

**London Borough of Camden**



**Camden's Transport Strategy**

**Camden's Local Implementation Plan**

**AUGUST 2011**

## TABLE OF CONTENTS

<b>Executive Summary</b> .....	<b>i</b>
<i>E1 What is the Camden Transport Strategy?</i> .....	<i>i</i>
<i>E2 Why do we Need a Transport Strategy?</i> .....	<i>i</i>
<i>E3 How will Camden Address the Borough's Transport Challenges?</i> .....	<i>iii</i>
<i>E4 Where Does the Money Come From?</i> .....	<i>vii</i>
<i>E5 Where will the Money be Spent?</i> .....	<i>vii</i>
<i>E6 How will we Measure our Performance?</i> .....	<i>ix</i>
<i>E7 Summary of the Reporting Process</i> .....	<i>x</i>
<b>Chapter 1 - Introduction</b> .....	<b>1</b>
<i>About the Camden Transport Strategy</i> .....	<i>1</i>
<i>Structure of the Camden Transport Strategy</i> .....	<i>3</i>
<b>Chapter 2 – Local Context and Transport Geography</b> .....	<b>4</b>
<i>Introduction</i> .....	<i>4</i>
<i>Local Context</i> .....	<i>4</i>
<i>Camden's Transport Context</i> .....	<i>15</i>
<i>Cycle Network</i> .....	<i>22</i>
<i>Walking Routes</i> .....	<i>23</i>
<i>How People in Camden Are Travelling</i> .....	<i>25</i>
<i>Changes in Traffic Flows</i> .....	<i>27</i>
<i>Wider Policy Context</i> .....	<i>33</i>
<b>Chapter 3 - Transport Challenges and Opportunities for Camden</b> .....	<b>36</b>
<i>Introduction</i> .....	<i>36</i>
<i>Mayoral and Sub-Regional Challenges</i> .....	<i>36</i>
<i>Supporting the Growing Population</i> .....	<i>38</i>
<i>Improving Connectivity of Transport in Camden</i> .....	<i>41</i>
<i>Providing an Efficient and Effective Transport System</i> .....	<i>42</i>
<i>Maintaining the Transport System</i> .....	<i>43</i>
<i>Improving Journey Experience</i> .....	<i>44</i>
<i>Enhancing the Built and Natural Environment</i> .....	<i>45</i>
<i>Improving Air Quality</i> .....	<i>46</i>
<i>Encouraging Healthy Travel</i> .....	<i>48</i>
<i>Reducing Crime, Fear of Crime and Anti-Social Behaviour</i> .....	<i>49</i>
<i>Improving Transport Safety</i> .....	<i>52</i>
<i>Accessible Transport for All</i> .....	<i>56</i>
<i>Supporting Regeneration</i> .....	<i>59</i>
<i>Reducing Transport Impacts on Climate Change and Increasing Resilience</i> .....	<i>61</i>

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# Camden Transport Strategy

<i>Supporting Delivery of the London Olympics and Paralympics in 2012 and Developing a Sustainable Legacy</i> .....	63
<b>Chapter 4 - Transport Vision and Objectives</b> .....	<b>65</b>
<i>Camden Transport Objectives</i> .....	65
<b>Chapter 5 – Delivering Camden’s Transport Objectives</b> .....	<b>70</b>
<i>Introduction</i> .....	70
<i>Objective 1 - Reduce motor traffic and vehicle emissions to improve air quality, mitigate climate change and contribute to making Camden a ‘low carbon and low waste borough’</i> .....	71
<i>Objective 2 - Encourage healthy and sustainable travel choices by prioritising walking, cycling and public transport in Camden</i> .....	84
<i>Promoting Sustainable Travel through Travel Planning</i> .....	100
<i>Objective 3 – Improve road safety and personal security for people travelling in Camden</i> .....	103
<i>Reducing Crime on the Transport Network</i> .....	113
<i>Objective 4 – Effectively manage the road network to manage congestion, improve reliability and ensure the efficient movement of goods and people</i> .....	117
<i>Objective 5 – Develop and maintain high quality, accessible public streets and spaces and recognise that streets are about more than movement</i> .....	124
<i>Objective 6 – Ensure the transport system supports Camden’s sustainable growth and regeneration as well as enhancing economic and community development</i> .....	131
<i>Objective 7 – Ensure the transport systems supports access to local services and facilities, reduces inequalities in transport and increases social inclusion</i> .....	136
<i>Objective 8 – To ensure that the provision of parking is fair and proportionate by considering the needs of all users, whilst also encouraging sustainable travel choices</i> .....	143
<i>Objective 9 - Support the delivery of a successful London 2012 Olympic and Paralympic Games</i>	148
<b>Chapter 6 – Investment in Camden’s Transport System</b> .....	<b>152</b>
<i>Introduction</i> .....	152
<i>Corridors and Neighbourhoods and Smarter Travel</i> .....	154
<i>Supporting Measures</i> .....	168
<b>Chapter 7 – Consultation</b> .....	<b>186</b>
<i>Summary of the draft LIP consultaton</i> .....	186
<b>Chapter 8 - Performance Monitoring Plan</b> .....	<b>188</b>
<i>Introduction</i> .....	188
<i>Camden Transport Strategy Targets</i> .....	190
<i>Detailed Target Tables</i> .....	192
<i>Collecting Monitoring Data</i> .....	207

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## Executive Summary

### *E1 What is the Camden Transport Strategy?*

- E1.1 The Camden Transport Strategy (CTS) sets out the future direction for transport in Camden and describes the context of traffic and transport in the borough, the challenges we face and how, through the objectives and actions outlined in the Strategy, we propose to address them. This document also forms the basis of funding requests to Transport for London (TfL) for borough transport schemes.
- E1.2 The CTS has strong links with a number of Camden Council policies and strategies, such as the Sustainable Community Strategy, the Local Development Framework, placeshaping, town centre studies, meeting the objectives of the Children and Young People's Plan and the Older People's Plan, and the economic, health and sustainability agendas. It also has a close relationship with the relevant sub-regional transport plans (Central and North London), which are being developed by TfL in partnership with the London boroughs, and other London Mayoral policies.

### *E2 Why do we Need a Transport Strategy?*

- E2.1 The Greater London Authority Act 1999 requires London Boroughs to produce a Local Implementation Plan (LIP), which demonstrates how each authority will deliver the Mayor of London's Transport Strategy, and the Central and North Sub-Regional Transport Plans. In response to this requirement, Camden has developed the Camden Transport Strategy.
- E2.2 There have been many changes to Camden's transport network in recent years which have supported a shift to sustainable travel modes and reduced collisions. However, despite recent progress, there are still many transport challenges that we need to address, as follows:
- E2.3 **Supporting the growing population.** Camden's population is forecast to grow by 17% (or around 35,000 people) by 2031. This will put significant extra pressure on the transport network in the borough and surrounding areas.
- E2.4 **Improving connectivity of transport in Camden.** Despite excellent transport links in Camden, growing demand is creating huge pressures and overcrowding on the transport network. Although rail operators and TfL have responsibility for funding rail infrastructure improvements, Camden will need to continue to work with stakeholders to improve services, interchanges and provision of information.

- E2.5 Providing an efficient and effective transport system.** Different users such as commuters, residents, tourists and businesses all have different needs and priorities. Balancing these different demands and managing the road network effectively for the benefit of all is a major challenge for Camden.
- E2.6 Maintaining the transport system.** The reliability of the transport network in Camden is important to businesses and individuals. Congestion represents a significant cost to businesses which rely on transport for staff, customers and for deliveries of goods. Breakdowns and system failures, both on the transport network and on services such as water mains, can add to this inconvenience.
- E2.7 Improving journey experience.** Many people spend hours travelling each day and the quality of their experience can have a considerable impact on their day-to-day lives. As well as general health and well-being, it is vital for Camden's economy that people are able to get to their destinations safely, efficiently and reliably.
- E2.8 Enhancing the built and natural environment.** Improving the quality and attractiveness of public spaces can play a fundamental role in creating a successful neighbourhood, and contribute to social inclusion and regeneration. Camden has an ongoing commitment to enhance the environment to improve local areas.
- E2.9 Improving air quality.** Road transport in Camden makes a significant contribution to deteriorating air quality and pollution levels which impact on health, as well as CO<sub>2</sub> and climate change.
- E2.10 Reducing the impact of transport noise.** Given the borough's central London location and high levels of traffic, the main source of ambient noise experienced by Camden residents is from road traffic.
- E2.11 Encouraging healthy travel.** Active travel modes such as walking and cycling have significant health benefits as well as helping to reduce emissions, congestion and road danger on the road network.
- E2.12 Reducing crime, fear of crime and anti-social behaviour.** Crime and the perception of safety is often a significant barrier to travel. Reducing crime and providing an environment in which people feel safer is something that this transport strategy can help address.
- E2.13 Improving transport safety.** While Camden has been very successful in reducing casualties over recent years, ensuring the safety of all road users continues to be a big challenge for Camden.
- E2.14 Accessible transport for all.** The benefits of living and working in Camden are not always available to everyone. Accessibility to the transport network can limit opportunities and there are several barriers to overcome, including safety, reducing the dominance of traffic, and

providing affordable transport options. There are particular physical barriers for mobility impaired people.

**E2.15 Supporting regeneration.** Tackling deprivation requires action in a number of fields across the Council and with other agencies. Good transport links can provide access to jobs, services, education, training opportunities, essential services and social networks which can assist regeneration.

**E2.16 Reducing transport impacts on climate change and increasing resilience.** Transport has an important role to play in reducing emissions and their contribution to climate change. The transport network will also need to adapt to the impacts of climate change.

**E2.17 Supporting delivery of the 2012 Olympic and Paralympic Games and developing a sustainable legacy.** A significant challenge for Camden will be to keep Camden moving during the 2012 Olympic and Paralympic Games and ensuring that they provide a lasting legacy for the borough.

**E2.18** Many of these challenges will become more acute as population and employment continue to grow, both in Camden and across Greater London.

**E2.19** As well as these challenges, there are also emerging opportunities that can help Camden address transport issues. Large scale projects such as proposed improvements to the Underground lines and Crossrail, as well as the 2012 Olympic and Paralympic Games, present opportunities to influence travel behaviour and improve the overall travel experience in the borough. Some of the planned major infrastructure projects in Camden that will help accommodate growth include:

- **Crossrail** – a new east-west high capacity rail line through the southern part of the borough.
- **Thameslink Route** – upgrade works to increase frequency of services, provide new and longer trains and improve stations.
- **London Underground** – improved signalling, new trains and higher frequency services to improve capacity on the Jubilee, Victoria, Northern, Piccadilly, Metropolitan, Circle and Hammersmith & City lines.
- **The North London Line** (London Overground), which passes through Camden, is also now benefiting from increased capacity.

### ***E3 How will Camden Address the Borough's Transport Challenges?***

**E3.1** Camden has developed objectives to address the challenges described above. These objectives are designed to fit with the Mayor of London's goals set out in the Mayor's Transport Strategy, along with Camden's own vision in the Sustainable Community Strategy. We

have also developed a range of strategies and different measures that Camden will implement to deliver our transport objectives. The objectives, and how we propose to deliver them, include:

***Objective 1: Reduce motor traffic levels and vehicle emissions to improve air quality, mitigate climate change and contribute to making Camden a ‘low carbon and low waste borough.’***

E3.2 To meet this objective Camden proposes the following measures:

- Car clubs, low emission and electric vehicles
- Car-free developments
- Reducing traffic flows and encouraging a switch towards more sustainable travel
- A road user hierarchy that prioritises walking and cycling
- Encourage better driver behaviour to reduce vehicle emissions
- A greener Camden fleet
- Events and campaigns that promote sustainable travel
- More street trees and urban greening

***Objective 2: Encourage healthy and sustainable travel choices by prioritising walking, cycling and public transport in Camden***

E3.3 How we will achieve this:

- Campaigns and travel plan development with schools, businesses and other organisations
- Partnerships with key health practitioners, such as NHS Camden to promote active travel
- Improved pedestrian environment including better crossing facilities, seating and signage
- Cycle training and more secure cycle parking
- Improved cycle routes with better signs
- Working with TfL to extend the Cycle Hire scheme and introduce the proposed Cycle Superhighway route 11
- Work with transport providers, such as rail, underground and bus operators, to improve the public transport system and passenger information
- Enhance interchanges between the different transport modes in the borough

***Objective 3: Improve road safety and personal security for people travelling in Camden.***

E3.4 How we will achieve this:

- Improve pedestrian crossing facilities
- Direct and comfortable routes for cyclists and advanced stop lines at signalised junctions
- Education for cyclists and HGV drivers to improve awareness of potential conflict

- Create attractive streets to encourage more pedestrian activity and natural surveillance, and 'Design Against Crime' initiatives
- Speed reduction, including 20mph speed limits and zones
- Road safety education and awareness campaigns including a programme of annual events and initiatives
- Adult and child cycle training
- Partnership working with the Metropolitan Police to tackle crime and anti-social behaviour

***Objective 4: Effectively manage the road network to manage congestion, improve reliability and ensure the efficient movement of goods and people***

E3.5 How we will achieve this:

- Limit the demand for motorised travel by enhancing facilities for walking and cycling
- Encourage less traffic and parking demands through measures such as car clubs
- Minimise the impact of road works on the highway network
- Review the need for traffic signals where appropriate
- Construction Management Plans and Servicing Management Plans to minimise impacts from new developments
- Freight initiatives and partnership working to improve the reliability and efficiency of deliveries

***Objective 5: Develop and maintain high quality, accessible public streets and spaces and recognise that streets are about more than movement***

E3.6 How we will achieve this:

- Improve the look and feel of the street to create places where people interact, play, shop, live, work and socialise
- Remove unnecessary street clutter such as guardrailing and redundant poles
- Road and footway maintenance
- Maintenance of bridges, structures and highway assets
- Review Camden's Streetscape Design Manual to reflect latest design principles and the current economic climate

***Objective 6: Ensure the transport system supports Camden's sustainable growth and regeneration as well as enhancing economic and community development***

E3.7 How we will achieve this:

- Integrating transport and land use planning to support sustainable growth, particularly for growth areas and town centres
- Investing in public realm, safety and accessibility of the transport network to support town centre and placeshaping areas



- Securing developer contributions to ensure transport improvements mitigate the impacts of new developments

***Objective 7: Ensure the transport system supports access to local services and facilities, reduces inequalities in transport and increases social inclusion.***

E3.8 How we will achieve this:

- Reduce traffic dominance and severance
- Improve safety
- Encourage inclusive modes of transport that are affordable and easily available to everyone, such as walking, cycling and public transport
- Improve the provision of information, making it more widely accessible
- Improve passenger access at bus stops and rail/underground stations
- Remove physical obstacles and introduce new facilities such as wider footways and dropped kerbs to help people more easily move around

***Objective 8: Ensure that the provision of parking is fair and proportionate by considering the needs of all users, whilst also encouraging sustainable travel choices.***

E3.9 How we will achieve this:

- Review Controlled Parking Zones to ensure they are fair, simple and meet the needs of all road users
- Continue to use a system of parking charges based on vehicle emissions
- Ensure that parking enforcement is fair and proportionate
- Further analysis of motorcycle parking

***Objective 9: Support the delivery of a successful London 2012 Olympic and Paralympic Games***

E3.10 How we will achieve this:

- Work with London 2012 in developing the Olympic Route Network and the Russell Square Media Transport Hub
- Accessibility improvements on key routes and walking corridors
- Work with National Rail and London Underground to manage passenger flows on the public highway and safety around stations during the Olympic and Paralympic Games.

## E4 Where Does the Money Come From?

- E4.1 The primary source of funding for transport improvements in the borough is from Central Government, via the Mayor of London and **Transport for London** (TfL). Each year, all London authorities bid for funding to the Mayor of London for a range of traffic, highways and public realm schemes. TfL allocates funding to all boroughs based on a complex formula, although Major Schemes (those costing over £1 million) must undergo a competitive 'step bid' process, with several different stages of approval.
- E4.2 In the past Camden has been very successful at bidding for funding, but financial constraints and a changed way of allocating the funding across London means there is now less money available for Camden to spend on transport improvements. The result is that, between 2008/09 and 2013/14, funding through the Local Implementation Plan process will reduce significantly
- E4.3 Funding for transport will continue to be sought from other areas, such as from developers as part of the planning process, to contribute to highways improvements that will help Camden cope with the increased demands from population and employment growth.

## E5 Where will the Money be Spent?

- E5.1 Camden has developed a programme of projects and schemes that are designed to meet the objectives of the Camden Transport Strategy. These are categorised into three programmes as required by TfL and comprise Corridors, Neighbourhoods and Supporting Measures, Maintenance, and Major Schemes.
- E5.2 The funding has changed from the initial allocations described in the draft Transport Strategy, following the Government's Spending Review in October 2010. This document incorporates the final allocations provided by TfL.
- E5.3 The **Corridors, Neighbourhoods and Supporting Measures** programme has been developed based on these funding allocations. This programme is made up of what were previously two separate programmes; Corridors and Neighbourhoods, and Smarter Travel. Combining these programmes into a single 'block grant' was required by the Mayor of London to provide greater flexibility and local accountability for the boroughs
- E5.4 The Corridors & Neighbourhoods component comprises primarily engineering measures. Schemes in this element of the programme were developed using an area-based approach to address all of the

known issues. This holistic approach provides efficiency benefits and better value for money.

- E5.5 Through a robust, evidence-based approach, Camden has identified the following high priority areas for this programme:
- Camden Town (especially the area East of Camden Town)
  - Kings Cross/ St Pancras (south and north of Euston Road)
  - West Euston
  - Holborn (including Bloomsbury and St Giles)
  - Tottenham Court Road/Fitzrovia
  - Kentish Town
  - West Hampstead
  - Kilburn
  - Swiss Cottage/Finchley Road
- E5.6 Other areas that have been identified for transport schemes include Gospel Oak to link with the proposed regeneration of the area, and Hampstead.
- E5.7 Funding will also be allocated for other priority projects across the borough, including:
- School Travel Plan engineering measures
  - Borough-wide cycle parking
  - Borough-wide road safety improvements, including dangerous junctions
  - 20mph zones
  - Improving cycle routes
  - On-street electric vehicle charging points
  - Car club bays
  - Advanced Stop Lines for cyclists
- E5.8 The Smarter Travel element of the Corridors, Neighbourhoods and Supporting Measures programme is effectively a marketing tool to raise awareness, address behaviour change, and promote and encourage sustainable travel choices. It includes “softer” measures such as education, training and publicity (ETP), campaigns, and travel demand management such as travel planning. Smarter Travel schemes are linked closely with the Corridors and Neighbourhoods schemes to complement and enhance the effectiveness of new engineering measures on the street.
- E5.9 Smarter Travel includes the following projects:
- Cycle training
  - Sustainable school travel initiatives
  - Road safety dramas and workshops in schools
  - Projects to address vulnerable equalities groups and social inclusion
  - Air quality campaigns

- Area-based Smarter Travel projects to target areas and support engineering measures being implemented as part of the Corridors and Neighbourhoods programme
- Travel awareness sustainable travel initiatives such as Car Free Day
- Education, Training and Publicity events to promote road safety awareness

E5.10 **Road and Bridge Maintenance Programme.** The priorities for the road maintenance programme, which is predominantly funded by Camden Council, are based on road condition survey data. The programme co-ordinates with the proposed Corridors and Neighbourhoods programme where possible.

E5.11 Bridge assessment and strengthening schemes make up the other part of the TfL Maintenance programme. Funding for bridges is based on assessment of bridges across London and prioritises investment based on their condition.

E5.12 **Major Scheme Funding Programme.** Major scheme funding is for schemes that are greater than £1 million. Funding for these schemes is allocated through a competitive, step bidding process to TfL.

E5.13 Funding has been secured for the following Major Scheme projects:

- Bloomsbury Streets for People
- West Hampstead interchange – completion of scheme
- West End project which includes introducing two-way traffic on Tottenham Court Road/Gower Street, as well as public realm improvements at Euston Circus, St Giles Circus and Princes Circus
- Britannia Junction, Camden Town

## **E6 How will we Measure our Performance?**

E6.1 To make sure that Camden delivers change, we have set targets to measure progress towards meeting the objectives as follows:

- **Walking mode share** – Increase the proportion of residents' trips by walking from 38.9% in 2006/07 - 2008/09 to 40.9% by 2019/20
- **Cycling mode share** – Increase the proportion of residents' trips by cycling from 3% in 2006/07 - 2008/09 to 8% by 2025/26
- **Bus reliability** – Maintain the excess wait time (a measure of bus reliability) for high frequency bus services at 1.2 minutes by 2019/20
- **Condition of road surfaces** – Ensure the proportion of principal roads in need of repair does not increase beyond 6.6% in 2019/20
- **Road safety (total casualties)** – Reduce the total number of casualties by 11%, from 867 in 2007 – 2009 to 770 by 2019/20
- **Road safety (Killed and Seriously Injured)** – Reduce the total number of people killed and seriously injured by 25% from 123 in 2007 - 2009 to 92 by 2019/20.

- **CO<sub>2</sub> emissions** – Reduce CO<sub>2</sub> transport emissions by 45% from 172 kilo tonnes in 2008 to 94 kilo tonnes by 2025
- **Traffic flow** – Reduce the current proportion of residents' trips made by car and motorcycle from 19% in 2006/07 – 2008/09 to 17% by 2019/20.
- **Cycling trips** – Increase cycling's proportion of road traffic flow from 9.7% in 2009/10 to 20.5% in 2019/20.
- **Zero exhaust emissions for the local authority fleet** – Increase the proportion of fleet vehicles which are electric, hybrid and biomethane to 70% in 2019/20.
- **Car clubs** – Increase the number of on-street car club spaces from 202 in 2010 to 410 by 2020
- **School travel plans** – Increase the proportion of schools with travel plans to 100% by 2020.
- **Bicycle parking** – Increase the number of on-street cycle parking stands from 1,325 in 2010 to 3,800 by 2020.
- **Street trees** – Plant 500 new trees by 2020

### ***E7 Summary of the Reporting Process***

- E7.1 Camden is required to report annually to TfL on its allocation, including monitoring against short and long-term targets and to measure the success in delivering the Mayoral high profile outputs.
- E7.2 The Council will set up appropriate systems for the planning, monitoring and performance management of the transport programmes to provide information to the Mayor and ensure that the Programme of Investment contributes to Council-wide objectives

## Chapter 1 - Introduction

### *About the Camden Transport Strategy*

- 1.1 The Greater London Authority Act 1999 requires London boroughs to produce a Local Implementation Plan (LIP), which demonstrates how each authority will deliver the Mayor of London's Transport Strategy (MTS) in its local area. In effect, the LIP outlines what the Council would like to achieve in regards to transport in the coming years.
- 1.2 The last LIP, produced by Camden in 2005, applies until the end of March 2011. Camden is therefore producing a new comprehensive transport strategy that fulfils the requirement of the LIP and aligns with the new Mayor's Transport Strategy published in May 2010.
- 1.3 Camden has maintained its profile as a leading and innovative borough in regards to transport, and in recent years has made significant progress towards achieving the transport objectives of the Council including:
  - Reducing the number of people killed and seriously injured on the transport system by 53 per cent from the baseline period 1994-98 to 2006-2008;
  - More than tripling the number of people who cycle in Camden between 2001-2010, while reducing the number of cars travelling on Camden roads by 26 per cent;
  - The number of car club members has tripled in the last 3 years with around 9,000 members across the borough;
  - Camden launched the first plug-in electric car club in the UK in 2009.
  - An impressive programme of high quality public realm improvements such as Seven Dials, Great Queen Street, Camden High Street and Fitzroy Square;
  - Trialing cutting edge technology to reduce vehicle emissions and improve local air quality.
- 1.4 However significant transport related challenges still remain in Camden and this transport strategy will seek to build on the excellent progress since the publication of the last LIP, and adapt to the changing context of transport within the borough.
- 1.5 The Camden Transport Strategy has close links with the London Mayor's new Transport Strategy and aims to help London achieve the Mayoral transport goals that include:
  - Supporting economic development and population growth;
  - Enhancing the quality of life for all Londoners;
  - Improving the safety and security of all Londoners;
  - Improving transport opportunities for all Londoners;

- Reducing transport's contribution to climate change and improve its resilience; and
  - Supporting delivery of the London 2012 Olympic and Paralympic Games and its legacy.
- 1.6 The Transport Strategy also contributes to achieving the vision and objectives of Camden's Sustainable Community Strategy. The Strategy translates the Community Strategy's vision into policies and projects that will help shape a safer and a more sustainable, accessible and efficient transport system for the borough.
- 1.7 The Camden Transport Strategy also has strong links with many other Camden Council policies and strategies including the Local Development Framework, placeshaping, and the economic, health and sustainability agendas.
- 1.8 As well as local policies, the Strategy has also been guided by and responds to the North and Central London sub-regional transport plans, the London Plan and other relevant local and regional policies. The document also has regard to the need to ensure that the Strategy is consistent with national policies and certain international obligations.
- 1.9 The preparation of the Camden Transport Strategy has been developed alongside and influenced by the following:
- Strategic Environmental Assessment<sup>1</sup> - a process that helps to ensure negative environmental impacts are considered and, where possible, avoided, mitigated or minimised. It also identifies opportunities to potentially enhance the natural environment in Camden through the Transport Strategy; and
  - Equality Impact Assessment<sup>2</sup> - a process to ensure that equality issues are being considered in some depth in regards to transport. The assessment outlines the different transport related issues faced by equalities groups and how the Camden Transport Strategy objectives and strategies have considered and addressed these to promote social inclusion. Ensuring that all Camden's population can access opportunities in the borough is a major objective of both the Council's Community Strategy and the Camden Transport Strategy.
- 1.10 The Strategic Environmental Assessment and Equalities Impact Assessment are available as separate documents alongside the Camden Transport Strategy.
- 1.11 Transport for London (TfL) is responsible for managing bus services in London and London Underground and Overground services. TfL is also the highway and traffic authority for the TfL Road Network (TLRN

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<sup>1</sup> Strategic Environmental Assessment of Camden Transport Strategy (2010)

<sup>2</sup> Equality Impact Assessment of Camden Transport Strategy (2010)

– red routes). Projects included in the Camden Transport Strategy therefore do not cover local bus or underground services. However, Camden Council will work with TfL and other stakeholders to improve services in these areas for the benefit of Camden's population.

