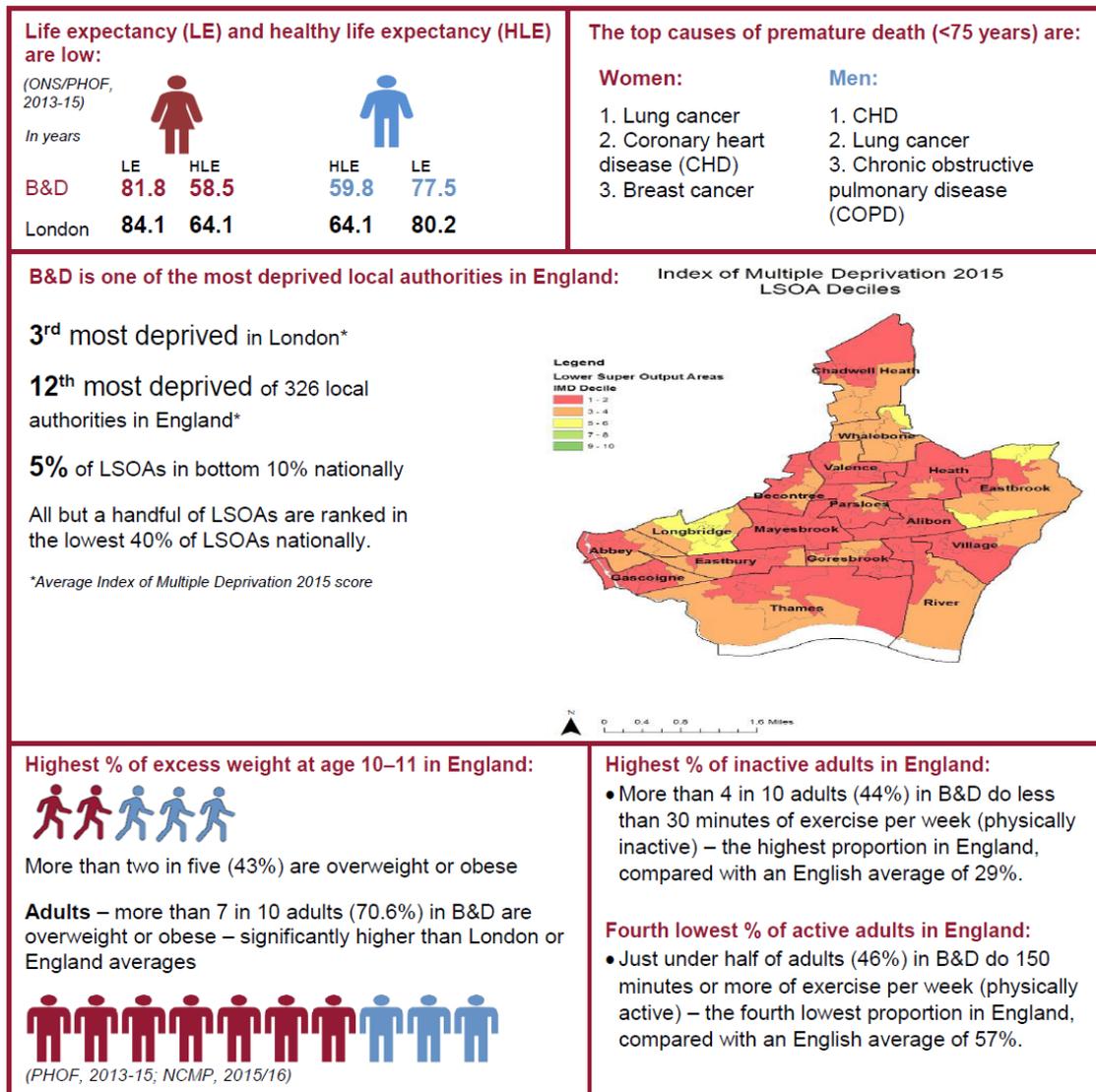
Key Challenges	Priority Issues/Concerns	Key Opportunities
		<p>encouraging a switch to more sustainable modes of travel (MTS Proposal 23);</p> <ul style="list-style-type: none"> <li>• Roll-out of TfL's bus priority programme (MTS Proposal 59).</li> </ul>
<p>Poor air quality and traffic noise adjacent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