### ***Structure of the Camden Transport Strategy***

- 1.12 The Camden Transport Strategy represents the overall transport vision for the borough and is set out as follows:
- Chapter 2 – outlines the local demographic and transport context;
  - Chapter 3 – describes the current emerging issues, challenges and opportunities relating to transport in the coming years;
  - Chapter 4 – lists the transport objectives for the borough;
  - Chapter 5 – describes the proposed transport policies for the borough;
  - Chapter 6 - outlines the projects that Camden proposes to implement in the next three years to deliver the transport objectives;
  - Chapter 7 - describes the consultation on the draft LIP that Camden undertook.
  - Chapter 8 – outlines a set of targets that will be used to measure the success of the strategy;



## Chapter 2 – Local Context and Transport Geography

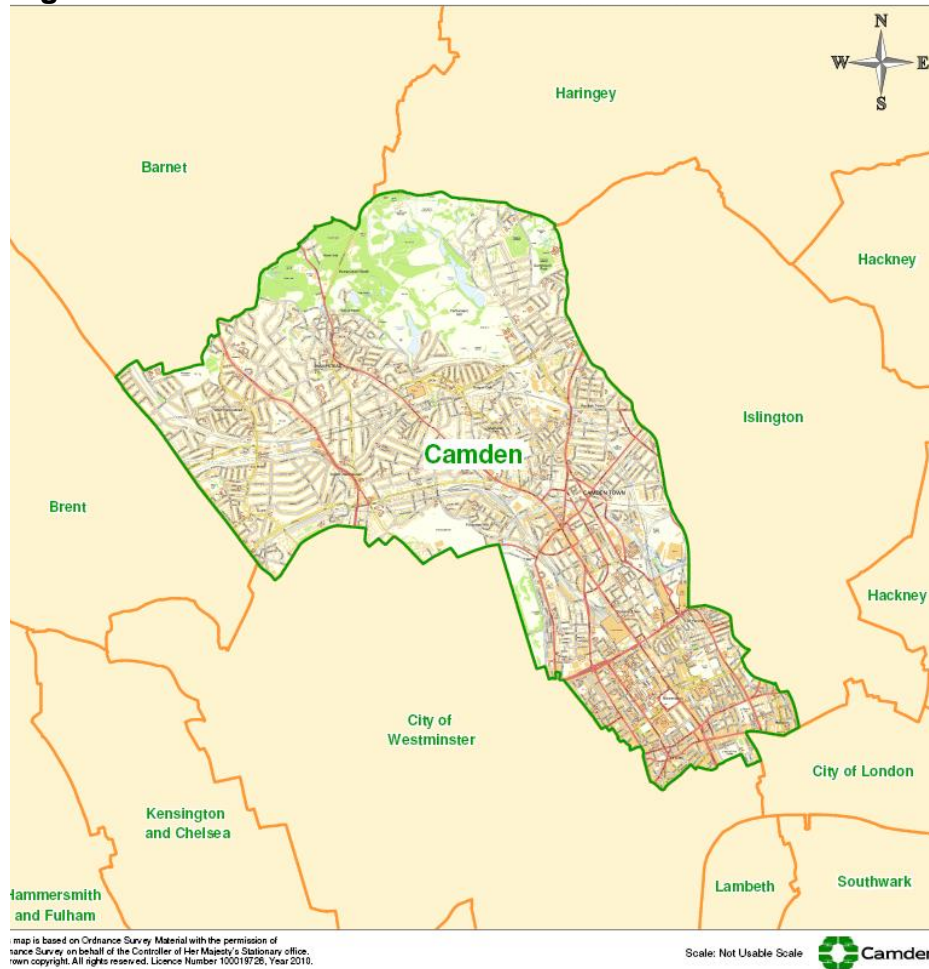
### *Introduction*

- 2.1 Camden is a dynamic inner and central London borough that has a strong economy, significant and growing residential population, a diverse and multi-cultural community with significant disparities in incomes and living standards, and a range of transport issues and challenges.
- 2.2 The Camden Transport Strategy represents the guiding transport strategy for the borough for the next 20 years. The Strategy outlines policies and proposals for encouraging travel by sustainable and healthier modes, reducing motor traffic, improving the local environment and enhancing our urban realm.
- 2.3 To identify the appropriate measures and approach to achieve these objectives it is important to establish a clear understanding of Camden's local context, in terms of the borough's key characteristics, trends, as well as the transport systems that operate within the borough.
- 2.4 The profile below describes some of the features that give the borough its unique character.

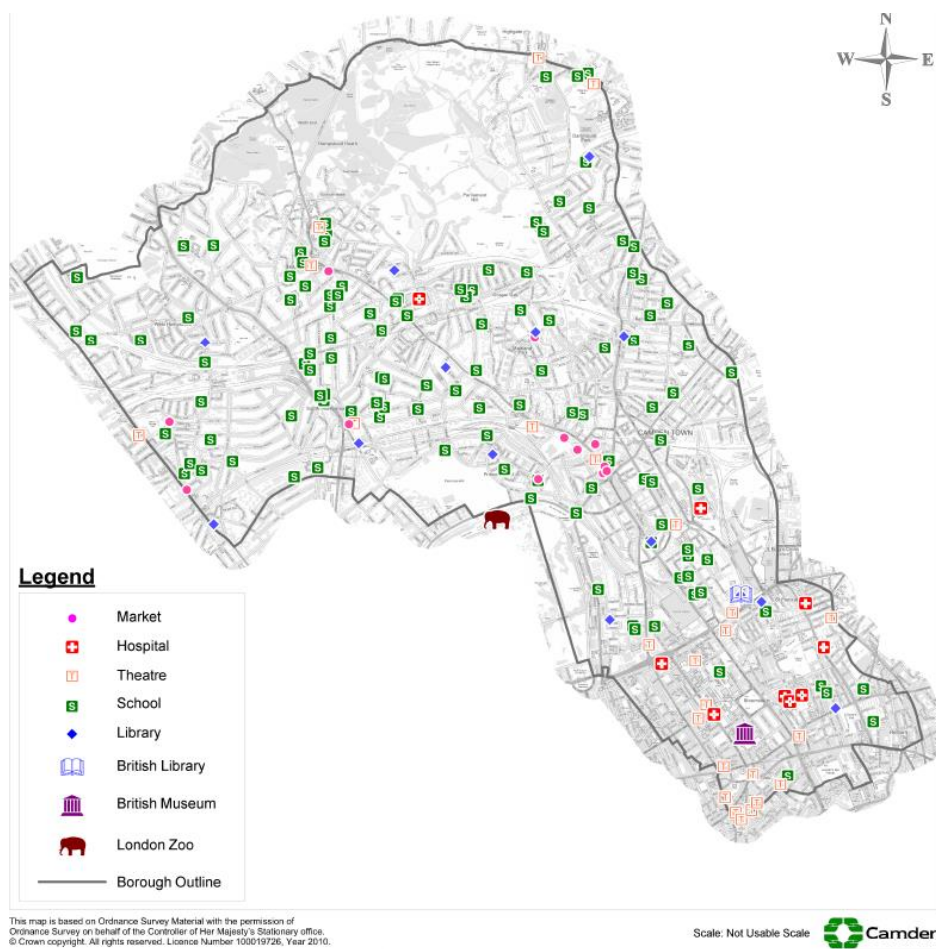
### *Local Context*

#### **Camden's Places**

- 2.5 Camden covers approximately 22 square kilometres (11 square miles) in inner and Central London.
- 2.6 Camden is bounded by the boroughs of Barnet and Haringey to the north, Islington to the east, the Cities of Westminster and London to the south and Brent to the west. **Figure 2.1** shows Camden's location in relation to the neighbouring boroughs in London.

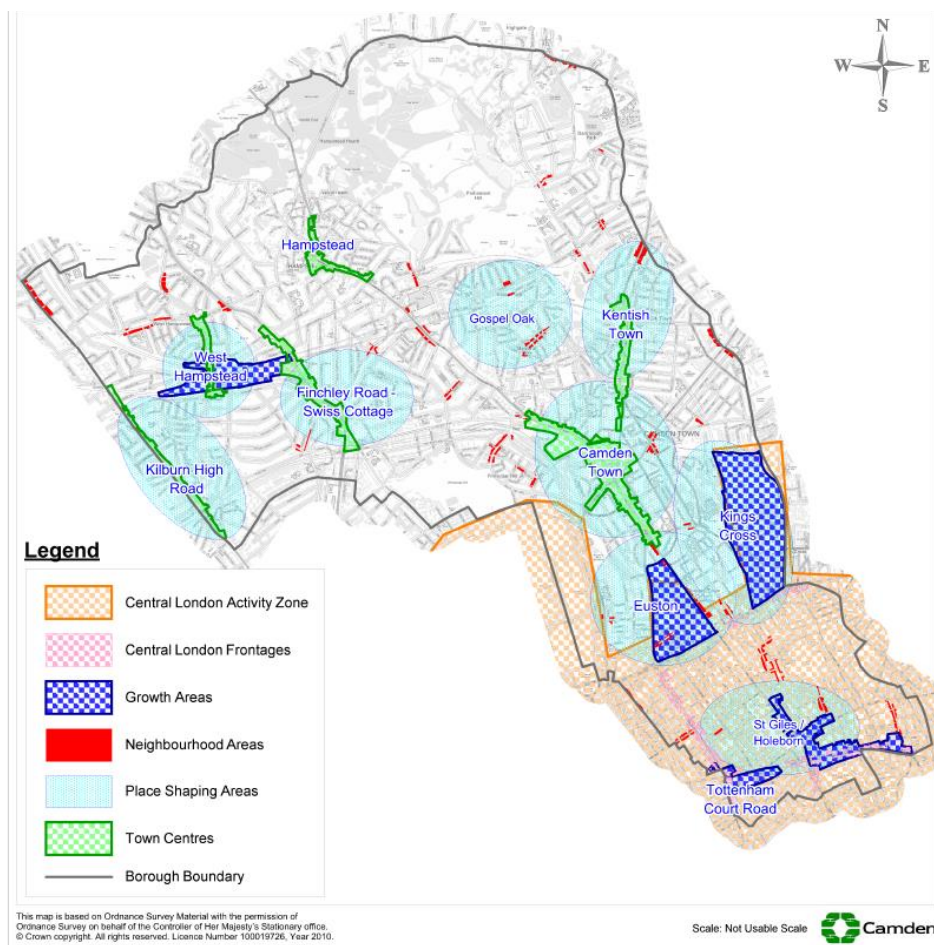
**Figure 2.1 – Camden’s Location in London**

- 2.7 Camden has many distinct areas. The southern part of the borough forms part of central London’s busy commercial, retail, theatre and restaurant districts. Further north, Camden becomes more residential with smaller local centres and more open spaces.
- 2.8 Camden has a vibrant mix of uses, activities and facilities of London-wide, national and international significance. These include educational and cultural institutions such as University College London, the British Library and the British Museum, and distinctive cultural areas including “Theatreland” and Covent Garden in the West End; places of cultural and historical interest such as Camden Town, the Roundhouse, the Georgian surroundings of Fitzroy Square and Bloomsbury; open spaces such as Hampstead Heath, Primrose Hill and Regent’s Park; and large medical establishments including University College Hospital, Royal Free Hospital, and Great Ormond Street Hospital. Camden is well known for its culture and arts, including many renowned music venues in Camden Town. **Figure 2.2** illustrates some key places of interest across the borough.

**Figure 2.2 – Camden’s Key Places of Interest**

- 2.9 Camden sits within London’s Central Activities Zone, which contains the bulk of the activities that define London as a world-class city. It is home to many London-wide, national and international events. Camden has a wide variety of tourist destinations that attract around 10 million visitors a year and will have an important role to play in the delivery of the London Olympic and Paralympic Games in 2012.
- 2.10 Camden has a range of street markets including Leather Lane and the famous Camden Market, which is one of London’s most popular tourist attractions. There are also a number of well-known and specialist shopping locations such as Hatton Garden, which is widely known for its jewellery trade.
- 2.11 Camden has six key town centres that provide important employment, education, shopping and visitor destinations, as well as essential services for Camden people. 36 neighbourhood areas supplement the town centres with many small but specialised museums, pubs, clubs and restaurants, and retail stores and services. **Figure 2.3** illustrates Camden’s town centres, growth areas and local neighbourhood centres.

**Figure 2.3** - Camden's town centres, growth areas and local neighbourhood centres

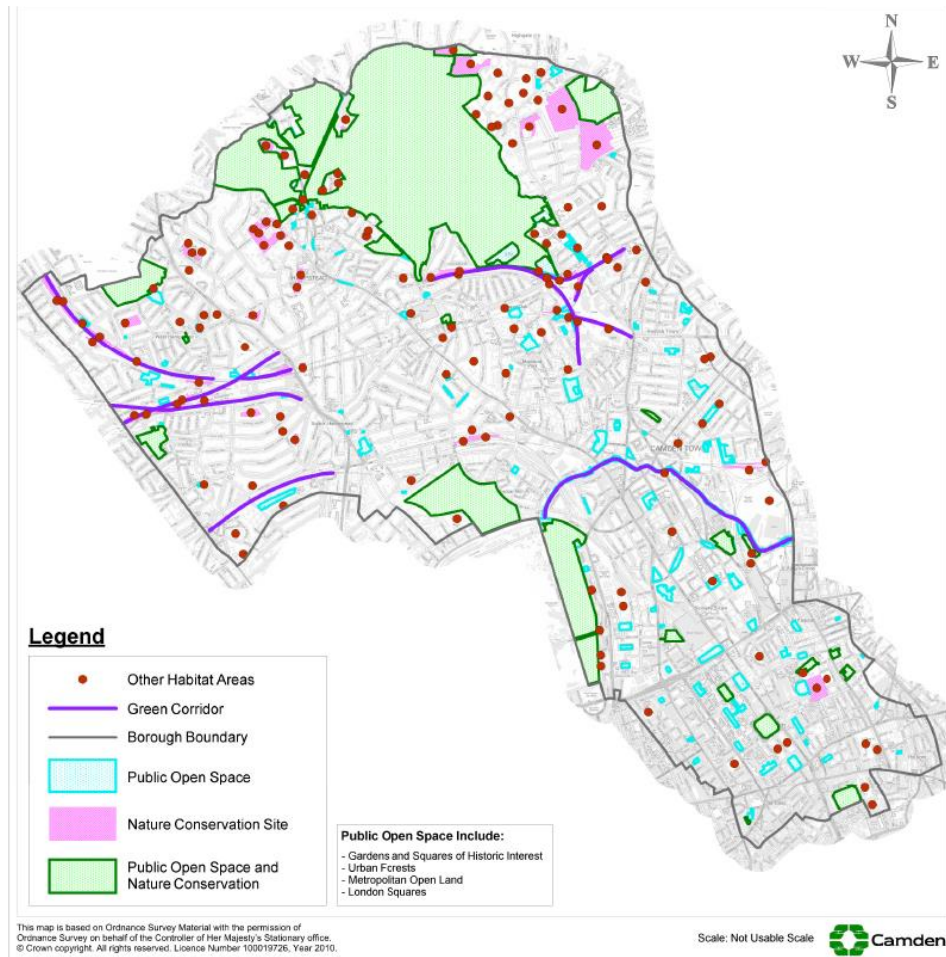


- 2.12 The five growth areas in Camden - King's Cross, Euston, Tottenham Court Road, Holborn and West Hampstead – are expected to contain the majority of Camden's future growth and redevelopment. These areas have been identified in the London Plan as being suitable locations for redevelopment and/or additional jobs or housing, and are based around interchanges where increased capacity is planned.
- 2.13 There are nine 'placeshaping' areas in Camden including King's Cross, Euston, Camden Town, Swiss Cottage, West Hampstead, Gospel Oak, St Giles to Holborn, Kentish Town and Kilburn. The 'placeshaping' areas are those where the Council has identified opportunities to bring together strategies, investment, services, facilities, public realm and infrastructure improvements in a holistic approach to "shape" these areas in response to community needs.
- 2.14 The main business and commercial centres in Camden are focussed in Holborn, Euston and Tottenham Court Road.<sup>3</sup>

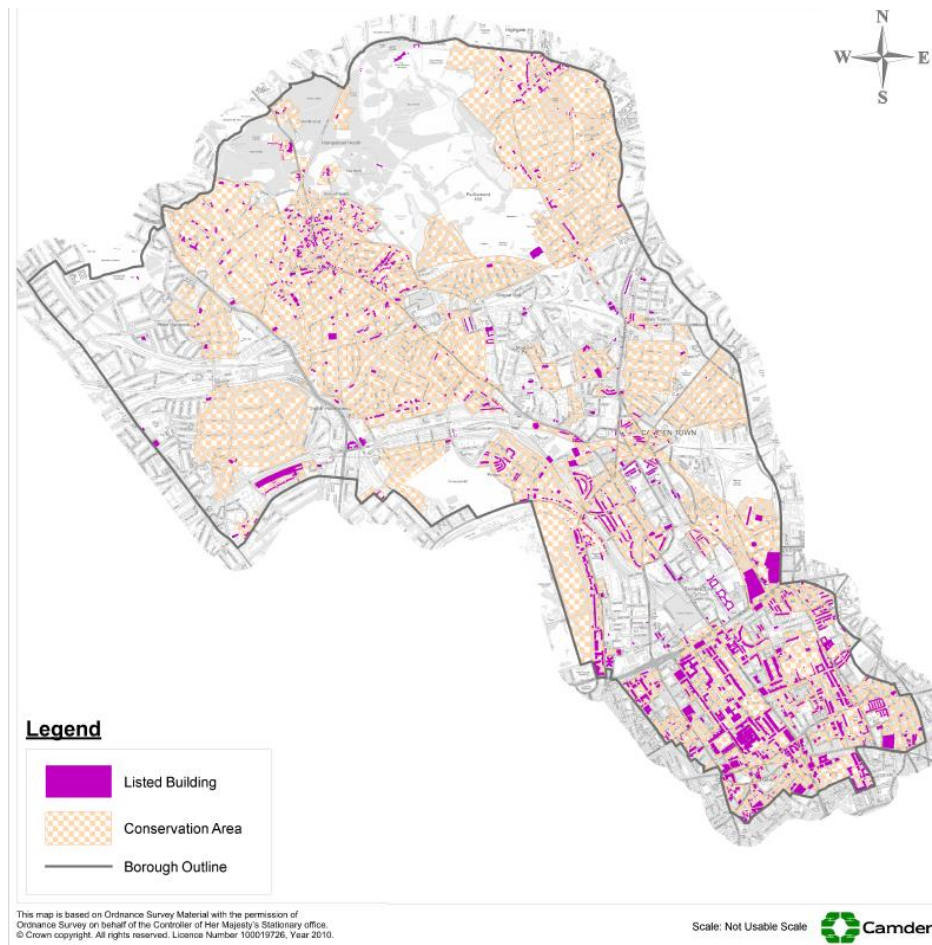
<sup>3</sup> Local Implementation Plan 1

- 2.15 In addition to large green areas that include Regent's Park, Primrose Hill and Hampstead Heath, Camden has several smaller parks and open spaces that provide opportunities for recreation, leisure, sport as well as nature conservation. **Figure 2.4** shows the open spaces and nature conservation sites across the borough.

**Figure 2.4** – Open spaces and conservation sites in Camden



- 2.16 The Council has designated 40 conservation areas that cover around 50 per cent of the borough, and around 5,600 buildings or places are listed as being of historical or architectural significance, in locations such as Georgian Bloomsbury and Hampstead village. Conservation areas and listed buildings are shown in **Figure 2.5**.

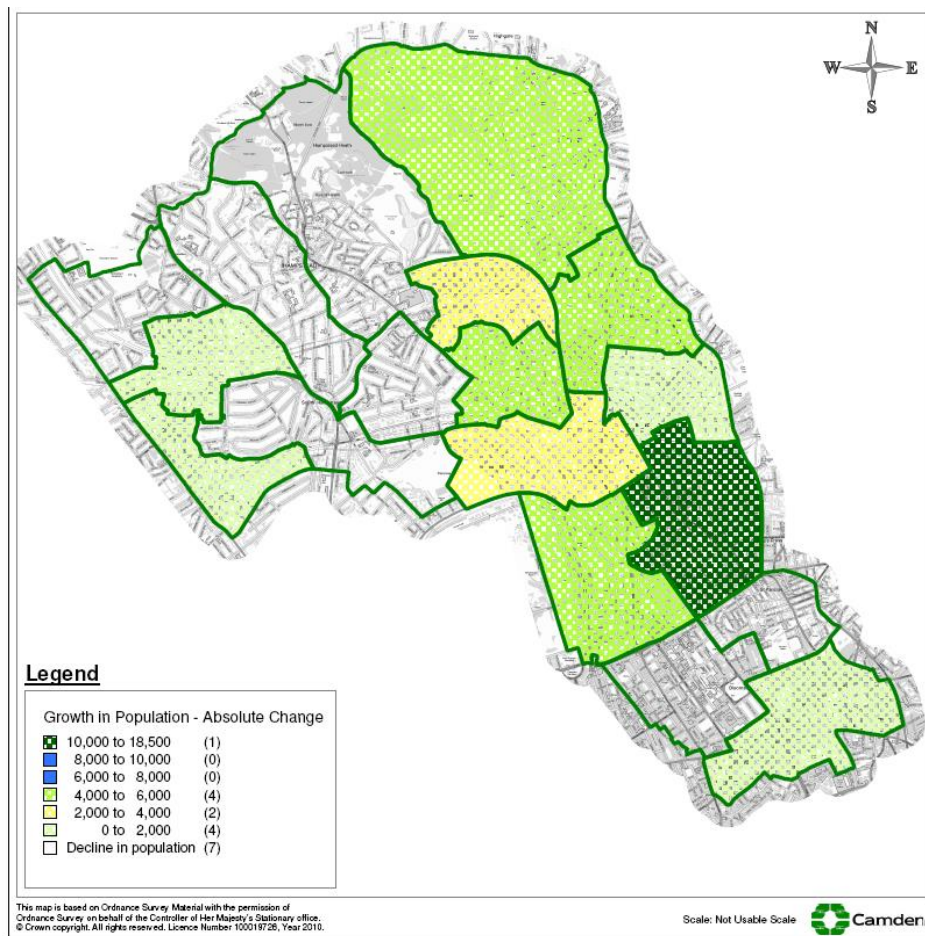
**Figure 2.5 – Conservation areas and listed buildings in Camden**

## Camden's People

- 2.17 Camden has diverse areas including predominantly affluent areas in Hampstead and Highgate in the north of the borough, the business centres south of Euston Road as well as areas of deprivation such as Somers Town near King's Cross and Gospel Oak.
- 2.18 Approximately 210,200 people currently live in Camden. It is estimated that the borough's population will increase to around 245,000 by 2031.<sup>4</sup> The forecast increases in people living in the wards across the borough are shown in **Figure 2.6**.

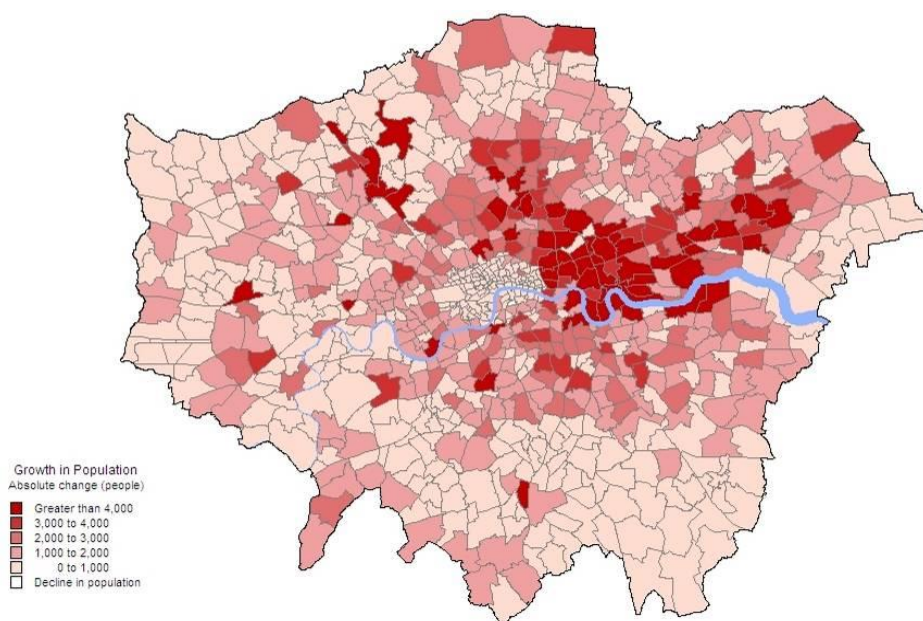
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<sup>4</sup> GLA 2008 Round of Demographic Projections - High

**Figure 2.6 – Projected change in population in Camden**

There are no wards with projected population growth from 6,000 to 10,000 (blue)

2.19 Similarly, population is expected to significantly grow across wider London, much of it in the east, which will inevitably have impacts on the transport networks in Camden. **Figure 2.7** shows how this growth is distributed across the capital.

**Figure 2.7** – Change in population across London (2006-2031)

Source: GLA London Plan Forecasts (2009)

- 2.20 Growth will be largely due to more births and fewer deaths; however increased migration will also have an impact. With people also living longer, it is expected that the population structure will change in terms of age and ethnicity.<sup>5</sup>
- 2.21 Despite the aging population in the UK, Camden has a relatively young population (similar to London in general), as well as the largest proportion of students in London.<sup>6</sup> 12 per cent of Camden's population are older people in the 60/65+ age group, and 70 per cent of people are in the working age group.<sup>7</sup>
- 2.22 The proportion of black and minority ethnic groups in Camden is 30 per cent, slightly less than the London average of 34 per cent. The England average is 9 per cent.<sup>8</sup>
- 2.23 Camden residents are highly qualified, being in the top ten local authorities with people qualified to degree level or above (47 per cent). Less than a fifth of residents have no qualifications and may lack basic skills in literacy and numeracy.<sup>9</sup>
- 2.24 Overall recorded crime levels in the borough have been falling in recent years, but are still above average for London.<sup>10</sup>

<sup>5</sup> 2001 Census

<sup>6</sup> 2001 Census

<sup>7</sup> GLA 2006 Round-based Population Projections – RLP High

<sup>8</sup> GLA 2008 Round-based Ethnic Group Projections – Low

<sup>9</sup> 2001 Census

<sup>10</sup> Metropolitan Police crime statistics 2006/07



## Camden's Economy

- 2.25 The businesses in Camden are the third largest contributor to London's economy and provide around 1 per cent of Britain's economy.<sup>11</sup>
- 2.26 Camden is a growing employment centre and the third most significant in London, after Westminster and the City of London<sup>12</sup>. The southern part of the borough accommodates the majority of this employment, with 60 per cent of jobs located south of Euston Road, and a further 19 per cent in the Somers Town and Regent's Park areas.
- 2.27 Camden has over 24,000 businesses<sup>13</sup>. Over half of these are in 'knowledge economy' industries such as media, finance, law and other professional services. The borough is also a centre for 'creative industries'. Leisure, entertainment and tourism are also important to the borough's economy, particular in central London and Camden Town.<sup>14</sup>
- 2.28 It is estimated that around 300,000 people work in Camden<sup>15</sup>. The majority (84 per cent) of these people live outside the borough.<sup>16</sup> This means that Camden's population significantly increases during the week.
- 2.29 As at 2009 the number of Camden residents in employment was 139,500 – this figure is made up of 101,700 in full-time employment, 15,100 in part-time employment and 22,700 who are self-employed.<sup>17</sup> In July 2010, 7,700 Camden residents were registered as unemployed.<sup>18</sup> Since the 1990s the number of unemployed Camden residents has been generally decreasing in line with London and national trends.
- 2.30 Camden welcomes a large number of visitors at the weekend to the borough's key cultural attractions and to educational, business and retail hubs, for example town centres, Camden market, the British Museum and the British Library. It is important that transport provision responds to this need in order to facilitate economic growth.
- 2.31 Most town centres in Camden, including Kilburn, Kentish Town, Swiss Cottage / Finchley Road and West Hampstead, have experienced a decrease in the proportion of vacant retail floor space in the last few years.

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<sup>11</sup> Annual Business Inquiry; office of National Statistics; 2007 quoted in LDF

<sup>12</sup> GLAE Working Paper 39: Borough employment projections to 2031, GLA Economics with the assistance of Volterra Consulting, 2009

<sup>13</sup> ONS Business Demography – active business 2007 quoted in LDF

<sup>14</sup> Annual Business Inquiry, Office of National Statistics, 2007

<sup>15</sup> ONS Total Jobs Estimate; 2006 quoted in LDF

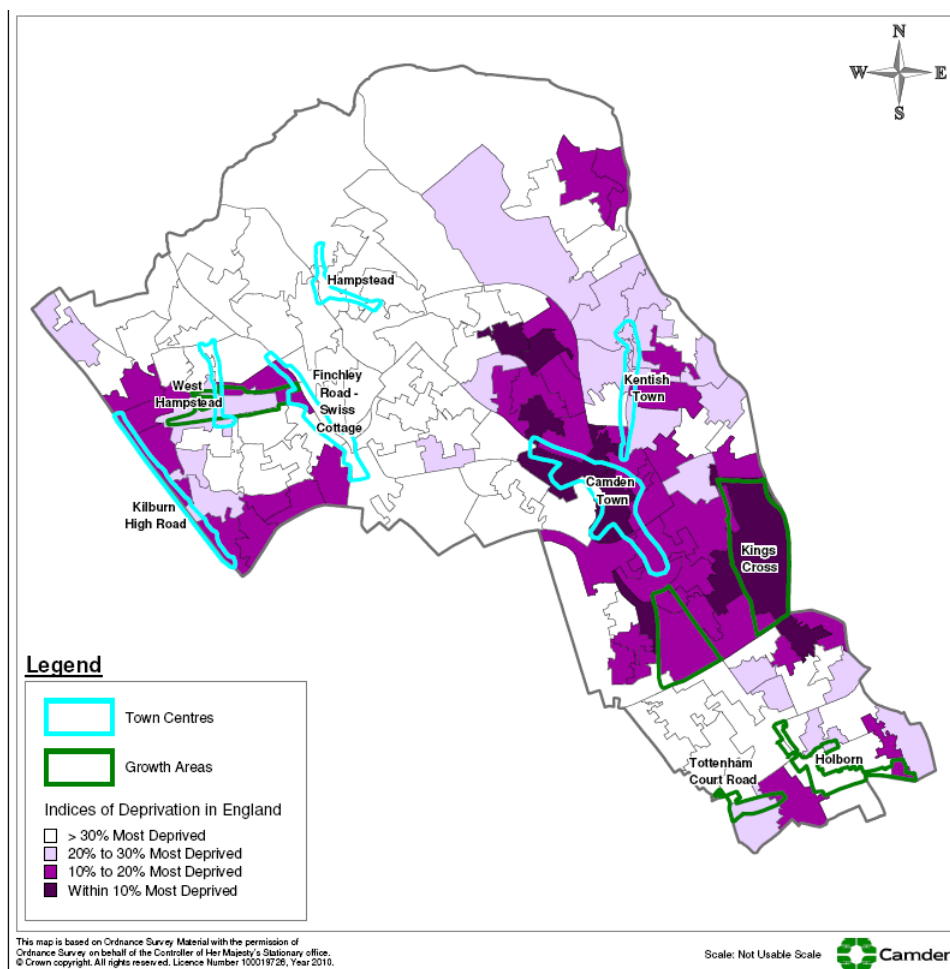
<sup>16</sup> 2001 Census

<sup>17</sup> Annual Population Survey (APS) Feb 2009

<sup>18</sup> Annual Population Survey (APS) Feb 2009

- 2.32 **Figure 2.8** illustrates the spread of affluence and deprivation across the borough using the index of multiple deprivation figures<sup>19</sup>. This is based on a number of indicators including income, employment, health education and crime (darker colour indicates the area is more deprived).
- 2.33 Camden falls within the 20 per cent most deprived districts in England on all of the summary indicators. Thirty-one of Camden's 133 Super Output Areas are among the 10 per cent most deprived in England. The most deprived areas in Camden are focussed around King's Cross, Gospel Oak and Camden Town.

**Figure 2.8 – Indices of Multiple Deprivation in Camden**



- 2.34 The visitor economy in Camden generates £566 million a year and provides 16,500 jobs in the borough.

<sup>19</sup> English Indices of Deprivation 2007; Communities and Local Government

### Camden's Homes

- 2.35 Camden is a popular place to live and the average house price is the third highest in London.<sup>20</sup>
- 2.36 Demand for affordable housing outweighs supply, and trends suggest this demand will continue to increase. There is also demand for larger homes, particularly for social housing.<sup>21</sup>
- 2.37 Camden aims to increase the supply of housing in the borough, in particular affordable housing, with higher density development in highly accessible locations. The number of households in Camden is estimated to rise by 17,700 households (19 per cent)<sup>22</sup> between 2006 and 2026.
- 2.38 As at the 2001 Census, there were approximately 95,000 households in Camden. Only 2.6 per cent of these were vacant and 0.8 per cent were second residences or holiday accommodation.<sup>23</sup>
- 2.39 Camden has a relatively small average household size of 2.06 persons per household, compared to 2.36 persons per household in England and Wales as a whole.<sup>24</sup> Approximately 10 per cent of residences are single-parent households and 46 per cent are occupied by people living alone - the 4th highest proportion in London.<sup>25</sup>
- 2.40 87 per cent of accommodation in the borough comprises maisonettes and apartments. Only 13 per cent are self-contained houses.
- 2.41 35 per cent of Camden households are owner occupied; 26 per cent rent from the Council; 23 per cent rent privately and 11 per cent rent from a Housing Association or Registered Social Landlord. The remaining 4 per cent rent from the employer of a household member or relative of a household member or friend, or rent from other sources or live rent-free.
- 2.42 From 1971 to 1991 there was a steady rise in the rate of car ownership in Camden. Since 1991 car ownership in Camden has slightly decreased with 59 per cent not owning a car, 35 per cent owning one car and 5 per cent with 2 or more cars. **Figure 2.9** illustrates the trend in car ownership in Camden. Camden has the 6<sup>th</sup> highest figure of local authorities in England and Wales for residents that do not own a car.<sup>26</sup>

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<sup>20</sup> Land Registry House Price Index, 2008 quoted in LDF

<sup>21</sup> Census 2001

<sup>22</sup> GLA 2008 Round of Demographic Projections - High

<sup>23</sup> Census 2001

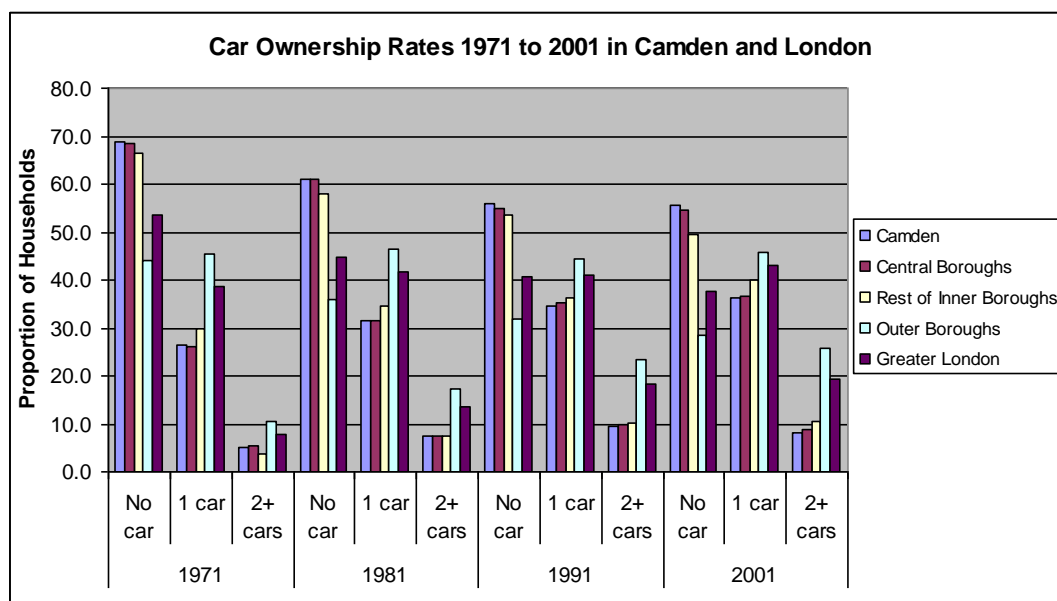
<sup>24</sup> Census 2001

<sup>25</sup> GLA 2008 Round of Demographic Projections – High

<sup>26</sup> Census 2001

- 2.43 Car ownership in the borough is not spread evenly across the population or geographically. Bloomsbury has the highest level of households in Camden without a car (74.2 per cent) and Hampstead Town the lowest (39.9 per cent).<sup>27</sup> The wards with the highest level of car ownership are situated in more affluent areas in the north of the borough where access to public transport is also generally lower.

**Figure 2.9 - Car ownership levels in Camden**



- 2.44 Camden is diverse, dynamic and growing, in terms of its resident population, employment and redevelopment areas. The way in which the borough is changing plays an important part in how we manage resources, particularly the steadily growing and heavy demand on our transport network.

### ***Camden's Transport Context***

#### **Introduction**

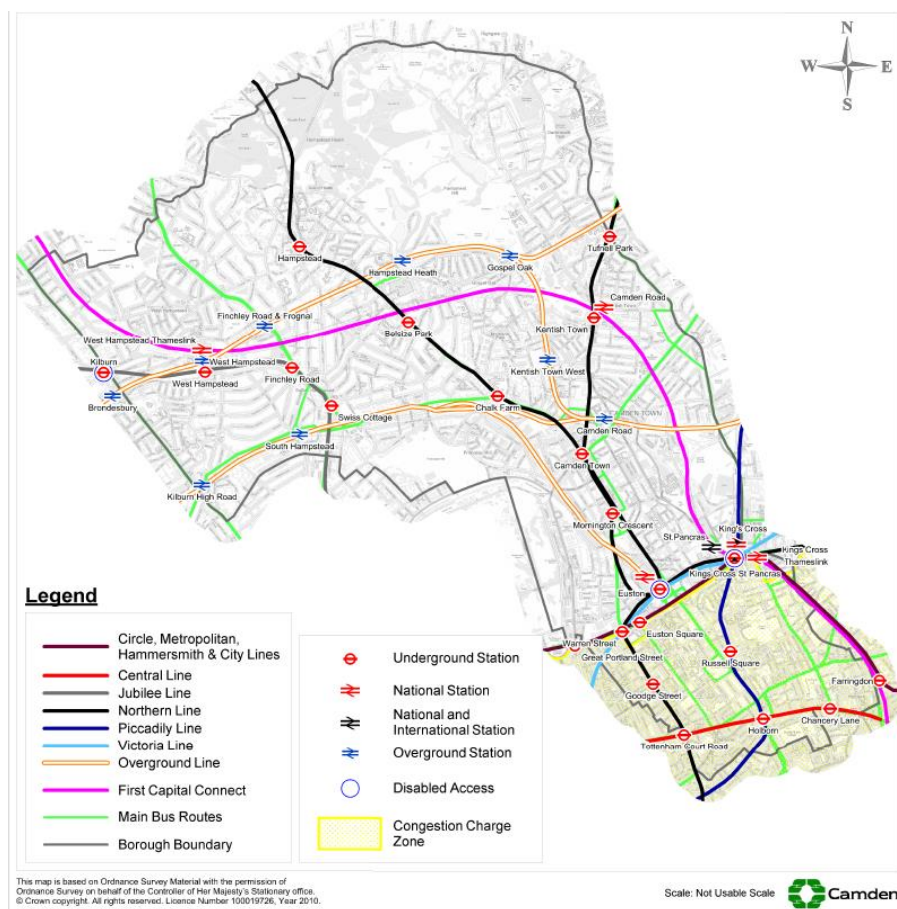
- 2.45 Understanding the local transport networks and connectivity is vital in developing an effective and comprehensive transport strategy for the borough. The different networks that make up Camden's transport system are explained below.

<sup>27</sup> Census 2001

## Public Transport Network in Camden

2.46 Camden is well served by public transport with several London Underground lines, the London Overground network, three mainline national railway stations (King's Cross, Euston and St Pancras) which have links across the UK, and an international station with links to mainland Europe from the Eurostar terminal at St Pancras International station. **Figure 2.10** illustrates the key public transport networks in Camden.

**Figure 2.10** – Key public transport networks in Camden



2.47 **Table 2.1** summarises Camden's transport geography at the international, national, London-wide, sub-regional and local level. Camden assesses and delivers projects on local and sub-regional levels, as well as those which influence national and international travel. There are significant relationships between all levels of the transport network and Camden will continue to work with stakeholders to maximise achievements both at a local level and further afield.

Table 2.1 – Camden’s Transport

Level	Key Origin / Destinations	Multi-Modal Transport Corridors	Interchanges Between Networks
International		Rail – Eurostar	Rail Station / Termini - St Pancras International
National		Rail - First Capital Connect (Thameslink), East Midlands Trains, East Coast, London Midland, First Hull Trains, Grand Central, Southern Railway, Crossrail (proposed)	Rail Stations / Termini - Euston, King’s Cross, West Hampstead, Kentish Town
London-wide		<p><b>Overground:</b> North London line and Euston to Watford Junction line</p> <p><b>Tube:</b> Circle, Metropolitan, Hammersmith &amp; City lines, Central line, Jubilee line, Northern line, Piccadilly line, Victoria line</p> <p><b>Road – TfL Route Network (TLRN):</b> A501, A201, A400, A503, A41</p>	<p><b>Overground Stations</b> – Euston, Kilburn High Road, South Hampstead, West Hampstead, Finchley Road and Frognal, Hampstead Heath, Gospel Oak, Kentish Town West, Camden Road</p> <p><b>Tube Stations</b> – 20 stations in the borough or on its borders - Belsize Park, Camden Town, Chalk Farm, Euston, Euston Square, Finchley Road, Hampstead, Holborn, Goodge Street, Great Portland Street, Kentish Town, Kilburn, King’s Cross, Mornington Crescent, Russell Square, Swiss Cottage, Tottenham Court Road, Tufnell Park, Warren Street, West Hampstead, (3 stations with wheelchair access – King’s Cross, Euston and Kilburn)</p>
Sub-Region (North central / Central areas)	<p><b>Major Town Centre</b> – Camden Town</p> <p><b>Opportunity (Growth) Areas</b> – King’s Cross, Euston, Tottenham Court Road, Holborn, West Hampstead</p> <p><b>Major Shopping Centres</b> – Seven Dials, Camden Market, Covent Garden</p>	<p><b>Sub-regional strategic transport corridors and services</b></p> <p><i>Major Borough Roads (SRN):</i> A400, A40, A400, A401, A4200, A5200, A4200, A5, A502, A5200, A5202, A5203, B509, B511, B519, Crowndale Road, Goods Way</p> <p><i>Bus Routes:</i> 89 routes serve the borough (route numbers 1, 4, 7, 8, 10, 13, 14, 16, 17, 18, 19, 24, 25, 27, 29, 30, 31, 32, 38, 45, 46, 55, 59, 63, 68, 73, 82, 88, 91, 98, 113, 134, 139, 143, 168, 171, 176, 187, 188, 189, 205, 206, 210, 214, 242, 243, 253, 259, 268, 271, 274, 316, 328, 332, 341, 390, 393, 453, 476, 521, 603, 632, C2, C11, UL1, X68, N2, N5, N7, N8, N13, N16, N19, N20, N28, N29, N31, N35, N38, N41,</p>	<p><b>Major Bus Interchanges / Coach Stops</b> – Euston, Tottenham Court Road, Warren Street / Euston Square, Goodge Street / Gower Street, King’s Cross</p> <p><b>Major Road Junctions / Gyratories</b> – Kentish Town Road / Highgate Road / Fortess Road, Holborn / Kingsway, St Giles’ Circus, Cambridge Circus, Swiss Cottage gyratory (A41), Tottenham Court Road / Gower Street gyratory, Bloomsbury Way gyratory, Euston Road / Pentonville Road / York Way / Gray’s Inn Road, Kentish Town Road / Camden High Street / Chalk Farm Road / Parkway / Camden Road, Heath Street / Fitzjohn’s Avenue / Rossllyn Hill, Camden High Street / Hampstead</p>

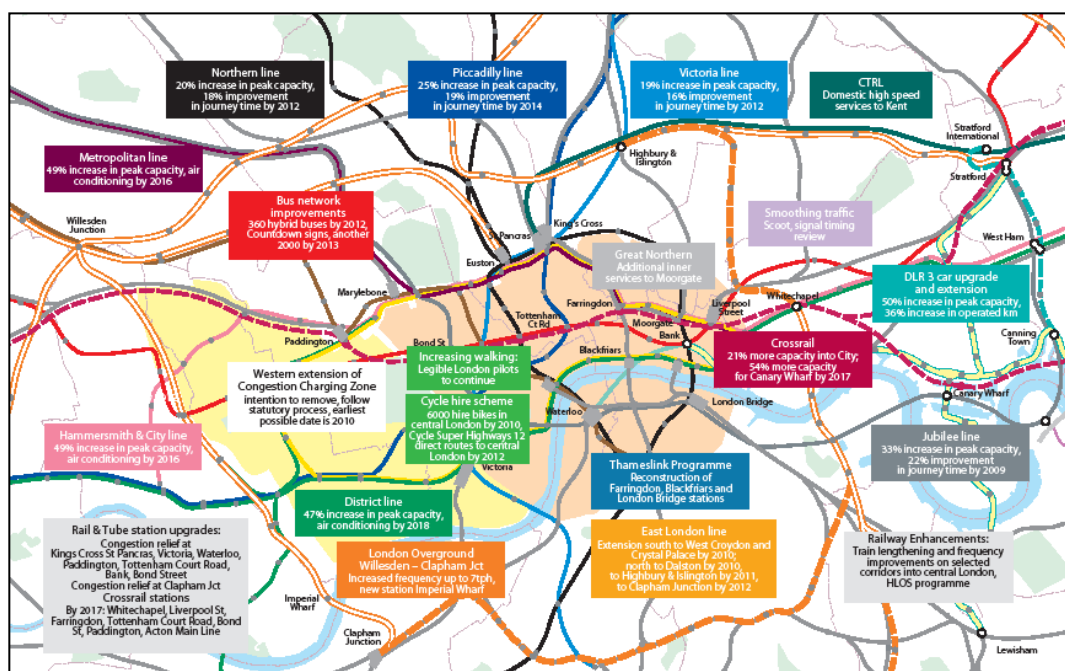
	<p><b>Placeshaping Areas</b> – Kentish Town, Camden Town, Euston, King’s Cross, Swiss Cottage, West Hampstead, Gospel Oak, Kilburn, St Giles to Holborn</p>	<p>N55, N63, N73, N91, N98, N171, N207, N253, N279)</p> <p><i>Bus Corridors:</i> Euston Road, Kilburn High Road, Finchley Road, Woburn Place/Southampton Row, New Oxford Street, Camden High Street, Camden Road, Kentish Town Road</p> <p><i>Key Cycling Corridors:</i>  <u>LCN+:</u> A5 (Kilburn High Road, Shoot Up Hill), A41 (Finchley Road), B525 (Avenue Road), West Hill Park, Highgate West Hill, Highgate Road, A400 (Kentish Town Road, Camden Street, Oakley Square, Hampstead Road, Tottenham Court Road, Charing Cross Road), A40 (New Oxford Street, Bloomsbury Way, A401 (Theobald’s Road, Rosebery Avenue), Maple Street, University Street, Huntley Street, Howland Street, Torrington Place, Gordon Square, Byng Place, Tavistock Place, Regent Square, Sidmouth Street, Ampton Street, Malet Street, Montague Place, Montague Street, Bury Place, High Holborn, Newton Street, Great Queen Street, Cubitt Street, Pakenham Street, Calthorpe Street, Cartwright Gardens, Ossulston Street, Brill Place, Midland Road, Goods Way, A5200 (York Way), Purchase Street, Goldington Street, Goldington Crescent, A5202 (Royal College Street, St Pancras Way), Georgiana Street, Agar Grove, Stratfield Villas, Camden Square, North Villas, Cliff Road</p> <p><u>Jubilee Greenways (currently in development):</u> A 60km (37mi) circular route around London linking 2012 Olympic and Paralympic venues with parks, waterways and other attractions. It passes through Camden along the Regents Canal Towpath and is proposed for completion by March 2011.</p> <p><i>Major Walking Route:</i> Jubilee Greenways (also a walking route) and Jubilee Walkway.</p>	<p>Road / Eversholt Street.</p> <p><b>Cycle Hire “Docking Stations”</b> – Docking stations at sites indicated on <b>Figure 2.10</b> at 39 locations.</p>
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<p><b>Local</b></p>	<p><b>Metropolitan Town Centres</b> – Camden Town, Swiss Cottage / Finchley Road, Kentish Town, Hampstead, West Hampstead and Kilburn</p> <p><b>Local Neighbourhood Centres</b> – 36</p> <p><b>Local Services</b> - 91 schools (public and private), 1766 retail units in town centres (for all retail categories including vacant units), 10 hospitals, 25 theatres, 14 libraries, 1.1km<sup>2</sup> of private open space, 4.8km<sup>2</sup> of public open space, 12 markets)</p> <p><b>Industrial Estates</b> – Kentish Town Industrial Estate</p>	<p><b>Local strategic transport corridors and services</b> <i>Roads and streets:</i> 285.7km of public highway in Camden and 13.8km of TfL network</p> <p><i>Cycling routes:</i> <u>LCN+</u>: 16km of the total 900km LCN+ cycle route covers the borough (20km including the TLRN)</p> <p><u>East / west strategic route:</u> provides an east-west route across the north of the borough linking Kilburn to King’s Cross.</p> <p><u>SSL relief route:</u> Camden’s Seven Stations Link (SSL) forms part of the LCN+ route and runs east to west in the south of the borough through Bloomsbury.</p> <p><u>Cycling on Greenways:</u> provides off-road cycling links in green spaces and along canals for leisure cycling rather than commuter cycling.</p> <p><u>Legible London:</u> 58 signposts across the borough</p>	<p><b>Bus Stops</b> – 388 bus stop flags across the borough (excludes those on the Transport for London Road Network).</p> <p>49 taxi rank locations</p>
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- 2.48 A number of projects to significantly increase the capacity of Camden's public transport services are planned or currently under construction. This includes Crossrail (the biggest current transport project in Europe), a significant upgrade of the London Underground network (including the chronically overcrowded Northern line), increasing Thameslink services, and continuing improvements to the London Overground network and other suburban rail services.
- 2.49 Committed investment<sup>28</sup> in rail and underground routes is illustrated in **Figure 2.11**. More detail of proposed strategic transport improvements is included in Appendix B.