## 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 and walking network in Barking and Dagenham.

*Figure 2.5: Borough cycling and walking network*

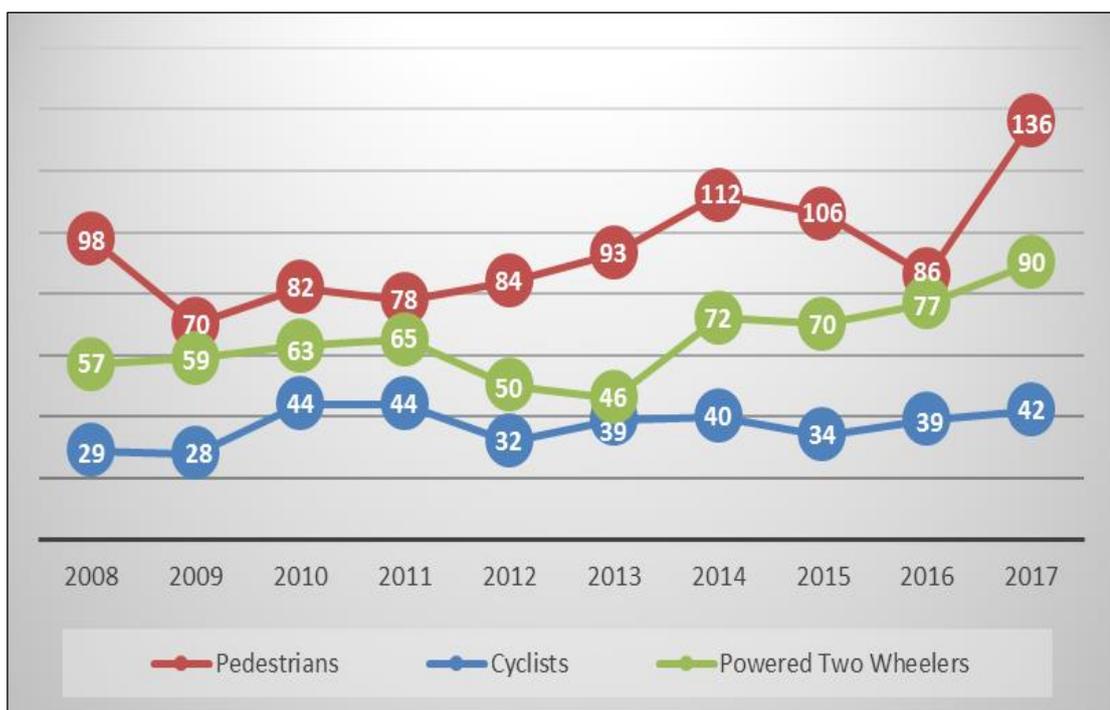
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2.4.6 Providing safe and secure infrastructure to encourage greater levels of cycling and walking, especially for shorter journeys, represents one of the best ways of addressing challenges around poor health and inactivity. A key opportunity that could 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.

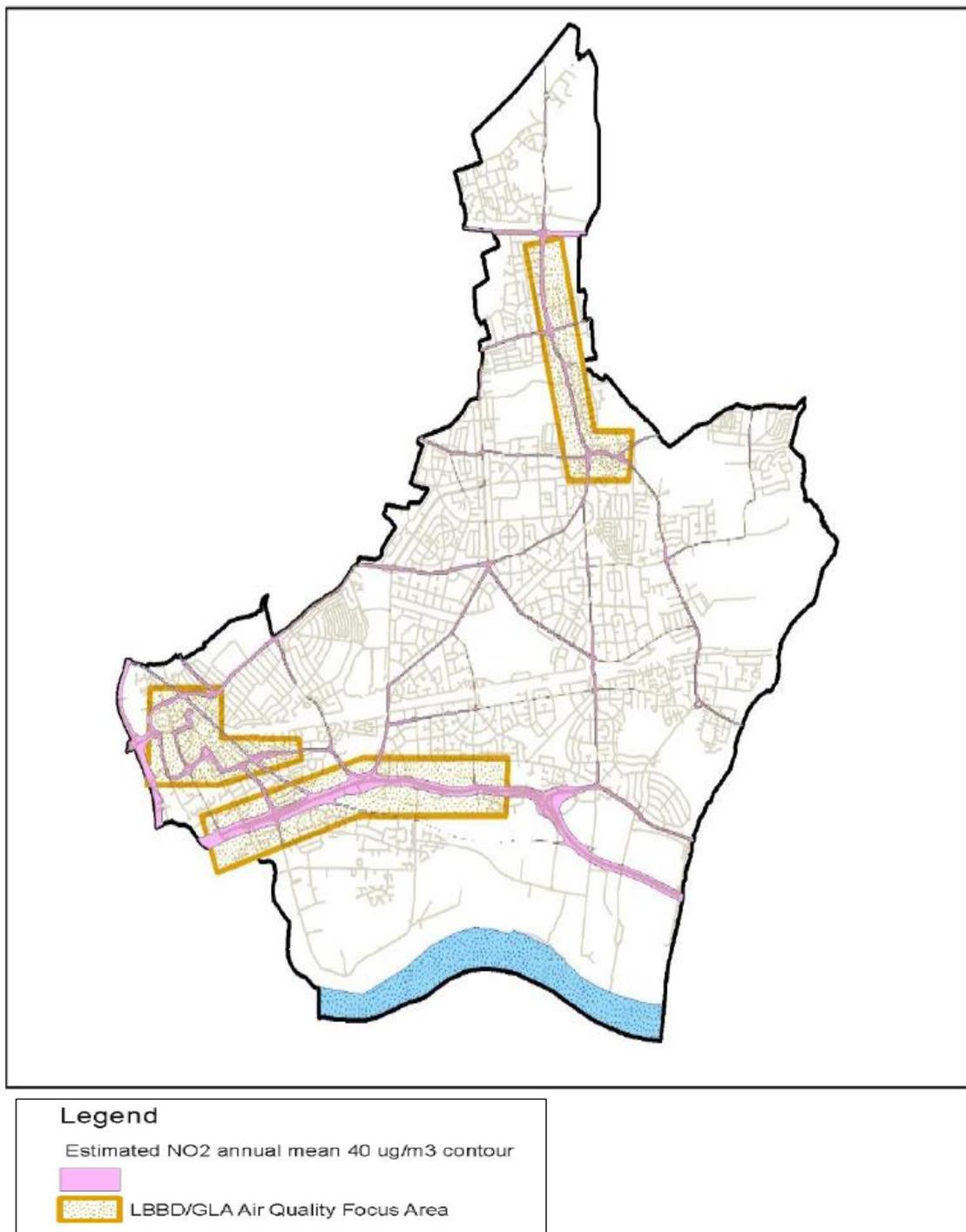
2.4.11 It is clear then that action is needed to reduce the negative impacts of congestion on the borough. This includes working with TfL, businesses, freight operators and a range of other stakeholders to prioritise space-efficient modes of transport and improve the efficiency of streets for the movement 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

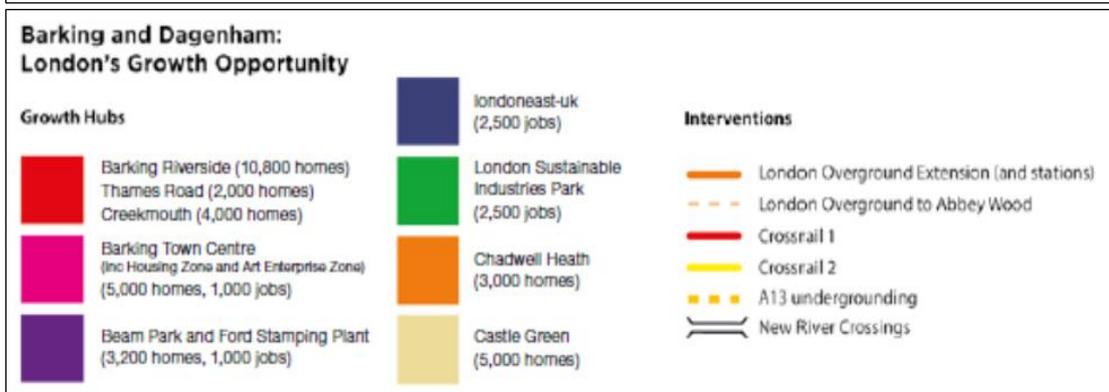
### **MTS Outcome 9: Unlocking**

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 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	
<b>LIP Priority: Connecting people and places</b>																		
A. Enhancing public transport connectivity to enable growth	✓✓		✓	✓	✓	✓✓	✓	✓✓	✓✓	✓✓		✓✓	✓		✓		✓✓	
B. Improving accessibility for all to key services and facilities	✓		✓			✓✓	✓✓	✓	✓	✓		✓✓	✓	✓			✓	
<b>LIP Priority: Promoting healthy, sustainable travel</b>																		
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
<b>LIP Priority: Improving safety and security</b>																	
E. Reducing the number of casualties on our roads	✓✓	✓	✓✓				✓	✓			✓✓		✓✓	✓		✓	
F. Improving safety and security across the transport network	✓	✓	✓✓		✓		✓	✓			✓		✓✓			✓	
<b>LIP Priority: Creating better streets and places</b>																	
G. Managing our road space more efficiently to tackle congestion	✓✓	✓✓	✓	✓✓	✓✓		✓	✓✓	✓		✓✓	✓	✓		✓✓	✓	
H. Transforming the public realm to create healthy, inclusive places	✓✓	✓✓	✓	✓✓	✓✓		✓	✓	✓	✓	✓✓		✓		✓✓	✓	
<b>KEY:</b> ✓✓ 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 Despite a fall in the number of casualties on our roads and a reduction in crime on public transport, safety and security 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.