**Figure 2.11 – TfL's Transport Improvements in Central London**



Source: Draft Mayor's Transport Strategy 2009

- 2.50 Bus service provision in Camden is generally very good, with 89 bus routes serving the borough including more than 20 night bus services. Several corridors in Camden including Euston Road, Tottenham Court Road, Kilburn High Road and Finchley Road are served by a large number of bus services.

<sup>28</sup> Committed investment is outlined in the TfL Business Plan outlines the package of investment in London's transport infrastructure for the next 10 years.

## Highway Network

- 2.51 Due to Camden's location within central London there are heavy demands on the transport infrastructure: the highway network is busy, complex and is used by a variety of vehicles including cars, motorcycles, taxis, buses / coaches, heavy goods / commercial vehicles (HGVs), as well as cyclists and pedestrians.
- 2.52 Camden is responsible for 286km, or 89 per cent of the total road network in the borough. TfL manages the remaining 11 per cent which is known as the Transport for London Road Network (TLRN).
- 2.53 Camden's road hierarchy has been developed to integrate land uses (in development terms) to the transport function of roads (as shown in **Figure 2.12**). More detail can be found in Camden's Network Management Plan<sup>29</sup>. Camden's road hierarchy is made up of the following classifications:
- **Transport for London Road Network (TLRN):** the key routes or major arterial roads in London (such as Euston Road and Finchley Road) which are managed directly by TfL.
  - **Strategic Road Network (SRN):** a network of strategic roads which are managed by Camden but which require consent from TfL to carry out highway works that may affect traffic operation.
  - **London Distributor Roads:** roads which provide links to the TLRN for journeys between boroughs and access to town centres - many of which carry bus routes. These roads are managed by Camden.
  - **Local Roads:** all other roads in the borough which perform local functions. These roads are managed by Camden.
  - **Emergency Services Strategic Routes:** although these roads have no formal status, they provide key routes for responding to emergency call-outs and are dictated by the locations of fire, police and ambulance stations, hospitals, and key/frequent call-out destinations. Their main purpose is for consideration of appropriate traffic engineering approaches such as avoidance, where possible, of vertical traffic calming measures such as speed humps.

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<sup>29</sup> Local Development Framework, Camden Development Policies Proposed Submission, October 2009

**Figure 2.12 – Road Hierarchy in Camden**

### ***Cycle Network***

- 2.54 The cycle network in the borough forms an integral element of Camden's wider transport system and is a key factor in encouraging people to cycle. Much of the cycle network was established through the London Cycle Network Plus network - a 900 kilometre network of radial and orbital cycle routes across London. Twenty kilometres of this network is within Camden.
- 2.55 Greenways cycle routes have been recently introduced in the borough and are especially designed to encourage leisure cycling. These routes include cycle links in green spaces, along canals and away from highly trafficked routes. Current Greenways routes in Camden include Spaniards Road, Camley Street and Savernake Bridge.
- 2.56 Most recently, the Mayor of London directed the focus of new cycle routes to the establishment of Cycle Superhighways. Cycle Superhighway Route 11 is proposed to run through Camden along

Finchley Road and due to be delivered as part of a rolling programme which is anticipated to be completed by 2013.

- 2.57 The Central London Cycle Hire scheme was launched by the Mayor of London in July 2010. As at June 2011 there were 43 docking stations in Camden, located throughout the south of the borough. The number of stations and geographical spread is expected to increase as the scheme is rolled out further. **Figure 2.13** below illustrates the key cycle routes and cycle hire locations in Camden.

**Figure 2.13** – Key Cycle Routes and Cycle Hire Locations in Camden



### ***Walking Routes***

- 2.58 For some people, walking is the only available transport option; however, many people choose walking as their main means of travel. Walking provides an easy and quick way of getting around the borough and has potential to generate significant improvements in health with benefits for air quality, congestion and time saving.
- 2.59 In Camden, the pedestrian route network includes:
- Street pavements
  - Pedestrian crossing points

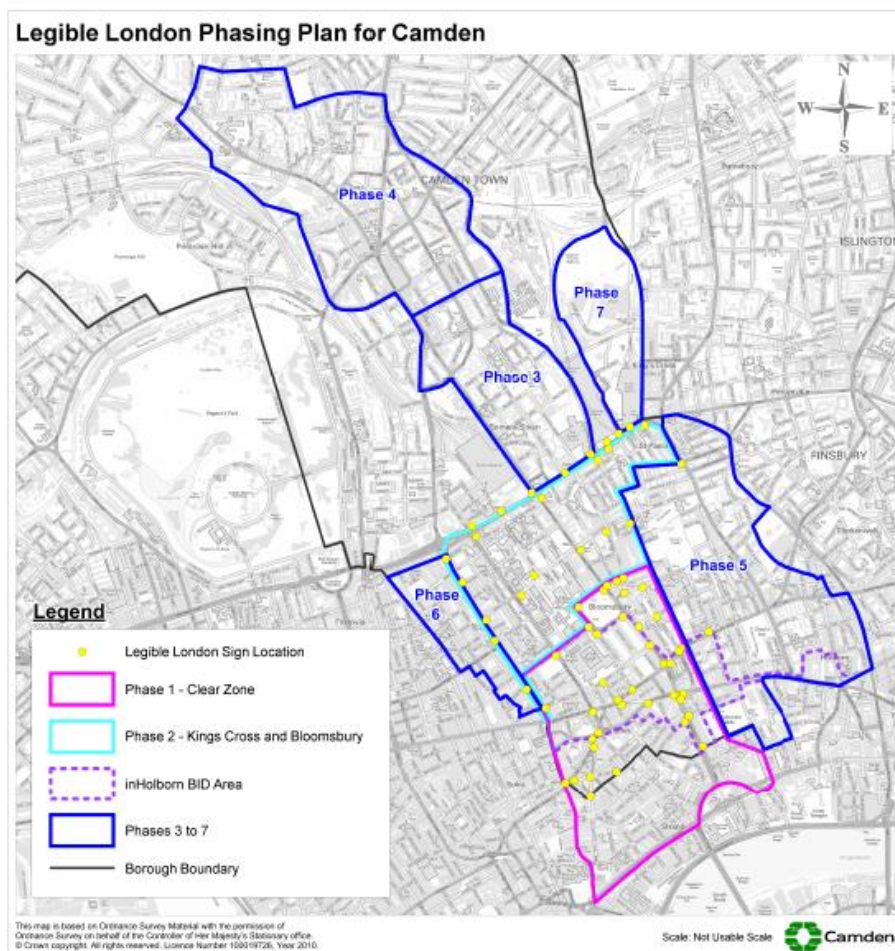
- Open spaces
- Canal towpaths
- Transport interchanges

2.60 Camden, in conjunction with a number of other London boroughs, has introduced a network of Legible London signage - pedestrian signage that is designed to be simple, consistent and easy to understand, and which aids navigation around the borough. Introduction of signage has been predominantly focused in Central London; the geographical spread is proposed to continue further north in coming years. As of May 2011 the borough has installed approximately 100 Legible London signs that extend as far north as Kentish Town and Swiss Cottage.

2.61 Two of London's seven strategic walking routes pass through Camden – the Jubilee Walkway and the Jubilee Greenway, a circular route around London that passes through Camden along the Regent's canal towpath.

2.62 **Figure 2.14** shows the location of current Legible London wayfinding boards.

**Figure 2.14 – Legible London Locations**

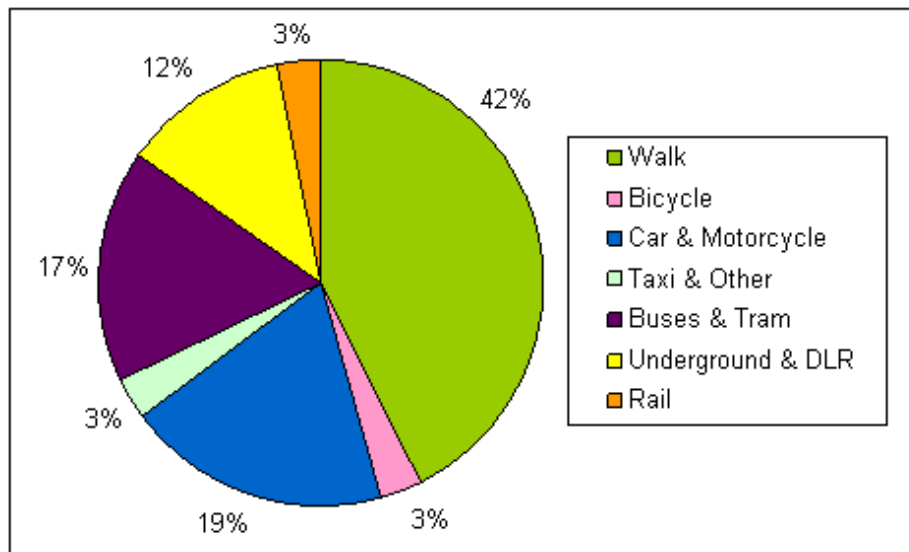


## *How People in Camden Are Travelling*

### **Introduction**

- 2.63 The borough's location in Central London, as well as its economy and characteristics, create significant pressure on Camden's transport networks. These pressures have direct consequences for how people travel to, from and within the borough.
- 2.64 Central London contains some of the worst traffic congestion in Britain and Camden does not escape this, although motor traffic levels in the borough have reduced over the past decade. This decrease can be partially attributed to significant increases in cycling both within Camden and across London.
- 2.65 Most of Camden is well served by public transport including bus, tube and rail, which provide links within London, other parts of the country, and to continental Europe. Parts of the borough benefit from some of the best transport accessibility in the country and as a result a significant proportion of Camden's people travel by public transport.
- 2.66 The most comprehensive study of how people travel is identified through the Census. The most recent Census, held in 2001, indicates that Camden had the 3<sup>rd</sup> lowest level of car use for journeys to work, compared to all local authority areas in the UK.
- 2.67 A more recent survey<sup>30</sup> of trips originating in Camden found that almost half were walking trips. **Figure 2.15** illustrates the proportion of trips originating in Camden for each mode.

**Figure 2.15** - Mode share for trips originating in Camden



Source: London Travel Demand Survey, 2006-09

<sup>30</sup> The London Travel Demand Survey (2006/9)

2.68 A comparison of mode share between Camden and its neighbouring boroughs (within central London) is illustrated in **Figure 2.16**.

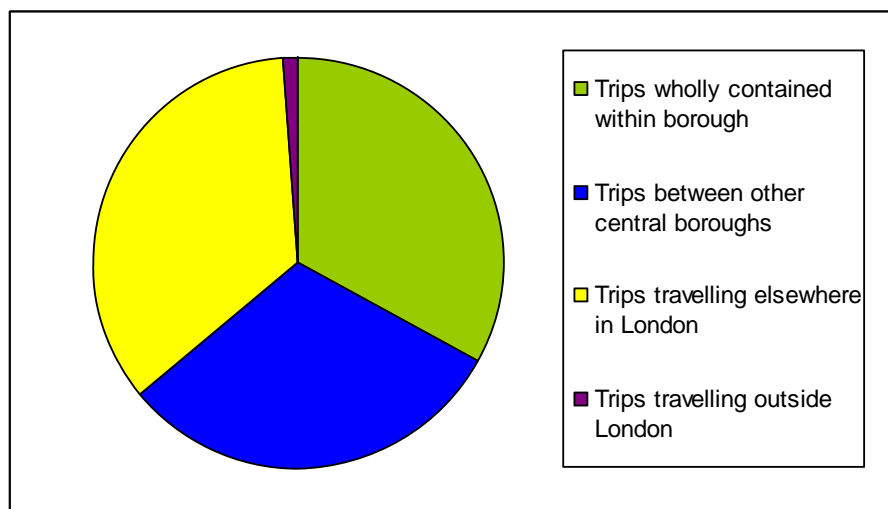
**Figure 2.16 – Residents’ Travel by Mode in Camden & Neighbouring Boroughs**



Source: London Travel Demand Survey 2006/07 to 2008/09 average

2.69 The majority of trips that begin in Camden cover small distances, with one-third of all trips contained wholly within Camden, and another 31 per cent to other Central London boroughs (**Figure 2.17**). Given the relatively short distances, this indicates that there is potential to continue to increase trips made by walking and cycling, as these are more suited to shorter distances.

**Figure 2.17 - Origin and destination of trips by Camden residents 2006-9**



Source: London Travel Demand Survey 2006/9

- 2.70 The number of trips in central London that are undertaken by car is much higher at weekends: mode share increases from 18 per cent on weekdays to almost 30 per cent on weekends (**Table 2.2**). This increase can be attributed to several factors, including increased parking availability, no congestion charge and lower frequencies of public transport services.

**Table 2.2** - Number of trips by mode by day of week originating in the Central London Sub-Region

Number of trips by mode by day of week originating in the Central Sub-Region						
Mode	Weekday	Mode share %	Saturday	Mode share %	Sunday	Mode share %
National rail / Overground	328,700	7	128,900	4	69,700	2
Underground / DLR	713,200	16	442,900	12	285,500	10
Bus / tram	772,300	17	616,300	17	434,500	15
Taxi / Other Public	92,300	2	99,900	3	35,600	1
Car / Motorcycle	828,400	18	977,500	27	869,200	29
Cycle	145,300	3	59,300	2	85,900	3
Walk	1,640,700	36	1,247,600	35	1,171,200	40
Other	6,200	<1	3,900	<1	1,800	<1
<b>Total</b>	<b>4,527,100</b>	<b>100</b>	<b>3,576,300</b>	<b>100</b>	<b>2,953,400</b>	<b>100</b>

Source: London Travel Demand Survey 2006/9

- 2.71 Travel by rail and Underground is more attractive for longer journeys, whereas trips under 1km are significantly dominated by walking – 81 per cent of trips in central London and 74 per cent in North London are undertaken on foot. Car trips are generally short journeys, with 66 per cent of car journeys in central London less than 5km. **Table 2.3** shows the number of trips and daily distances for Camden residents.

**Table 2.3** - Trips and travel distance for Camden residents

Trips and travel distance for Camden residents	
Camden population aged 5 and over	189,000
Trips per day	579,000
Total distance travelled per day	2,647,000
Trips per person per day	3.1
Travel distance travelled per person per day (km)	14

Source: London Travel Demand Survey 2006/09 Note: total distance travelled refers to straight line 'crow fly' distance

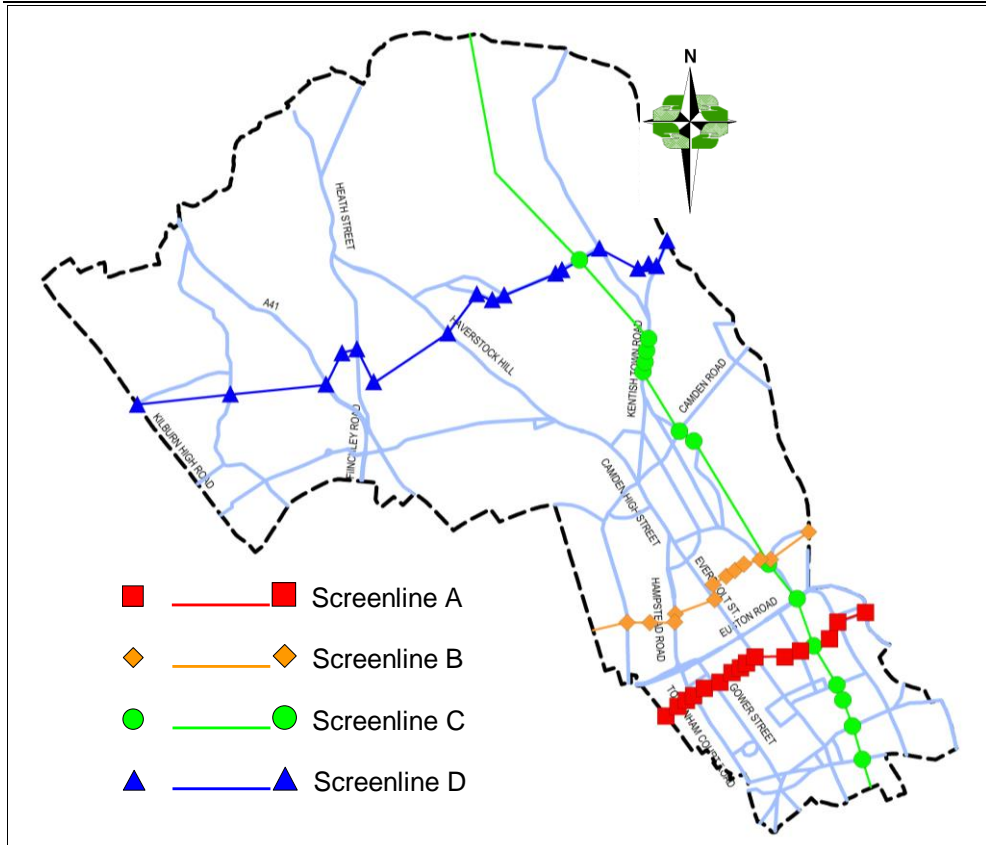
### ***Changes in Traffic Flows***

- 2.72 Each year, Camden monitors changes in traffic flows on the highway network using video surveys at approximately 58 locations across four screenlines in the borough. Three screenlines assess changes in east-west traffic and one measures traffic in the north-south direction. The surveys are conducted in Spring and Autumn and record all types of



traffic including cars, goods vehicles, buses, taxis, motorcycles and bicycles. **Figure 2.18** illustrates the screenlines and the individual survey points along the screenlines.

**Figure 2.18** – Screenline survey locations in Camden



2.73 The surveys provide a snapshot of the traffic situation each year, which over time can demonstrate trends. Analysis of the morning (7am to 10am) and evening (4pm to 7pm) peak period flows indicate that significant changes occurred in the traffic composition between 2001 and 2010. These changes include:

- Total motor vehicle flows have fallen by 16 per cent. This exceeds the Mayor's and Camden's 2011 target of 15 per cent<sup>31</sup> ;
- Private car numbers have reduced by 26 per cent;
- A 229 per cent rise in cycling, which exceeds the Mayor's target of 80 per cent by 2011<sup>32</sup>;
- Bus volumes have increased by 82 per cent and taxis by 15 per cent; and
- The level of goods vehicles has decreased by 7 per cent.

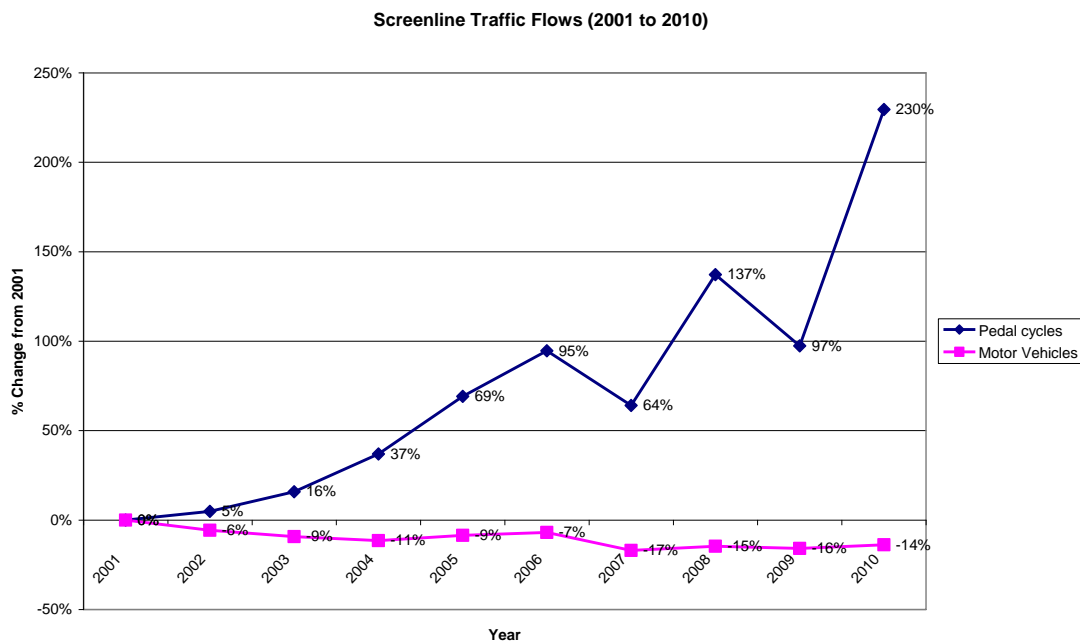
2.74 **Figure 2.19** indicates the trends in traffic flows across the borough since 2001.

<sup>31</sup> Quoted in London Plan, February 2008

<sup>32</sup> Quoted in Mayor's Transport Strategy 1

**Table 2.4** – Traffic flow data (6 hour totals for all pedal cycles and motor vehicles across Camden) from 2001 to 2010

Vehicle Type	2001	2005	2010	% change 2001 - 2010
Pedal cycles	12,070	20,416	39,772	229%
Motorcycles	18,026	18,129	17,720	-2%
Taxis	27,081	31,954	31,101	15%
Goods vehicles	54,988	50,922	51,419	-6%
Buses & coaches	5,611	8,820	10,220	82%
Cars	159,577	132,672	118,088	-26%
Total motor vehicles	265,282	242,496	228,548	-14%

**Figure 2.19** – Traffic flow data (6 hour totals for all pedal cycles and motor vehicles across Camden)

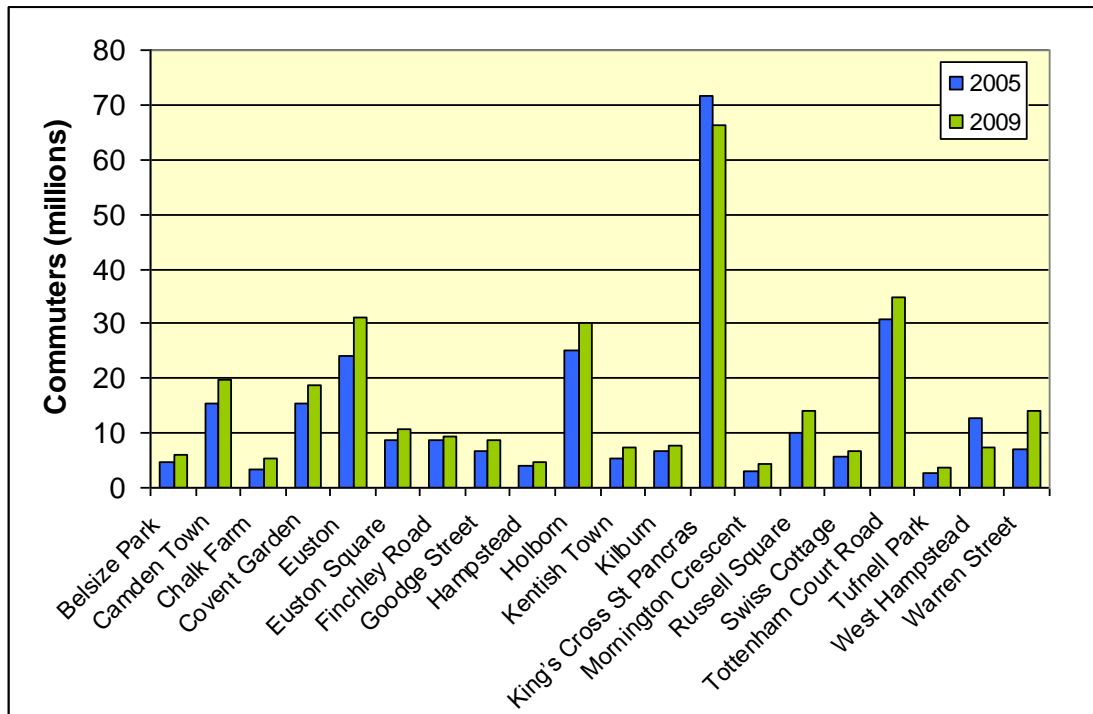
2.75 The decrease in private car use can be partially attributed to the introduction of Central London Congestion Charging Zone in 2003, as well as significant improvements in public transport, the increase in petrol prices, significant measures to encourage travel by sustainable modes (both engineering and “softer” travel awareness means), and the economic slowdown affecting commercial activity in recent years.

2.76 It is difficult to effectively monitor walking levels and Camden does not monitor wide-spread pedestrian volumes in the borough.

## Public Transport Flows

- 2.77 TfL provides annual reports on the total number of annual entry and exit frequencies for underground stations. Between 2005 and 2009 the total annual number of commuters entering and exiting underground stations in Camden (including those on the borough boundary) increased from 2,277 to 2,320 million. One notable exception is King's Cross St Pancras station where there has been a decline of 7.5 per cent. This is likely to be due to ongoing works to improve the station.
- 2.78 The changes in passenger volumes at Camden's Underground stations are illustrated in **Figure 2.20**.

**Figure 2.20** – Number of people entering or exiting Underground Stations in Camden (millions)

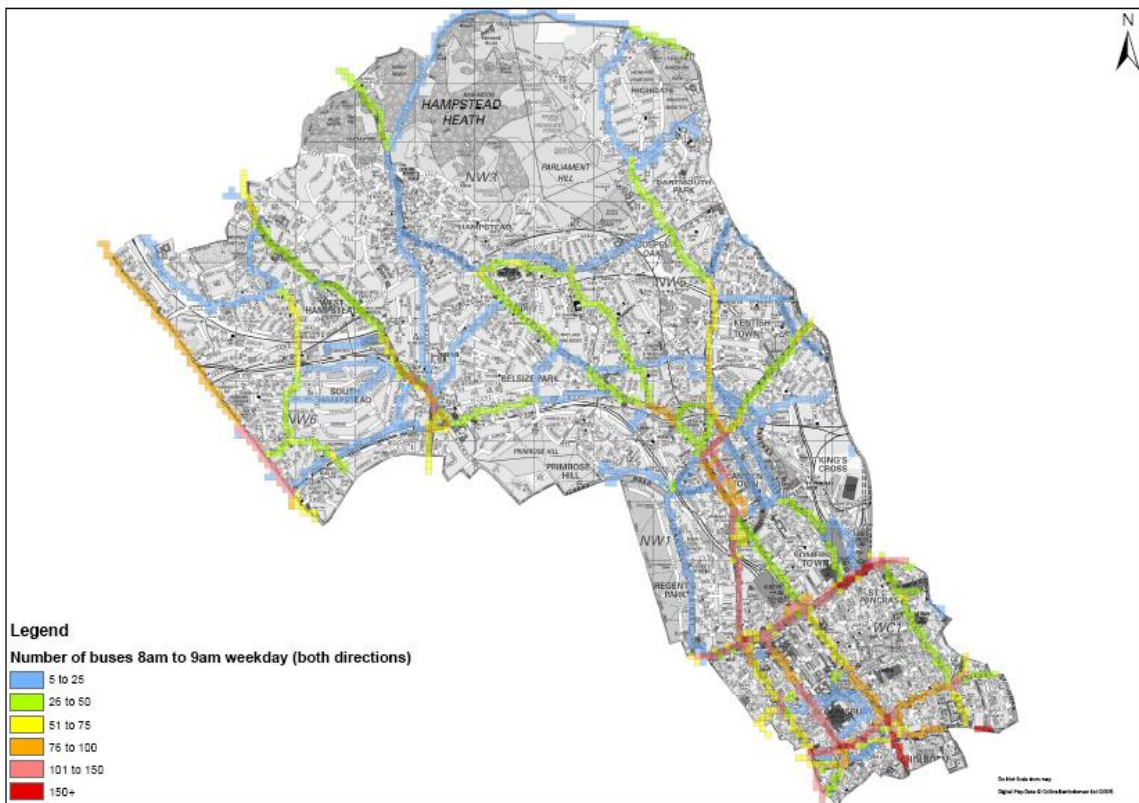


Source: TfL, London Underground Performance Update, Entries & Exits, 2005 & 2009

- 2.79 Passenger figures for London Overground stations have generally been increasing, although recent figures are significantly distorted by rail closures associated with the upgrades of the Overground, especially the North London line.
- 2.80 Overground passenger figures are forecast to significantly increase with proposed major infrastructure/facilities improvements, new trains/increased frequency, and improvements to reliability of Overground services. In 2011, 120 million Overground passengers (compared to only 41 million in 2007) are forecast as a result of the East London Line Phase 1 opening, which will include increased frequency and longer trains. It is forecast that the completion of Phase 2 in 2016 will see

passenger numbers grow to 139 million. By 2031 forecasts predict that there will be 207 million Overground passengers annually.

- 2.81 Passenger numbers at mainline rail stations in Camden have significantly increased in recent years. This is especially evident for King's Cross and St Pancras stations where international rail services have been introduced, and services and facilities on other lines, including Thameslink services, have been improved.
- 2.82 Passenger numbers at rail stations in Camden are forecast to continue to grow significantly. The forecast growth between 2008/09 and 2013/14 at the mainline rail terminals is as follows:
- Euston – 14 per cent
  - King's Cross – 13 per cent
  - St Pancras – 42 per cent
- 2.83 Similarly, bus passenger flows have greatly increased in the Central Activity Zone as well as the Inner London Borough area. Between 1999/2000 and 2008/09 total bus passengers throughout the day and night increased by 72 per cent. During the morning peak period bus services increased by 39 per cent and passenger numbers increased by 67 per cent.
- 2.84 Analysis of bus boardings indicate that the most boardings (in the AM peak) take place at areas of interchange (such as Euston and King's Cross), areas of high economic activity (especially in the south of the borough) and high density residential areas with relatively poor rail access. **Figure 2.21** shows the location of the busiest bus stops in Camden.

**Figure 2.21 – Buses per hour in North London**

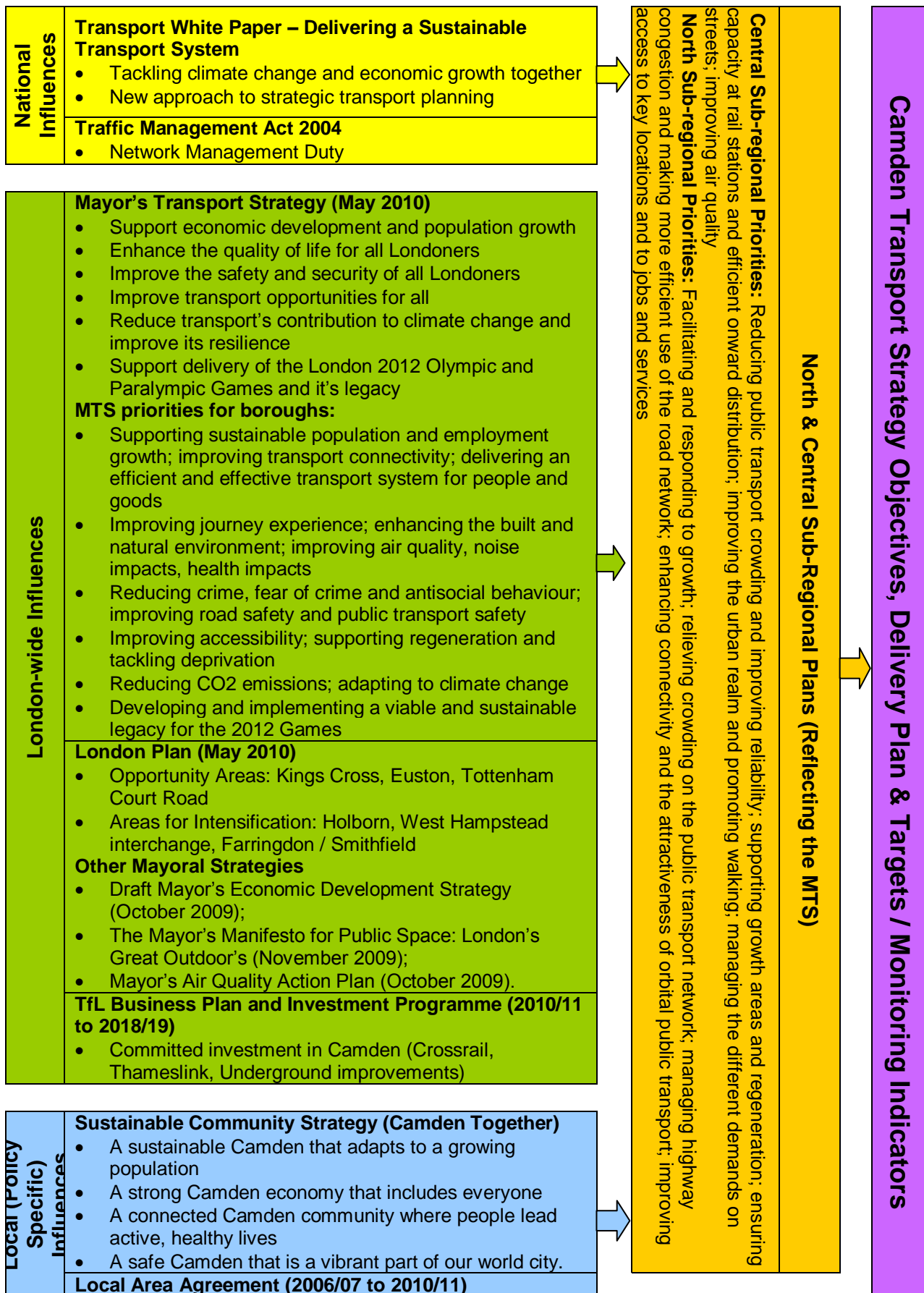
## Parking

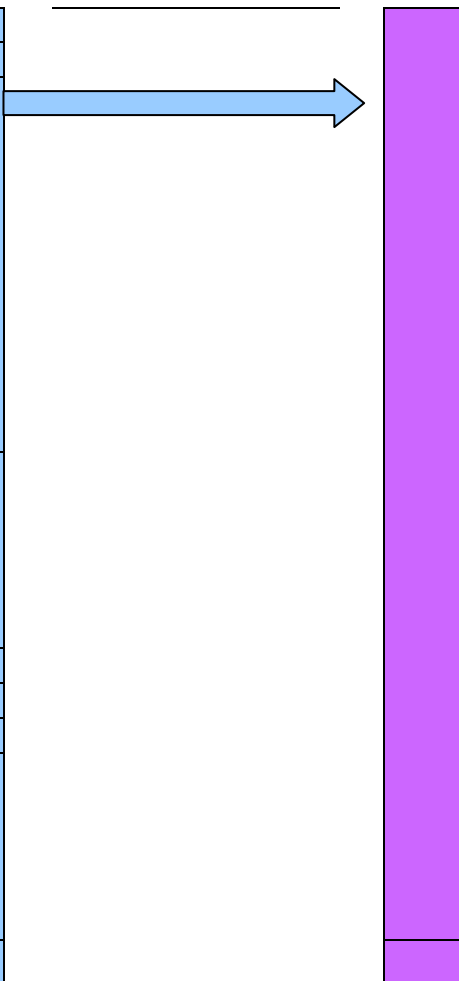
- 2.85 Parking controls cover all of Camden's public highways and are designed to enable a variety of different users to have access to kerbside parking. Camden's central London location and the demand for parking results in high parking pressures, which vary across the borough. Controlled Parking Zones (CPZs) were introduced across the borough over a number of years in response to requests from residents to be able to park closer to their homes. There are 19 CPZs that operate for different hours and days of the week to reflect local parking demands.
- 2.86 Further details about the development of CPZs over time, control hours, the types of bays and permits on offer are given in the *Parking and Enforcement Plan* ([camden.gov.uk/pep](http://camden.gov.uk/pep)). The demand for parking changes all the time, so parking arrangements and different aspects of the service are continually reviewed to rebalance changing requirements. Camden's *Annual Parking and Enforcement Reports* provide updates on these changes.
- 2.87 Some CPZs are divided into sub-areas with different hours and days of control. To even out parking demand in some areas, permit holders in adjacent zones can park in 'buffer zones' that follow the hours of control of one of the zones. The Council is currently reviewing all aspects of the parking regime to simplify arrangements and provide a stronger customer focus.

***Wider Policy Context***

- 2.88 **Figure 2.22** summarises the key documents that have informed the preparation of Camden's Transport Strategy. Further details of these policy influences are provided in Appendix A.

**Figure 2.22 – Summary of Policy Influences on Camden’s Transport Strategy**



	<ul style="list-style-type: none"> <li>• Targets to meet Sustainable Community Strategy</li> </ul> <p><b>Comprehensive Area Assessment process</b></p> <p><b>Camden's Local Development Framework</b></p> <ul style="list-style-type: none"> <li>• Promoting sustainable and efficient travel by improving strategic transport infrastructure to promote growth; promoting sustainable travel options; making private transport more sustainable; and promoting the sustainable movement of goods.</li> <li>• Growth Areas: Kings Cross, Euston, Tottenham Court Road, Holborn, West Hampstead interchange, Farringdon / Smithfield</li> <li>• Highly accessible Areas: Camden Town, Finchley Road / Swiss Cottage, Kilburn High Road, Kentish Town, West Hampstead</li> </ul> <p><b>Camden Sustainability Delivery Plan (under review 2010-2011)</b></p> <ul style="list-style-type: none"> <li>• Promoting sustainable use of resources</li> <li>• Mitigating the impacts of climate change through energy efficiency and travel</li> <li>• Improving air quality</li> </ul> <p><b>Camden Safe 2008/2011 Strategy</b></p> <p><b>Camden Climate Change Adaptation Action Plan</b></p> <p><b>Camden Air Quality Action Plan</b></p> <p><b>Placeshaping Studies</b></p> <ul style="list-style-type: none"> <li>• Placeshaping Areas: Camden Town &amp; east of Camden Town; Euston, Tottenham Court Road &amp; St Giles; Finchley Road &amp; Swiss Cottage; Holborn &amp; Bloomsbury; Kings Cross &amp; Somers Town; West Hampstead; Kentish Town; Kilburn; Gospel Oak</li> </ul> <p><b>Older People and Younger People Plan</b></p>	
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## Chapter 3 - Transport Challenges and Opportunities for Camden

### *Introduction*

- 3.1 There have been many changes to the transport network in Camden in recent years which have supported a significant shift to sustainable travel modes and reduced car volumes on the Central London road network.
- 3.2 However, despite recent progress, there are still many transport challenges that need to be addressed. Motorised travel has significant implications for air quality, particularly on busier borough roads. Climate change and obesity associated with inactive life styles are serious and growing issues that need urgent attention. Camden has achieved significant reductions in road casualties but the challenge to reduce them further remains. Improving the accessibility of the transport system is essential for reducing inequalities and increasing social inclusion. The actual and perceived personal safety for people using the transport system is a continuous challenge, as is making journeys as comfortable as possible, especially for more sustainable modes.
- 3.3 Many of these challenges will become more acute as population and employment continue to grow, both in Camden and across Greater London.
- 3.4 As well as challenges, there are also emerging opportunities that can help Camden address transport issues. Large scale projects such as proposed improvements to the Underground lines and Crossrail, as well as the London 2012 Olympic and Paralympic Games, present opportunities to influence travel behaviour and improve the overall travel experience in the borough.

### *Mayoral and Sub-Regional Challenges*

- 3.5 As a borough located in central London, Camden shares many of the same transport challenges and opportunities that are experienced by boroughs across the Capital. The challenges described in the Mayor's Transport Strategy for Greater London are therefore, in many cases, the same or similar to those faced by Camden.
- 3.6 Camden has even more in common with surrounding boroughs in the central and northern regions of London. These challenges are described in transport plans that have recently been published by TfL for each of the five sub-regions (i.e. Central, North, South, East and West) in London.

3.7 A summary of the key challenges outlined in both the London-wide and sub-regional documents are included in **Table 3.1**. These challenges are translated down to the borough level in Chapter 3.

**Table 3.1** – London and Sub-regional Transport Goals and Challenges

MTS Goals	MTS Challenges	Central Sub-regional Challenges	North Sub-regional Challenges
Supporting economic development and population growth	Supporting sustainable population and employment growth	Supporting growth areas and regeneration	Facilitating and responding to growth, particularly in Brent Cross/ Cricklewood and the Upper Lee Valley
	Improving transport connectivity		
	Delivering an efficient and effective transport system for people and goods		
Enhancing the quality of life of all Londoners	Improving journey experience	Reducing public transport crowding and improving reliability	Relieving crowding on the public transport network
	Enhancing the built and natural environment	Improving the urban realm and promoting walking	
	Improving air quality		
	Improving noise impacts		
	Improving health impacts		
Improving the safety and security of all Londoners	Reducing crime, fear of crime and anti-social behaviour	Managing the different demands on streets	Managing highway congestion and making more efficient use of the road network
	Improving road safety		
	Improving public transport safety		
Improving transport opportunities for all Londoners	Improving accessibility	Ensuring capacity at rail stations and efficient onward distribution	Enhancing connectivity and the attractiveness of orbital public transport
	Supporting regeneration and tackling deprivation		
Reducing transport's contribution to climate change and improving resilience	Reducing CO <sub>2</sub> emissions	Improving air quality	Improving access to key locations and to jobs and services
	Adapting to climate change		
Support delivery of the London 2012 Olympic and Paralympic games	Contributing to a successful 2012 Games and its legacy		
	Transport Infrastructure and services		
	Physical and behavioural transport legacy		

### ***Supporting the Growing Population***

- 3.8 Camden's population is forecast to grow by 17 per cent (or around 35,000 people) by 2031. Much of this growth will be focused in the King's Cross regeneration area, Holborn, West Hampstead, West Euston and Tottenham Court Road<sup>65</sup>.
- 3.9 These areas are identified in Camden's Local Development Framework and the Mayor's London Plan as suitable for significant increases in homes and jobs. They are based around large public transport interchanges where improvements to transport facilities, services and capacity are planned or currently being completed.
- 3.10 Camden's Local Development Framework Core Strategy predicts 37,500 new jobs in Camden between 2001 and 2026. Employment floorspace is also forecast to grow significantly, with over two-thirds of increased floorspace in the borough expected in King's Cross and Euston. It is expected that 25,000 jobs will be created at the King's Cross development alone, which will also include 1,700 homes (of which 750 will be affordable), plus up to 650 units of student housing.
- 3.11 As a consequence of this growth in Camden and across Greater London, trips are expected to increase by 18 per cent in Central London and 12 per cent in North London by 2031<sup>66</sup>. Coupled with development in surrounding boroughs (such as Brent Cross/ Cricklewood), this will exert significant pressure on already congested public transport and highway networks. The transport system will need to adapt at both a local and regional level.
- 3.12 The Camden Core Strategy (the borough's Local Development Framework document) outlines its policy of ensuring close integration between land use and transport planning to support sustainable future growth. The Core Strategy sets out a number of policies to achieve this, including locating major developments in highly accessible locations, promoting car-free and car capped housing, supporting car clubs, introducing minimum cycle and maximum car parking standards, and developing electric charging points. These policies help to ensure new developments minimise the impacts of travel on both the transport network and the environment.
- 3.13 It is important that developer contributions – in the form of Section 106 contributions and Community Infrastructure Levy contributions when and if these become available - continue to address local transport issues in mitigating the impacts of developments, and where appropriate, contribute towards public realm and other strategic transport improvements.

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<sup>65</sup> LDF Core Strategy, Camden Council, 2010

<sup>66</sup> Mayor's Transport Strategy (TfL, 2010)

- 3.14 As there is little or no spare capacity on most of Camden's roads, inevitably much of the anticipated demand will need to be met through more sustainable modes of travel rather than by motor vehicles. Camden particularly seeks to manage congestion through encouraging more people to walk and cycle. Recent studies<sup>67</sup> indicate there is significant potential in Camden, as well as across wider London, for increased travel by these modes.
- 3.15 Extra demand will also need to be met by improvements to public transport services. There are a number of planned major infrastructure projects in Camden that will help accommodate growth including:
- Crossrail – a new east-west high capacity rail line through the southern part of the borough. It is due to be completed in 2017 and will include new stations at Tottenham Court Road and Farringdon.
  - Thameslink Route – upgrade works to increase frequency of services, provide new longer trains and improve stations. By 2016 it is expected that train frequency will be 2 to 3 minutes through Camden stations.
  - London Underground and Overground – improved signalling, new trains and higher frequency services to improve capacity on the Jubilee, Victoria, Northern, Piccadilly, Metropolitan, Circle and Hammersmith & City lines. The North London Line will see capacity increase by around 50 per cent.
- 3.16 Improvements will reduce crowding on some lines, however, continued population and employment growth will mean that some public transport links will become more congested despite the improvements. **Figures 3.1** and **3.2**, for example, indicate where severe crowding occurred on the London Underground network in 2006 and where it is forecast to occur in the future (2031). Black indicates severe crowding and it is clear that in Camden some areas, especially around King's Cross and Euston are expected to worsen, even with the upgrades of the London Underground lines.
- 3.17 Station improvements, such as those at King's Cross St Pancras will relieve some of the pressures within the stations themselves. However some stations such as Holborn and Camden Town are severely overcrowded and are in urgent need of extra capacity.
- 3.18 As well as crowding on the Underground, King's Cross and Euston will face major challenges of increased passengers from national rail line services, the large regeneration projects in both areas, and the potential expansion of Euston station should the High Speed 2 rail line proposals proceed.

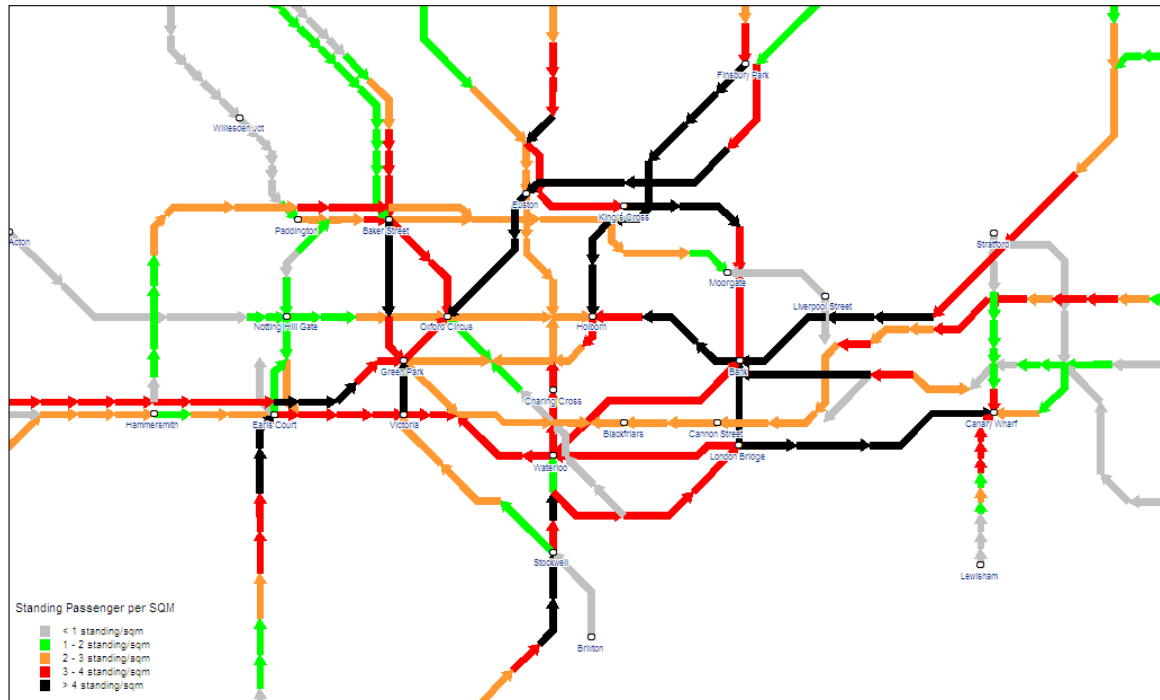
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<sup>67</sup> North and Central Sub-Regional Transport Plans (TfL, 2010)

**Figure 3.1: London Underground Crowding 2006**

LUL Crowding

BF0712A: 2006 Reference Case V11

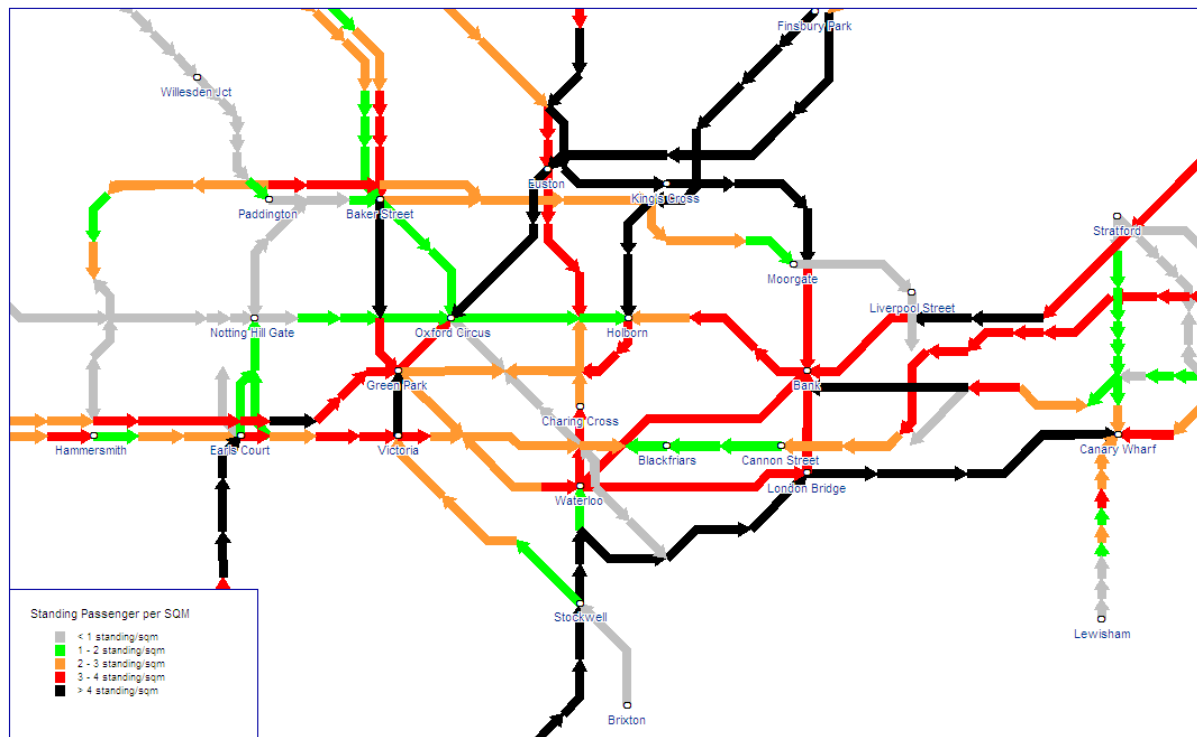


MTS2 Reference Case: BF1217V (Feb 09)  
 Crowding plots includes reliability and shows:  
 - peak hour crowding (54% peak period demand)  
 - most crowded direction  
 - using a standing density factor of 7 pass/sqm

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**Figure 3.2: London Underground Crowding 2031**



MTS2 Reference Case run  
 Oct 09  
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**Central Sub-region**  
**London Underground Crowding - 2031**

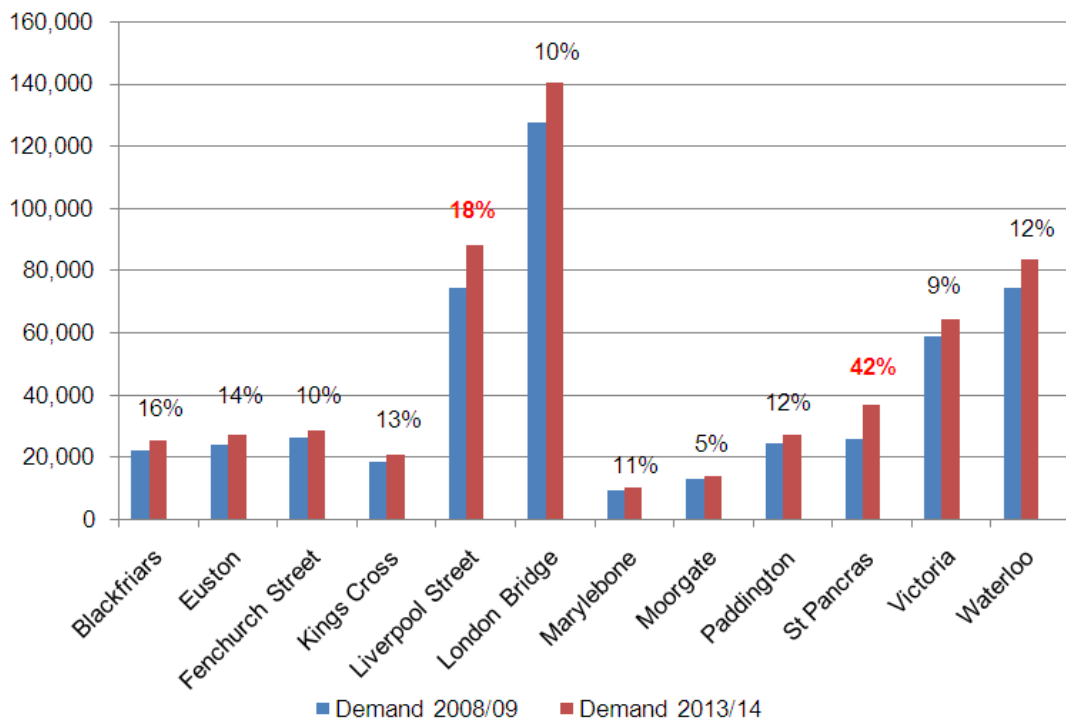
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### ***Improving Connectivity of Transport in Camden***

- 3.19 Camden benefits from excellent transport provision, including a direct link to continental Europe through St Pancras International, National Rail services at King's Cross, St Pancras and Euston, 23 tube stations, bus routes, an extensive bicycle network and pedestrian links throughout the borough. These services provide excellent accessibility within Camden, to the rest of London and beyond, and are vital in supporting the continued growth and success of the borough.
- 3.20 Despite excellent transport links, there are significant pressures on the public transport network due to high trip demands throughout the day and night and a requirement to support the variety and intensity of activities in Camden.
- 3.21 Increasing rail and Underground services introduces new challenges in accommodating increased passenger numbers entering Camden. **Figure 3.3** indicates the forecast growth in demand in the five year period to 2013/14 for all London stations including those in Camden at Euston (14 per cent), Kings Cross (13 per cent), and St Pancras (42 per cent).

**Figure 3.3** – Forecast Growth in the Morning Peak Period - Main London Termini (2008/09 – 2013/14)



Source: DfT, *Delivering a Sustainable Railway White Paper*, 2007

- 3.22 While rail operators and TfL are responsible for funding rail infrastructure improvements, Camden will need to continue to work with stakeholders to improve interchanges between services and provision of information.
- 3.23 Camden is currently working with Network Rail, TfL and the local community to significantly improve the on-street interchange in West Hampstead, for example, between London Underground, Overground and Thameslink rail services. This interchange, identified in the Mayor's Transport Strategy, helps relieve interchange pressures at mainline rail terminals in Central London.
- 3.24 Improvements to the street environment helps to encourage walking and cycling for onward journeys, rather than interchanging between rail services, especially in Central London where stations are closely spaced. Camden seeks wherever possible to achieve this through public realm improvements, improvements to cycling and walking facilities, travel awareness measures and schemes such as Legible London and London Cycle Hire. The cycle hire station near King's Cross station, for example, is the second busiest cycle hire station in the whole of London.
- 3.25 Buses also play a vital role in improving connectivity both through direct interchange with other modes, and as a comprehensive stand-alone, high quality service across the borough. London Buses regularly consults Camden on bus services. Although this communication is an effective way for the Council to communicate issues and concerns on specific routes, Camden strongly believes a strategic review of the bus network in London is required to highlight and address more comprehensive improvements across the Central and North sub-regions of the capital.

### ***Providing an Efficient and Effective Transport System***

- 3.26 Camden seeks to provide travel that is easy and efficient. However different users such as commuters, residents, shoppers, tourists, construction, freight and servicing all have different needs and priorities. Support for businesses that rely on good access and reliable journey times needs to be balanced with quality of life, the urban realm and the environment. Balancing the different demands and managing the road network effectively is a major challenge for Camden.
- 3.27 Despite the introduction of the congestion charge in Central London, congestion remains an issue across the borough. Although traffic levels have remained relatively stable in recent years, traffic congestion has increased, most likely due to reallocating road space for buses, pedestrians and cyclists, increasing pedestrian crossings and road works. As demand continues to grow, reliability and

resilience problems are likely to become more acute if further investment and action is not provided.

- 3.28 Highway congestion is particularly evident along a number of key corridors in Camden including the Woburn Place/ Kingsway corridor (especially near Holborn), Euston Road, Kentish Town Road, West End Lane and Kilburn High Road. Average traffic speeds of about 10 miles per hour in Camden are generally consistent with other Central London boroughs - Islington's average, for example, is 11mph. But this is lower than outer London boroughs, such as Barnet where the average speed is 22mph.
- 3.29 Given the high number of passengers that travel by bus and the accessibility across Camden and greater London, the reliability and efficiency of bus services are very important. Reliability is obviously directly affected by congestion on the road network. This has been somewhat mitigated in recent years, despite growing overall traffic congestion, through increasing service levels, providing better bus priority and introducing incentives for bus operators.
- 3.30 Freight also contributes to, and is impacted by, congestion. Demand for freight is likely to continue to increase (the number of vans in Central London, for example, is forecast to grow by 30 per cent between 2008 and 2031). A reliable and efficient transport system is vital for businesses and continued investment.
- 3.31 Balancing demands for kerbspace between servicing, parking and other uses, plus providing clearly understood waiting/loading restrictions, is a difficult and important challenge. Camden is currently working towards improvements in this area through a parking simplification project.

### ***Maintaining the Transport System***

- 3.32 The ongoing reliability of transport networks in Camden is important to both businesses and individuals. Congestion represents a significant cost to businesses which rely on transport not only for staff and customers but also for deliveries of goods. Breakdowns and system failures, both on the transport network and on ageing services such as Victorian water mains, continue to jeopardise the reliability of the transport system.
- 3.33 A key challenge for Camden is to manage and maintain the transport network (in many cases with external stakeholders) to continue to provide a reliable service. In addition to an annual allocation from TfL, Camden invests a significant amount of funding each year (£7 million in 2010/11) on the transport network to maintain and improve the performance and reliability of Camden roads, footways and lighting.



- 3.34 Improvement works to the road network as well as the frequent “openings” of footway and road surfaces by utility companies also significantly disrupt traffic flow through the borough and Camden will continue to manage these works in line with its Network Management Duty.
- 3.35 Camden is also responsible for managing the maintenance of a number of bridges across the borough. Much of the funding for maintenance of these bridges comes from TfL (as part of a London-wide allocation) and ensuring the structural integrity of this infrastructure will continue to provide challenges, especially in the current financial climate.
- 3.36 The proposed improvements to the London Underground network, whilst very welcome for the longer term benefits, present challenges for Camden in the short term. Recent improvements to the Jubilee line resulted in significant disruption, and frustration was felt by businesses and commuters served by the line in areas such as Kilburn who depend heavily on trade from people using the Underground network. Camden recognises there are significant consequences for those affected and will continue to lobby TfL and other stakeholders to deliver transport improvements in a timely manner to ensure minimal disruption to town centres.
- 3.37 Construction of large scale schemes such as Tottenham Court Road station and the King’s Cross regeneration project, also present a significant challenge in ensuring people and traffic can move around easily during this time. Construction management plans can help in this regard, trying to help minimise impacts on businesses, residents and those travelling through the area.

### ***Improving Journey Experience***

- 3.38 Many people spend hours travelling each day between different destinations and the quality of their journey experience can have a considerable impact on their day-to-day lives. As well as general health and well-being, it is vital for Camden’s economy (such as to businesses and the tourism industry) that people are able to get to their destinations safely, efficiently and reliably.
- 3.39 Areas that are poorly maintained, cluttered, congested or that have an unattractive streetscape can be uncomfortable and hazardous for pedestrians, cyclists and other people travelling through the area. It is an ongoing challenge to maintain and improve the public realm and street environment while improving road and footway conditions (to improve comfort) and manage congestion.
- 3.40 Whilst crowding remains an issue on many public transport rail lines which can often make for uncomfortable journeys, London

Underground and National Rail services are generally becoming more reliable with shorter waiting times<sup>68</sup>. Similarly statistics indicate that bus services have also become increasingly reliable.

- 3.41 Long term rail improvements continue to improve reliability and frequency, but construction of these schemes has potential to cause significant disruption in the short term and Camden will need to continue to work with TfL and other stakeholders to minimise disruption and keep Camden moving.
- 3.42 Recent surveys indicate that a quarter of people in Central London felt that their journey had improved over the last few years. The frequency and connectivity of services were noted as areas where most passengers were satisfied, while crowding was the issue that prompted the most dissatisfaction.

### *Enhancing the Built and Natural Environment*

- 3.43 Traffic and street infrastructure can significantly influence people's perception and enjoyment of an area. Improving the appearance of the street can have a positive influence on an area and can encourage more people to walk and cycle.
- 3.44 Camden has many attractive and historic neighbourhoods plus numerous parks and open spaces, and this is one of the reasons that the borough is such a popular place to live, work and visit.
- 3.45 Camden has an ongoing commitment to enhance the local environment through improving conservation areas and accessible open spaces, reducing emissions that affect air quality and upgrading the streets. Camden has numerous examples of impressive and innovative streetscape improvements. Fitzroy Square, for example, was restored in a simple but effective way to complement its impressive Georgian setting as shown in **Figure 3.4**.
- 3.46 **Figure 3.4** – Fitzroy Square public realm improvements



Before



After

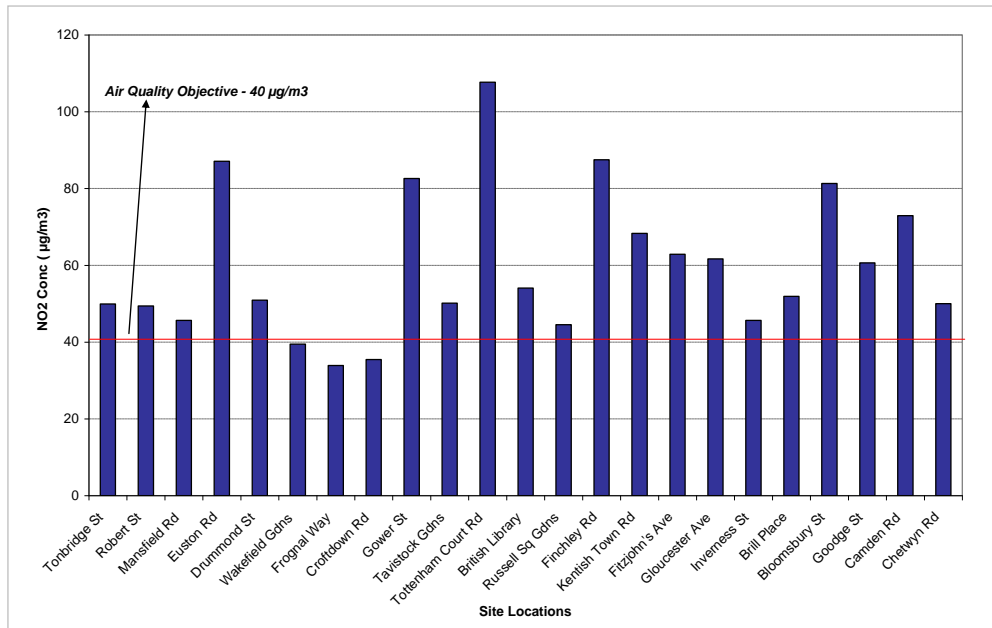
<sup>68</sup> Central London SRTP Issues and Challenges Report (TfL, 2010)

- 3.47 There are still many areas in Camden which would benefit from public realm improvements. As public highway represents a significant proportion of the land area in the borough, it is important wherever possible to take advantage of opportunities to enhance the streetscape through simple but effective measures that represent good value for money. Street trees, for example, are a cheap and effective way of enhancing the streetscape and can also potentially support local ecosystems.
- 3.48 An emerging challenge is balancing the needs of improving public realm, particularly the quality of material for those projects, as funding becomes more restricted. Reuse of materials will become important from both a cost and environmental perspective.

### *Improving Air Quality*

- 3.49 Protecting local air quality has a vital role to play in safeguarding public health and the environment. Poor air quality is responsible for over 4,000 premature deaths in London each year as well as a number of working days lost through illness. The young, elderly and those with existing lung and heart conditions are especially vulnerable to poor air quality.
- 3.50 Road transport, in particular cars and heavy goods vehicles, are the second largest source of nitrogen oxides (NO<sub>x</sub>) emissions (36 per cent) in the borough. Road transport is also the largest source of particulate matter (PM<sub>10</sub>) emissions (58 per cent), with taxis and heavy goods vehicles contributing the largest share. Particulate matter emissions also arise from diesel trains (10 per cent) and indirectly from brake and tyre wear (21 per cent). Air pollution levels in Camden are also greatly influenced by traffic emissions arising from busy road networks surrounding the borough.
- 3.51 The roads with the highest traffic volumes, such as Euston Road, Tottenham Court Road and Finchley Road, have the worst air pollution levels in the borough. A number of taxi rank and bus stand locations are also particularly bad for air quality, as vehicles tend to idle in these locations. Changing driver behaviour in these areas is an important issue to address in coming years. Increases in population and employment are likely to further impact on Camden's air quality as the demand for the movement of freight grows.
- 3.52 Camden, like many other boroughs across London, has failed the Government's air quality objectives for NO<sub>2</sub> and PM<sub>10</sub> since 2000 and has been declared an Air Quality Management Area. Camden exceeds the annual NO<sub>2</sub> objective along most of Camden's busy roads as indicated in **Figure 3.5**.

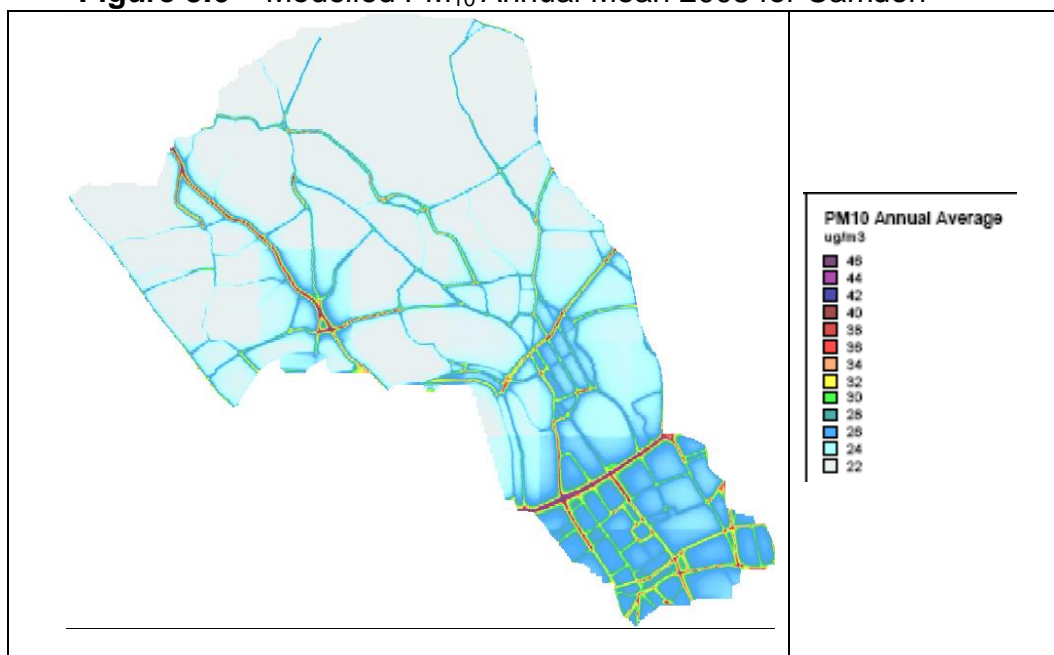
**Figure 3.5 - Annual mean NO<sub>2</sub> levels in Camden, 2009**



Source: LB Camden Air Quality Modelling Report, Bureau Veritas, 2010

3.53 **Figure 3.6** illustrates the PM<sub>10</sub> annual mean concentrations in Camden from measurements taken in 2008. The map highlights the potential areas that are predicted to exceed the annual mean PM<sub>10</sub> AQS objective of 40µg/m<sup>3</sup>. These areas include Euston Road, Finchley Road (particularly around Swiss Cottage), Tottenham Court Road, Upper Woburn Place/Tavistock Square, as well as several junctions in the south of the borough.

**Figure 3.6 – Modelled PM<sub>10</sub> Annual Mean 2008 for Camden**



Source: LB Camden Air Quality Modelling Report, Bureau Veritas, 2010 (Report prepared for London Borough of Camden)

- 3.54 To improve air quality at the local level, Camden has produced an *Air Quality Action Plan (AQAP) 2009-12*. Similarly, the Mayor of London has recently published an Air Quality Action Plan. Reducing road traffic emissions is one of the main challenges of the Camden air quality plan and thus the Camden Transport Strategy has an important role to support this.
- 3.55 Stop-start driving, which is a feature of most of the congested roads across Camden and wider London, is a particular issue given the additional impacts this has on air quality levels. Smoother traffic flows through reduced congestion and potentially fewer traffic signals may help address this to some extent.
- 3.56 One of the key challenges for Camden is to reduce the impacts of transport on the environment and health, and encouraging behaviour change. The Strategic Environmental Assessment (SEA), the air quality strategy and other environmental plans have been key inputs into the CTS.

### ***Reducing the Impact of Noise***

- 3.57 Noise is an inevitable, daily part of living in a Central London borough. However, noise can significantly impact on the quality of people's lives through anxiety, sleep disruption, and even illness.
- 3.58 Given the borough's central London location and high traffic levels, the main source of ambient noise experienced by Camden residents is from road traffic. Generally, higher motor traffic volumes cause higher noise levels, therefore busy streets, such as Euston Road and Finchley Road, are particularly 'noisy' areas.
- 3.59 As well as general traffic, noise disturbances are caused by other transport related sources such as deliveries and loading, trains on the rail network and announcements at stations.
- 3.60 Transport also has a role to play in dispersing people from an area late at night. There is a particular concern with noise associated with the thriving night time economy in the Camden Town area.
- 3.61 The CTS therefore has a key role to play in reducing the impact of transport related noise in the borough.

### ***Encouraging Healthy Travel***

- 3.62 There is an established body of research and evidence demonstrating the links between human health and transport. Active travel modes such as walking and cycling benefit both the person travelling, through increased exercise, as well as those around them through reduced emissions, congestion and road danger on the road network.

- 3.63 The British Medical Association, for example, has stated that cycling reduces the risk of heart disease, high blood pressure, obesity and diabetes. Walking and cycling can also benefit mental health by reducing levels of depression and stress, improving mood and raising self-esteem.
- 3.64 Research has found that there is significant potential to increase the number of cycling trips across London. The Mayor of London has stated his intention to achieve a 400 per cent increase in cycling between 2000 and 2026. Cycling levels in Camden have doubled since 2001, and cycling figures are expected to increase significantly with the introduction of the cycle hire scheme as well as other cycle measures.
- 3.65 There are many challenges to increasing the number of cycling trips, including constraints on road space, the need for a significant increase in cycle parking, providing a safe environment and mitigating any potential conflicts with pedestrians as well as other road users such as motor cyclists. Measures to promote cycling to the population and ensure people have the skills to cycle safely are also key challenges, especially with the introduction of the Cycle Hire scheme and its potential contribution to mainstream cycling in Central London.
- 3.66 Similarly, analysis indicates there is significant potential to increase walking levels. Studies suggest that around 350,000 trips that are currently undertaken daily in Central London by mechanised transport could be walked (or 5 per cent of all trips in the region). Fulfilling some of this potential growth is an important challenge for Camden.
- 3.67 Ill health is unevenly distributed across London - this is also the case in Camden. Increased levels of walking and cycling can improve health outcomes for people in those areas with greater health problems.

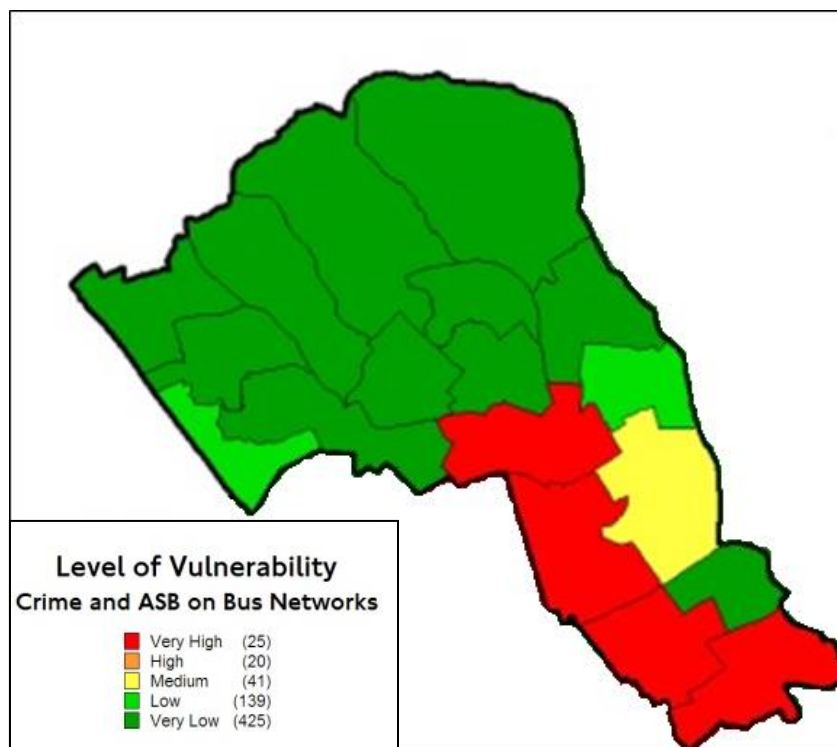
### ***Reducing Crime, Fear of Crime and Anti-Social Behaviour***

- 3.68 Providing a Safer Camden is a key theme in Camden's Sustainable Community Strategy and is an ongoing challenge where transport has a key role to play.
- 3.69 There is a downwards trend in overall crime levels across Camden. In terms of transport, crime levels on underground stations have reduced in recent years while the incidents of crime on buses have remained fairly static.
- 3.70 **Figures 3.7** and **3.8** show the intensity of crime across the borough on buses, rail and underground. The figures indicate that higher levels of transport-related crime in Camden are focussed in the Somers Town,

King's Cross, Euston and Camden Town areas for both bus and rail. These are total crime figures, not rate per passenger, so the figures should be considered in the context of very significant numbers of people travelling through stations and on buses in these areas.

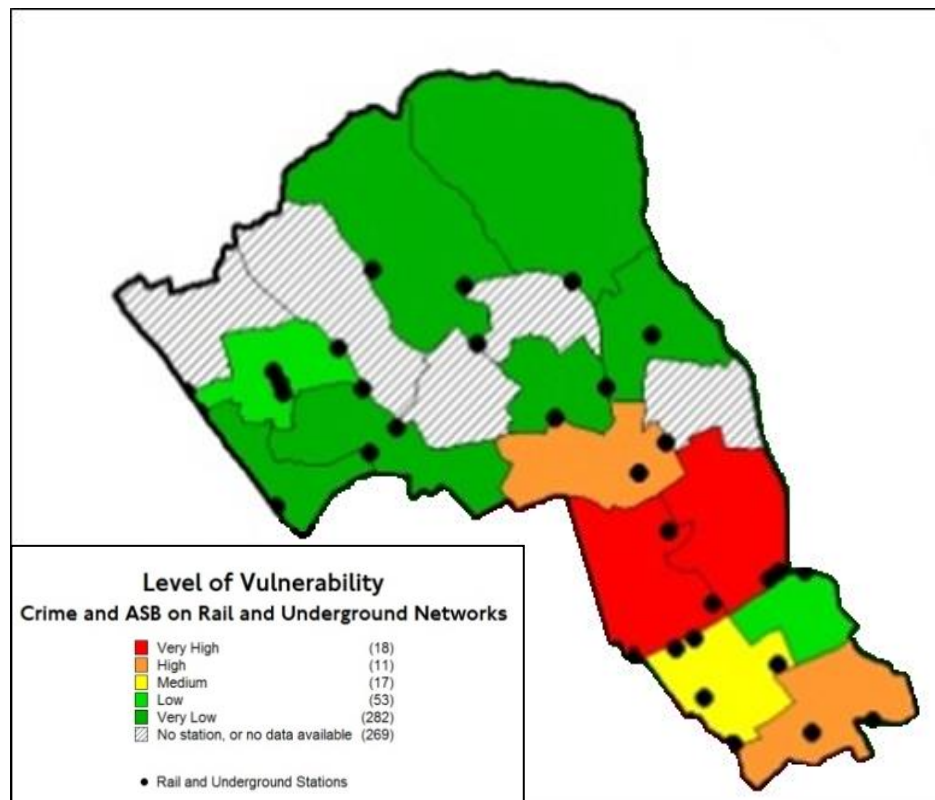
- 3.71 The perception of safety is often a significant barrier to travel. A public attitude survey conducted by the Metropolitan Police Service revealed that Camden is one of only two boroughs across London where 100 per cent of respondents (i.e. Camden residents) feel safe or very safe on the bus, tube, and train network. However it is noted that a survey of Camden residents conducted each year regularly indicates that fear of crime and concern for personal security are issues for some people when considering how to travel. School leaving times and late at night are times when people can feel particularly vulnerable.

**Figure 3.7 - Crime and Anti-social Behaviour on Buses in Central London**



Source: TfL Community Safety, Enforcement & Policing (CSEP) - 2009 Strategic Assessment

**Figure 3.8 - Crime and Anti Social Behaviour on the Rail and Underground Networks**



Source: TfL Community Safety, Enforcement & Policing (CSEP) - 2009 Strategic Assessment

- 3.72 Bicycle theft continues to be a significant challenge across the borough and wider London. Euston Station is the location with the highest recorded level of bike theft in London<sup>69</sup>, despite provision of 138 specially designed bike racks in the station forecourt last year.
- 3.73 Ongoing enforcement and the presence of police and community safety officers on the street, suitable lighting, well designed street environments and ensuring the planning process supports good on-street surveillance are some of the key ways that Camden can continue to address crime.
- 3.74 Camden is an integral part of Central London and its role as a world city make it a potential target for acts of terrorism. Unfortunately, as was seen in the events of July 7 2005, the transport network can be vulnerable and Camden will need to continue to increase resilience against potential future attacks.

<sup>69</sup> Mayor's Cycle Security Plan, (Transport for London)



### *Improving Transport Safety*

- 3.75 Camden adopts a wide ranging approach to casualty reduction through measures such as education, training and publicity programmes, engineering measures, speed limits and parking and moving traffic enforcement powers. Camden's evidence-based, multi-disciplinary approach to casualty reduction has proven to be very effective against fatalities and injuries on borough roads; however, reducing casualties further remains a significant challenge.
- 3.76 London-wide casualty statistics clearly reveal the success of Camden's road safety programmes. **Table 3.2** lists the per cent reduction in casualties since the baseline year of 1994-98 in Camden as well as Camden's "ranking" against other boroughs in terms of reducing casualties.

**Table 3.2 – Reduction in Casualties over Time**

Road safety measure	% reduction between 1994-98 and 2006-08	Camden rank compared to 33 boroughs
Total Killed and Seriously Injured (KSI)	53%	7
Child KSIs	83%	1
Pedestrian KSIs	53%	2
Cyclist KSIs	34%	16
Motorcycle KSIs	39%	3
Slight casualties	48%	2

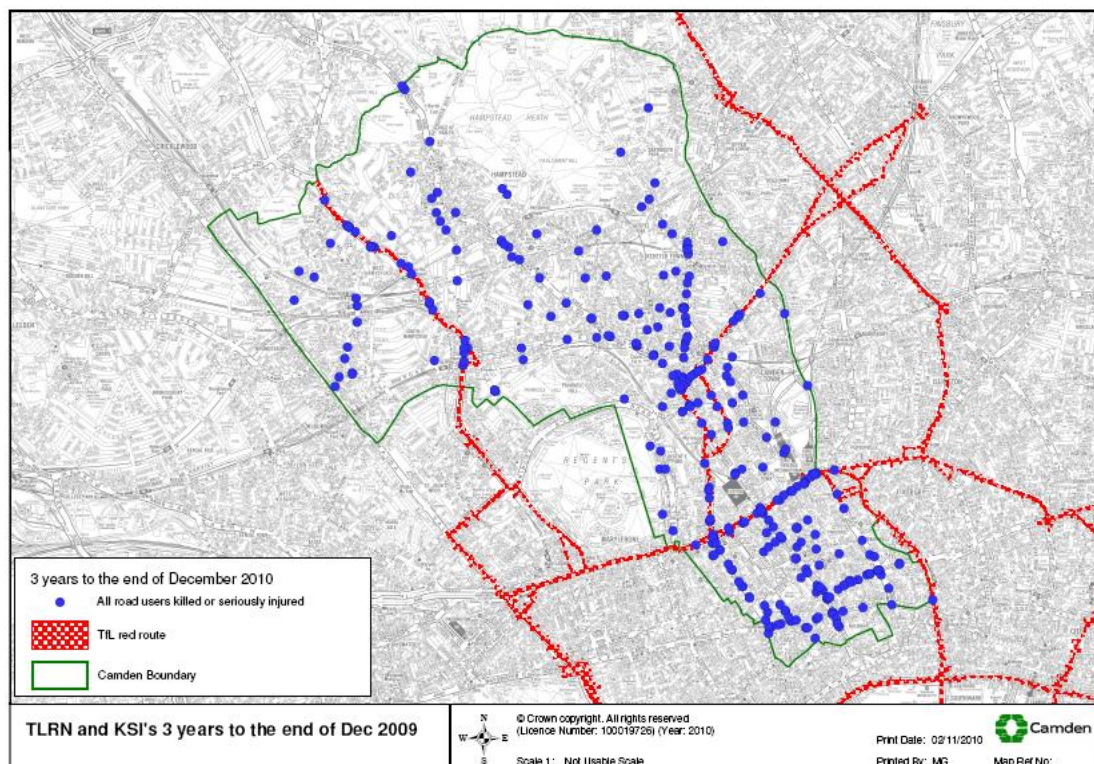
- 3.77 Camden continues to explore innovative solutions to improve safety, both individually and in partnership with other organisations. This approach is increasingly necessary as the scope for preventing further collisions with traditional approaches is becoming more limited.

**Table 3.3** – Road casualty trends in Camden 1994/98 to 2008/10

Casualty Type	1994 - 1998	1997 - 1999	1998 - 2000	1999 - 2001	2000 - 2002	2001 - 2003	2002 - 2004	2003 - 2005	2004 - 2006	2005 - 2007	2006 - 2008	2007 - 2009	2008 - 2010
KSI	249	236	231	228	236	216	191	157	134	120	117	122	125
Slight	1431	1399	1396	1422	1336	1228	1092	1003	893	797	738	745	777
TOTAL – casualties	<b>1680</b>	<b>1,635</b>	<b>1,627</b>	<b>1,650</b>	<b>1,572</b>	<b>1,444</b>	<b>1,283</b>	<b>1,160</b>	<b>1,027</b>	<b>916</b>	<b>855</b>	<b>867</b>	<b>902</b>
<b>KSI totals for target groups</b>													
KSI children	25	21	19	15	16	17	15	13	9	7	4	5	7
KSI pedestrians	104	93	91	86	88	83	79	68	59	55	50	53	55
KSI cyclists	31	34	30	27	27	25	24	21	18	19	20	22	23
KSI m/cyclists	41	41	46	52	54	49	41	35	33	27	25	24	24

Source: TfL 2010

- 3.78 Although the table above shows a downward trend in casualties for the three year averages between 1994 and 2008, there has been an increase in KSIs and total casualties for the last couple of years.
- 3.79 Many of the road casualties in Camden occur on busier roads with higher traffic volumes, such as the TLRN (red route), and strategic routes. **Figure 3.9**, which shows the collisions in 2009 that resulted in a fatality or serious injury (KSI), clearly illustrates this distribution.

**Figure 3.9 - Location of casualties (KSI) on roads in Camden**

3.80 **Table 3.4** and **Figure 3.9** show that while the number of KSI on local residential roads is much higher than that on the TLRN for the 3 year period to December 2009, borough roads comprise a much larger proportion of the road network in Camden. Addressing road safety on the TLRN and other major roads is of key concern for Camden which requires the Council to work closely with TfL to shape future road safety programmes.

**Table 3.4 – Killed and seriously injured casualties for different categories of road in Camden (2006-2009)**

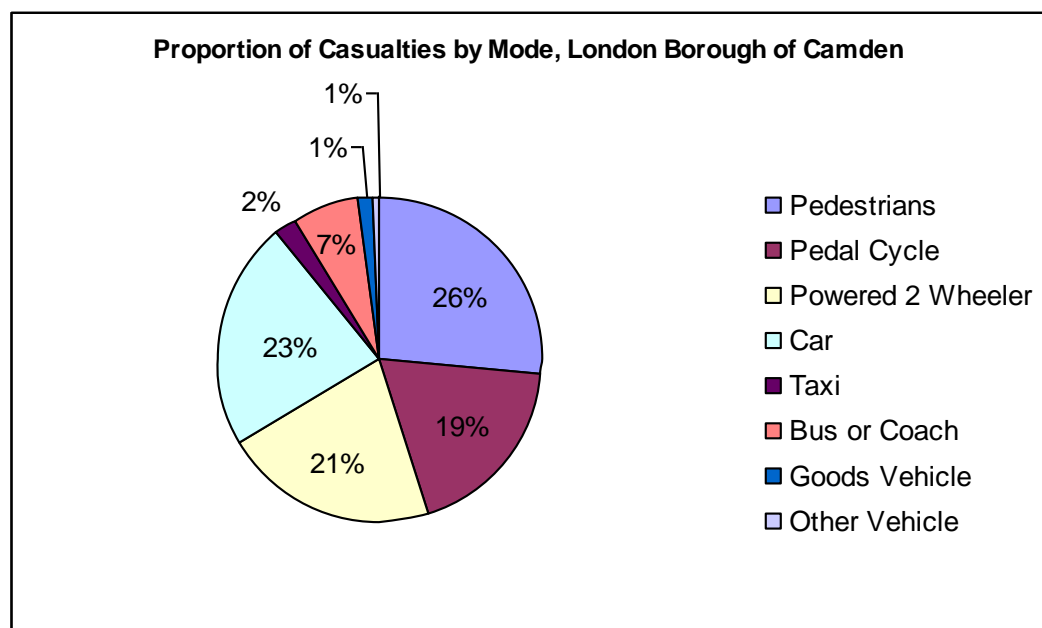
Road category	Total KSI	Approximate road length (km)	KSI/km
TLRN	89	12	7.4
SRN	89	20	4.5
London distributor	17	5	3.4
Borough distributor	24	10	2.4
Main local distributor	24	15	1.6
Minor local distributor	29	14	2.1
Residential and other	327	205	1.6

3.81 The Camden road corridors that have the worst collision history include:

- Euston Road
- Camden Road
- Bloomsbury Way/Theobalds Road
- Upper Woburn Place/Southampton Row
- Kilburn High Road
- Hampstead Road
- Kentish Town Road/Fortess Road
- Camden High Street
- Torrington Place/Sidmouth Street
- Gower Street/ Tottenham Court Road

3.82 Approximately two-thirds of those killed or seriously injured on Camden's roads between 2006 and 2008 were vulnerable road users. **Figure 3.10** shows a breakdown of road casualties by mode.

**Figure 3.10** - Proportion of Casualties by mode Camden, 2008



Source: London Road Safety Unit

3.83 Ensuring the safety of cyclists, pedestrians and other vulnerable road users is a core objective for Camden. While increased levels of cycling benefits people's health and has positive impacts on the broader community, there are associated challenges in maintaining safety for all. For example, while cyclists make up 11 per cent of traffic flows (2008), they comprise 19 per cent of casualties. Similarly, motor cyclists who make up 7 per cent of traffic flows (2008) comprise 21 per cent of casualties.

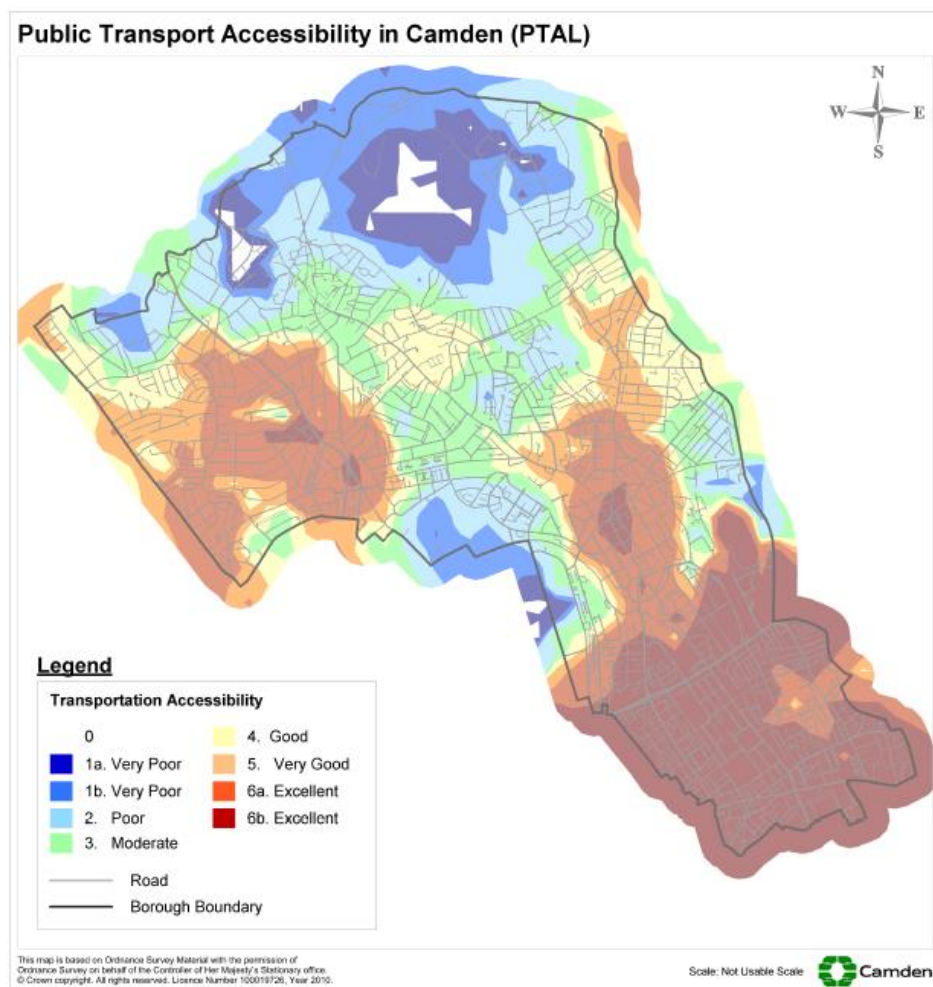
- 3.84 The introduction of the Mayor's Cycle Hire scheme presents an immediate challenge as greater numbers of inexperienced cyclists and tourists (who may be less aware of road rules and safe practice) use the scheme, potentially increasing the risk to the individual, other cyclists, pedestrians and drivers.
- 3.85 Pedestrian KSIs are more concentrated in the south of the borough and are more widely spread in the north, although there are higher numbers of incidents around Swiss Cottage, Camden Town, and along Kentish Town Road and Chalk Farm Road. In the south, Euston Road, Kingsway and around Tottenham Court Road Underground Station show higher concentrations of KSIs (pedestrian KSIs 3 years to end of Dec 2009).
- 3.86 Cyclist KSIs are mostly located around Camden Town/Chalk Farm and on key routes in the south of the borough (Cyclist KSIs, 3 years to end of Dec 2009).

### ***Accessible Transport for All***

- 3.87 Transport is a fundamental activity in people's daily life and can enhance personal freedom, education, and social and life opportunities. Access to jobs, training, education, support services, shopping, friends and relatives, leisure and participation in community life is dependent on people's ability to move around.
- 3.88 The benefits of living and working in Camden are not always available to everyone. The physical accessibility of the transport network can limit journey opportunities for mobility impaired people whose only option is to use the more accessible routes.
- 3.89 Providing step-free accessibility for Underground and Overground stations is a significant challenge for TfL and other stakeholders throughout London, especially due to very high costs and physical constraints. Step free access has recently been installed at Kings Cross and is proposed for Euston Square (westbound by 2013) and Tottenham Court Road (by 2015). Similarly, West Hampstead Thameslink will soon have step-free access as part of the new entrance.
- 3.90 Improving accessibility is not just about physical measures; it also includes improving communication and providing better information, improving safety and security of transport services (both real and perceived), reducing the dominance of traffic, and improving options for travel, particularly lower cost options, to help ensure that Camden does not unduly exclude people from opportunities.
- 3.91 Camden generally has very good levels of accessibility to transport and services but there are exceptions to this, especially in the northern part

of the borough. **Figure 3.11** maps the relative accessibility score for public transport and/or walking across Camden - the most accessible areas are coloured in red. The map clearly shows the most accessible part of the borough in the south and pockets of rather low accessibility in the northern parts of the borough.

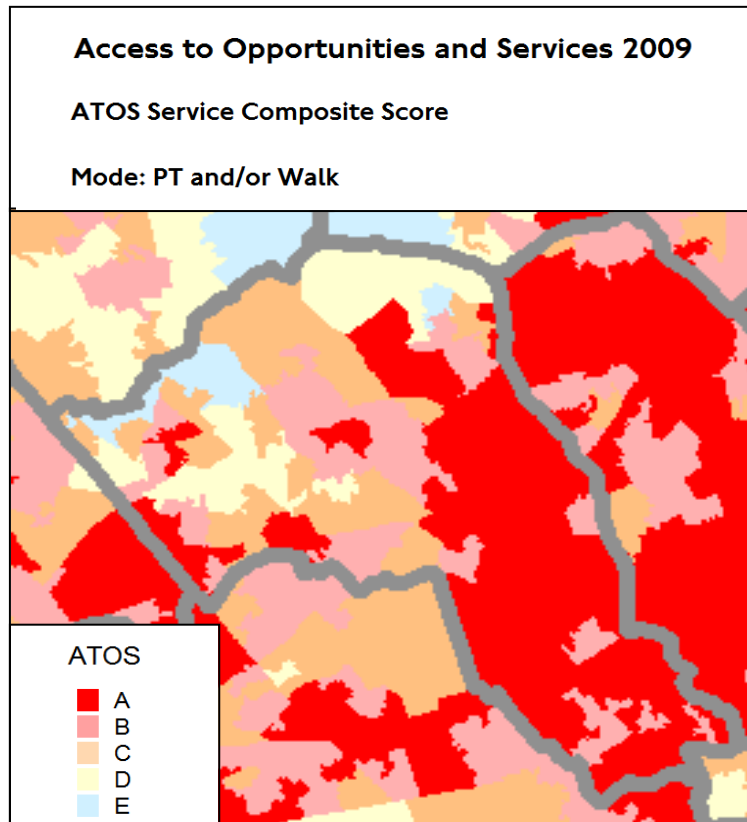
**Figure 3.11** – Public transport accessibility in Camden



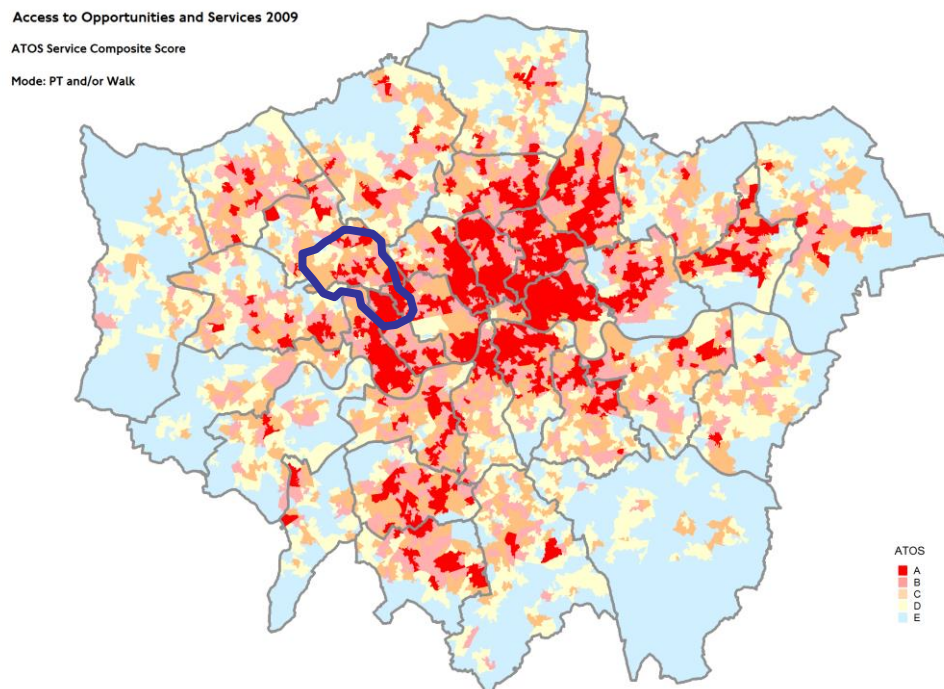
Source: TfL

3.92 **Figure 3.12** indicates the extent to which key services and opportunities in Camden are accessible by walking and/or public transport, with red having a high level of accessibility and rated 'A'. **Figure 3.13** shows Camden in the context of London. Areas with lower accessibility to services are coloured in yellow and blue.

**Figure 3.12** - Access to opportunities and services by public transport and/ or walking in Camden



**Figure 3.13** - Access to opportunities and services in London



Source: Central Sub-Regional Transport Plan (TfL, 2010)

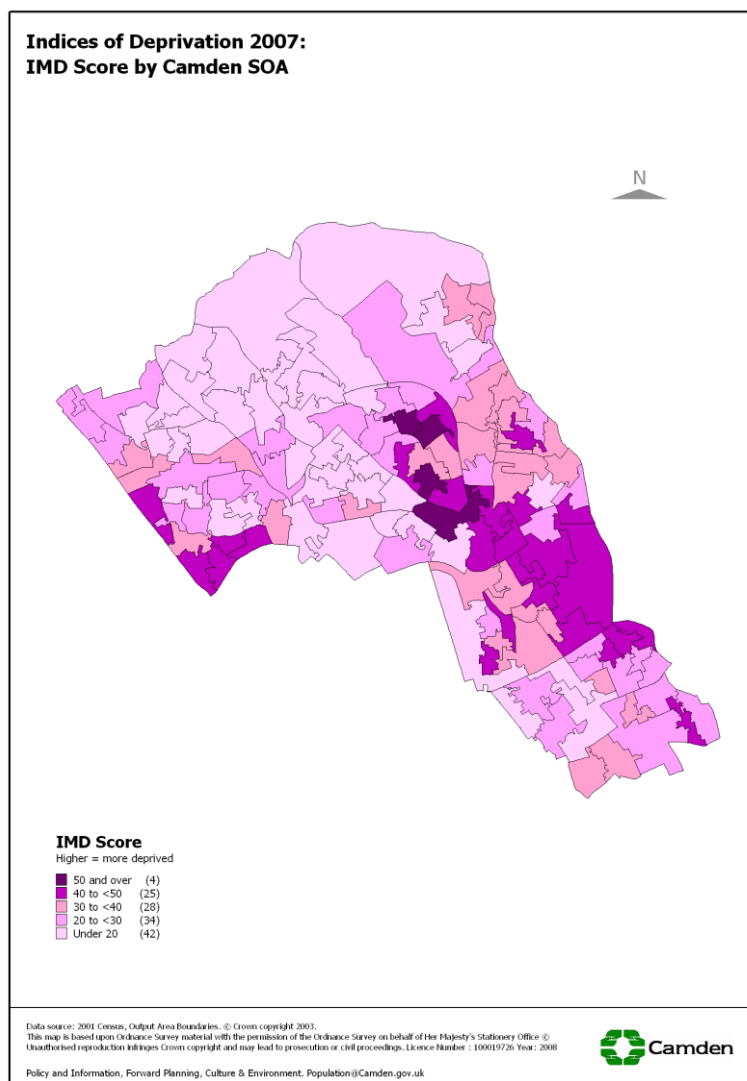
- 3.93 Issues that can affect accessibility include:
- Narrow footway widths and street clutter constrict the amount of footway space and make it difficult for people in wheelchairs or electric scooters to pass;
  - Poorly constructed or located bus stops can affect people's ability to board and alight from buses;
  - Lack of pedestrian facilities and the length of the green man times can make crossing the road difficult and stressful;
  - Lack of street benches for people to rest - although benches can also attract anti-social behaviour.

### ***Supporting Regeneration***

- 3.94 Camden is located at the centre of London and enjoys many of the economic, social, cultural and other benefits resulting from this strategic location. Nevertheless, there remain issues with unemployment, crime and socio-economic problems associated with deprived areas.
- 3.95 While Camden boasts some wealthy areas such as Bloomsbury and Hampstead, the borough also houses deprived areas such as Somers Town, Kilburn and Camden Town. Some of these areas contain pockets of chronic deprivation, and there are often concentrations of people who are low skilled, more vulnerable, and have low expectations. A map of the relative deprivation across the borough is included in **Figure 3.14**.
- 3.96 Tackling deprivation requires action in a number of fields across the Council and with other agencies. It is important to ensure that transport is not an additional barrier in restricting access to jobs, services, education, training opportunities, and social networks.



**Figure 3.14** – Map of Indices of Multiple Deprivation (IMD) in Camden (Super Output Areas)



- 3.97 TfL surveys indicate that significant numbers of people do not use public transport in certain areas due to fear of anti-social behaviour and crime. Transport affordability, better design of the street environment, and removal of physical barriers to travel (such as providing pedestrian crossings to help reduce the severance effect of busy roads and railways), are also ongoing challenges.
- 3.98 Major regeneration of areas like King's Cross is currently ongoing and will provide significant opportunities in a formerly deprived area.

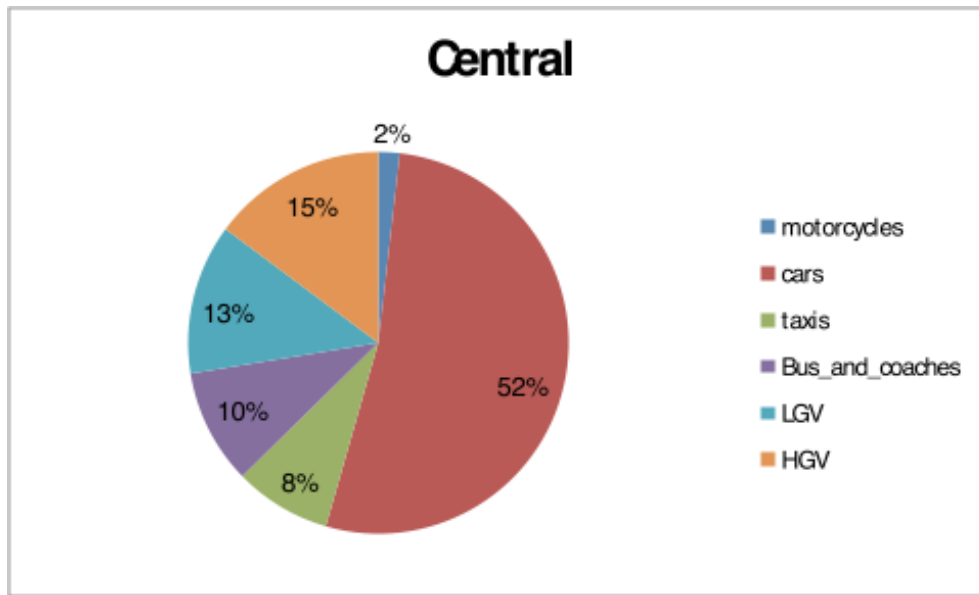
### ***Reducing Transport Impacts on Climate Change and Increasing Resilience***

- 3.99 It is widely accepted that climate change is inevitable and is already occurring, although the extent of its impacts is debated. Research suggests that the UK will experience warmer, wetter winters and drier, hotter summers.
- 3.100 The increase in temperatures will be felt more acutely in dense urban areas. Camden is likely to experience a number of impacts locally as well as a result of extreme weather events elsewhere. This includes more intense rainfall and flash flooding, more days with poor air quality and increased demand for open space.
- 3.101 Camden's Community Strategy commits the Council and its partners to reduce Camden's carbon dioxide (CO<sub>2</sub>) emissions in line with the national target of 80 per cent by 2050. In the shorter term the Mayor of London has set targets for a 60 per cent reduction in CO<sub>2</sub> emissions from their 1990 levels by 2025<sup>70</sup>.
- 3.102 Camden's draft internal (2010-2011) Climate Change Adaptation Action Plan identifies measures to ensure the Council's readiness for adapting to and mitigating the impacts of climate change, with transport having a major role to play.
- 3.103 Road transport is responsible for 15 per cent of CO<sub>2</sub> emissions in Camden, with private cars being the dominant source. The transport measures included in the *Air Quality Action Plan (AQAP)* seek to minimise NO<sub>x</sub> and PM<sub>10</sub> emissions and work in synergy to reduce CO<sub>2</sub> emissions from motor vehicles. Camden's *Delivering a Sustainable Camden 2008-12* also includes actions to reduce CO<sub>2</sub> emissions from road transport. Both these plans identify a clear and important role for transport to introduce measures to reduce car use, encourage walking, cycling and public transport, and improve technology. Figure 3.15 outlines the mode split of road based CO<sub>2</sub> emissions.

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<sup>70</sup> Mayor's Transport Strategy (Transport for London, 2010)

**Figure 3.15** - Mode split of road based CO<sub>2</sub> emissions in Central London (2006)



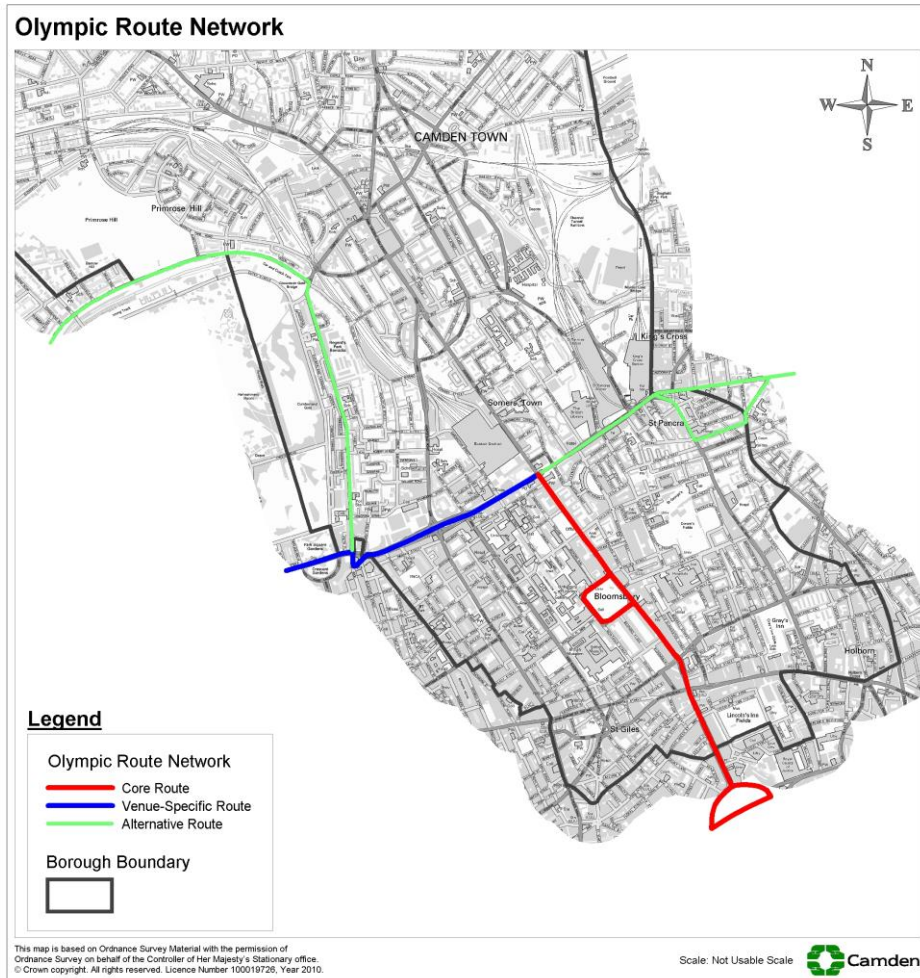
Source: London Atmospheric Emissions Inventory

- 3.104 There are several other Council plans which similarly identify a clear role for transport. Camden's Sustainable Delivery Plan, currently under review, seeks to address climate change as well as deteriorating air quality through CO<sub>2</sub> reduction. It also aims to promote biodiversity and mitigate the impacts of extreme weather conditions, such as high temperatures and flooding, through improving access to green spaces and increasing tree cover. These measures are also included in the Council's Biodiversity Action Plan and Tree Strategy. Measures to reduce car use, prioritise walking, cycling and public transport, as well as improvements to the public realm will help to meet objectives and actions identified in those plans.
- 3.105 Achieving CO<sub>2</sub> emission targets will require fundamental changes in transport efficiency and the way people travel. Whilst Camden will continue to implement plans and programmes locally, it will also require commitment nationally and globally to achieve the changes that are required.
- 3.106 Camden's *Climate Change Adaptation Action Plan* also identifies the need to address the increased risk of flooding through measures such as protecting and enhancing green space for biodiversity and Sustainable Urban Drainage (SUDS).
- 3.107 Biodiversity is essential for human well-being because it provides services, such as food, medicines, clean water and soil stabilisation. Transport can contribute in a number of ways to protecting biodiversity both through reducing traffic and enhancing Camden's green spaces and, particularly, increasing tree cover. Opportunities to achieve this will need to be considered in all projects.

- 3.108 Surface water flooding needs to be addressed through Sustainable Urban Drainage Systems (SUDS). This includes pavement materials that are permeable.
- 3.109 Camden will need to work with TfL and other stakeholders to adapt the transport system and improve public safety and resilience to the anticipated impacts of climate change.
- 3.110 Peak oil is the time when the maximum rate of extraction of petroleum is reached followed by permanent decline in availability of oil. The innovative work that Camden is doing in developing the use of alternative fuels and encouraging sustainable travel means that the borough is better placed to cope with reduced oil availability and potential price spikes in the future.

***Supporting Delivery of the London Olympics and Paralympics in 2012 and Developing a Sustainable Legacy***

- 3.111 The Olympic Games will be held in London from Friday 27 July (opening ceremony) to Saturday 12 August in 2012. Over 16 days of the Olympic Games approximately 7.7 million tickets will be available for the various competition events. The Paralympic Games will follow the Olympics, from Wednesday 29 August to 9 September 2012, and more than 1.5 million tickets will be available.
- 3.112 While no Olympic venues are proposed in Camden (the cycling road race and time trial that were originally proposed at Regents Park have been moved to other locations), key locations in Camden that will be affected by the Olympics are:
- Bloomsbury – this will be the location of accommodation for many of the broadcast media;
  - Russell Square - is proposed to be a significant transport hub for press and broadcast clients, where media personnel will board and alight from buses that travel to and from Olympic venues;
  - St Pancras Station - will form one of the key rail hubs, carrying people from Central London to the Olympic Park in 7 minutes on the Olympic Javelin service. It will also be one of the key international arrival hubs for visitors from overseas, and will likely attract large numbers to the King's Cross/ St Pancras area.
  - Olympic Route Network (ORN) – the ORN is the network of roads linking competition, key non-competition venues and accommodation in London during the 2012 Games. The Olympic Route network through Camden is shown in **Figure 3.16**.
  - A significant increase in visitors to existing attractions within Camden, such as the British Museum, Covent Garden and Camden Markets, is also likely to occur during the Games.

**Figure 3.16 – Olympic Route Network in Camden**

3.113 A variety of traffic management measures will be implemented on the streets along the ORN to ensure reliable journey times for the Olympic Family. The majority of ORN roads will still be available for use by general traffic, the only exception in Camden being Russell Square. However, there are a number of side street closures along the ORN and thus some diversionary routes will be required to provide access to these streets. The direction of the Kingsway Tunnel is also proposed to be reversed as part of the ORN measures.

3.114 A significant challenge for Camden will be to minimise the impact on everyday activities and ensure that businesses throughout the borough can continue to operate. The ODA has published two versions of the Olympic Transport Plan which “aims to ensure a successful, sustainable 2012 Games and leaves a legacy for many years to come”.

3.115 Ensuring legacy benefits from the Olympic Games is also an important priority for Camden.

## Chapter 4 - Transport Vision and Objectives

### *Camden Transport Objectives*

- 4.1 The Camden Transport Strategy objectives are outlined in **Tables 4.1** and **4.2**. The objectives not only respond to transport issues but are also designed to contribute towards desired economic, social and environmental outcomes and consider local, national and international policy influences.
- 4.2 In particular the Camden Transport Strategy is statutorily required to demonstrate how Camden will work towards achieving the Mayor's Transport Strategy goals and also how the emerging Sub-Regional Transport plans are taken into account. Tables 4.1 and 4.2 show the compatibility of the objectives with other MTS goals, the Sub-Regional Transport plans and Camden's wider Sustainable Community Strategy objectives for the borough.
- 4.3 The objectives are long-term and will be delivered over the course of the Mayor's Transport Strategy (by 2031). It should be noted, however, that objective 9 (i.e. delivery of the Olympics) will be delivered by 2012.
- 4.4 Staff across the Council in Camden will continue to work with TfL, the local community and other stakeholders towards achieving the objectives outlined below.

**Table 4.1** – Camden Transport Strategy Objectives – links to Mayoral and Camden objectives

Camden Transport Strategy Objectives	Mayor's Transport Strategy Goals						Sustainable Community Strategy Objectives			
	Support Economic Development and Population growth	Enhance the quality of life for all Londoners	Improve the safety and security of all Londoners	Improve transport opportunities for all Londoners	Reduce transport's contribution to climate change and improve its resilience	Support the delivery of the London 2012 Olympic and Paralympic Games and legacy	A sustainable Camden that adapts to a growing population	A strong Camden economy that includes everyone	A connected Camden community where people lead active healthy lives	A safe Camden that is a vibrant part of our world city
1. Reduce motor traffic levels and vehicle emissions to improve air quality, mitigate climate change and contribute to making Camden a 'low carbon and low waste borough'	X	X	X	X	X		X		X	X
2. Encourage healthy and sustainable travel choices by prioritising walking, cycling and public transport in Camden	X	X	X	X	X	X	X		X	X
3. Improve road safety and personal security for people travelling in Camden		X	X	X				X	X	X
4. Effectively manage the road network to manage congestion, improve reliability and ensure the efficient movement of goods and people	X	X		X	X	X	X	X	X	
5. Develop and maintain high quality, accessible public streets and spaces and recognise that streets are about more than movement		X	X	X		X			X	X

Camden Transport Strategy Objectives	Mayor's Transport Strategy Goals						Sustainable Community Strategy Objectives			
	Support Economic Development and Population growth	Enhance the quality of life for all Londoners	Improve the safety and security of all Londoners	Improve transport opportunities for all Londoners	Reduce transport's contribution to climate change and improve its resilience	Support the delivery of the London 2012 Olympic and Paralympic Games and legacy	A sustainable Camden that adapts to a growing population	A strong Camden economy that includes everyone	A connected Camden community where people lead active healthy lives	A safe Camden that is a vibrant part of our world city
6. Ensure the transport system supports Camden's sustainable growth and regeneration as well as enhancing economic and community development	X	X		X		X	X	X	X	X
7. Ensure the transport systems supports access to local services and facilities reduces inequalities in transport and increases social inclusion.	X	X		X			X	X	X	X
8. Ensure that the provision of parking is fair and proportionate by considering the needs of all users, whilst also encouraging sustainable travel choices.	X			X	X	X	X	X		X
9. Support the delivery of a successful London 2012 Olympic and Paralympic Games	X		X	X		X	X		X	X



**Table 4.2** – Camden Transport Strategy Objectives – links to Sub-regional plans

Camden Transport Strategy Objectives	Central Sub-regional challenges						North Sub-regional challenges				
	Supporting growth areas and regeneration	Reducing public transport crowding and improving reliability	Improving the urban realm and promoting walking	Managing the different demands on the streets	Ensuring capacity at rail stations and efficient onward distribution	Improving air quality	Facilitating and responding to growth, particularly in Brent Cross/Cricklewood and the Upper Lee Valley	Relieving crowding on the public transport network	Managing highway congestion and making more efficient use of the road network	Enhancing connectivity and the attractiveness of orbital public transport	Improving access to key locations and to jobs and services
1. Reduce motor traffic levels and vehicle emissions to improve air quality, mitigate climate change and contribute to making Camden a 'low carbon and low waste borough'	X	X	X	X		X	X		X		X
2. Encourage healthy and sustainable travel choices by prioritising walking, cycling and public transport in Camden	X	X	X	X	X	X	X	X	X		X
3. Improve road safety and personal security for people travelling in Camden	X	X	X	X		X	X	X		X	X
4. Effectively manage the road network to manage congestion, improve reliability and ensure the efficient movement of goods and people	X	X	X	X	X	X	X	X	X		X
5. Develop and maintain high quality, accessible public streets and spaces and recognise that streets are about more than movement	X		X	X		X	X			X	X

Camden Transport Strategy Objectives	Central Sub-regional challenges						North Sub-regional challenges				
	Supporting growth areas and regeneration	Reducing public transport crowding and improving reliability	Improving the urban realm and promoting walking	Managing the different demands on the streets	Ensuring capacity at rail stations and efficient onward distribution	Improving air quality	Facilitating and responding to growth, particularly in Brent Cross/Cricklewood and the Upper Lee Valley	Relieving crowding on the public transport network	Managing highway congestion and making more efficient use of the road network	Enhancing connectivity and the attractiveness of orbital public transport	Improving access to key locations and to jobs and services
6. Ensure the transport system supports Camden's sustainable growth and regeneration as well as enhancing economic and community development	X	X	X	X	X	X	X	X	X	X	X
7. Ensure the transport systems supports access to local services and facilities reduces inequalities in transport and increases social inclusion.	X		X	X	X	X	X		X	X	X
8. Ensure that the provision of parking is fair and proportionate by considering the needs of all users, whilst also encouraging sustainable travel choices.	X	X	X	X		X	X		X		X
9. Support the delivery of a successful London 2012 Olympic and Paralympic Games		X	X	X	X	X		X	X	X	

## Chapter 5 – Delivering Camden’s Transport Objectives

### *Introduction*

- 5.1 Chapter 5 considers how Camden will achieve the objectives in the Camden Transport Strategy, and outlines all the measures that Camden will implement to deliver them. Inevitably, some measures will help to deliver several different objectives and these are cross referenced where appropriate.
- 5.2 Sustainable travel is at the heart of the Camden Transport Strategy. Measures to promote and encourage walking, cycling and public transport, and address the barriers to using these modes of transport, are key to delivering the objectives of this Strategy.
- 5.3 The measures included in this Chapter will also help to deliver the Mayor of London’s Transport Strategy, as well as plans and strategies specific to Camden (see Table 4.1).
- 5.4 The Mayor’s vision for London is that the city should take a leading role in the drive towards a sustainable future, and set an example for other cities. By helping to create a transport system which will improve air quality, reduce transport’s contributions to climate change, while also continuing to innovate and adopt best-practice, Camden intends to be at the forefront of this effort.
- 5.5 Population and economic growth will create enormous additional pressures on the transport network. Reducing the need to travel and encouraging sustainable travel choices to help prevent further congestion as well as overcrowding on public transport are vital for long-term economic success.
- 5.6 Neighbourhoods which are dominated by traffic are not very pleasant places to live, work or visit. Reducing the dominance of traffic improves safety, regeneration and helps to create liveable communities.
- 5.7 One of the key barriers to sustainable travel is road danger, and the perception of road safety and personal security. Contributing to a safer environment, particularly for pedestrians and cyclists, through speed management and public realm improvements underlie all the objectives outlined in the Camden Transport Strategy.
- 5.8 The Transport Strategy has been subject to a Strategic Environmental Assessment (SEA). The SEA has had no significant impact on the development and/or delivery of the LIP objectives.

***Objective 1 - Reduce motor traffic and vehicle emissions to improve air quality, mitigate climate change and contribute to making Camden a 'low carbon and low waste borough'***

**Introduction**

- 5.9 Motor traffic has significant environmental impacts, particularly on climate change and deteriorating air quality.
- 5.10 Through changing and extreme weather conditions such as flooding and drought, it is predicted that climate change has serious consequences for well-being. Addressing climate change is therefore a major global priority and Camden is committed to playing its part in reducing the borough's carbon emissions.
- 5.11 As a significant emitter of carbon, transport must undertake substantial reductions in CO<sub>2</sub>. The Council's Sustainable Community Strategy identifies a key role for transport to help achieve this objective both by reducing car use and through technological innovation.
- 5.12 Emissions from transport also impact on human health, particularly those with lung and heart conditions and among vulnerable people such as children and older people. Air pollution contributes to over 4,000 premature deaths annually in London, significantly more than the number of people killed in traffic collisions, as well as work days lost through ill health, with the greatest impacts felt by the most deprived. Transport is a major source of two of the most harmful pollutants – particulates (PM10) and oxides of nitrogen (NOx).
- 5.13 The costs of climate change, poor air quality as well as those associated with the health effects of pollution are estimated to run into £billions annually. These impacts are generally more acutely felt in more deprived areas and among more vulnerable members of the population. There are, therefore, overwhelming economic and equality imperatives for addressing the environmental impacts of transport.
- 5.14 In order to achieve the goal of a low carbon and low waste borough, Camden has established two parallel transport policy objectives. The first is to reduce where appropriate the need to travel as well as unnecessary motor traffic flows, on Camden's roads; the second is to ensure that people can still get from "A" to "B" easily, especially by the most appropriate and sustainable modes.
- 5.15 Car clubs, car-free developments, low emissions vehicles and travel demand management all have an important role to play in reducing the impacts of transport on the environment and quality of life.

- 5.16 In developing policies it is recognised transport options are more limited in some parts of the borough and some people have particular needs that require them to travel by certain modes.
- 5.17 The task of reducing traffic flows and encouraging a switch towards more sustainable travel options will not be easy. However, Camden has shown that through the use of innovation and imagination, real, long lasting change can be achieved.

### **Reducing the Need to Travel**

- 5.18 It is likely that both population and employment growth will be accompanied by increasing demands on Camden's transport system. Reducing the need to travel is very important to ensure reliable and efficient travel in the borough.
- 5.19 Planning policies in Camden encourage mixed-use developments that help to ensure that amenities and shops are located closer to residential areas. By shaping the pattern of development and influencing the location, scale, density, design and mix of land uses, land-use planning can help to reduce the need to travel, travel by car or reduce the length of journeys.
- 5.20 Camden also implements several other key initiatives to reduce travel. This includes working with local businesses to promote tele-conferencing (allowing individuals and groups to meet and work together without having to be in the same location) and home-working. Other awareness campaigns such as Camden's [travelfootprint.org](http://travelfootprint.org) website help educate people about environmental issues associated with their travel choices and encourage people to avoid making unnecessary trips.
- 5.21 Improved wayfinding and mapping through the Legible London and the recent Cycle Hire schemes in the southern part of the borough will increase awareness of local facilities and amenities and encourage people to walk and cycle for short trips, while reduce unnecessary travel outside of the local area.

### ***Policy 1.1***

- 5.22 *Camden will seek to reduce the frequency and length of people's journeys through encouraging mixed use development, continue to improve maps that raise awareness of local facilities and by raising awareness of the environmental issues associated with travel.*

### **Managing Motor Vehicle Travel in Camden**

- 5.23 Camden Council's policies to support people to switch to more sustainable modes of travel through public realm improvements, review of parking restrictions, raising awareness and providing education and

training have been very successful. Between 2001 and 2009 car travel in Camden decreased by 27 per cent while travel by bicycle doubled. Bus volumes have also significantly increased.

- 5.24 Camden's long-standing commitment to support sustainable travel choices is based on several factors:
- **Inclusion:** the majority of people living in the borough do not have access to a car, and rely on walking, cycling and public transport. Support for these modes is therefore more inclusive.
  - **Availability:** walking, including wheelchair mobility, is universal, and for many is the only travel option.
  - **Health:** walking and cycling help to address national health concerns associated both with an ageing population and an increasing problem of obesity. Reducing transport emissions is also essential to reduce illness and mortality associated with pollution, and to improve the health and wellbeing of Camden's population.
  - **Climate change:** transport emissions in London make a significant contribution to CO<sub>2</sub> and climate change.
  - **Environment:** motor traffic also impacts on noise levels and local air quality which affect the quality of life and health, particularly for those people living on or close to main roads.
  - **Road danger:** reducing motor traffic reduces road danger and casualties.
  - **Regeneration:** heavily trafficked streets create an unpleasant street environment and sever communities, cutting them off from essential services and facilities. More pleasant street environments encourage street-based activity and interaction, improve community cohesion and contribute to economic regeneration making centres more attractive destinations.
  - **Efficient and smoothing traffic flow:** sustainable modes of transport make the most efficient use of scarce road space, while leaving maximum capacity for essential vehicle journeys such as emergency services, delivery of goods and services, buses and coaches and car journeys for people who cannot access "mainstream" public transport.

### **Policy 1.2**

- 5.25 *The Council will continue to encourage travel by sustainable modes, reduce motor vehicle dependency and the dominance of motor traffic in the borough. The Council will aim to increase the permeability of streets and remove one-way gyratories.*

### **Road User Hierarchy**

- 5.26 Road and kerb space in Camden, especially in the southern part of the borough, is extremely limited and demand far exceeds supply for streets for movement (of people and goods) as well as a place where people can gather and enjoy public space.

- 5.27 Camden is required under the Traffic Management Act 2004 to do “all that is reasonably practical to manage the network effectively to keep traffic (including pedestrians) moving”.
- 5.28 Reconciling the huge competing and often conflicting demand for very limited road space, while also ensuring the smooth flow of traffic, is a major challenge for the Council, especially in dense urban areas. To aid decision making on which transport modes should receive priority consideration, and within the context of its overarching objectives, Camden has adopted a road user hierarchy. **The hierarchy is for guidance only** and transport schemes should still be assessed on a case by case basis, taking into account a range of other issues such as adjacent land uses, the “nature” of the “place” at that location as well as its traffic/movement function.

### ***Policy 1.3***

- 5.29 *Camden has a road user hierarchy for the borough, which will be used as a tool in developing projects, as follows:*
- *Pedestrians*
  - *Cyclists*
  - *Public transport*
  - *Freight (including loading and unloading)*
  - *Taxis*
  - *Powered two-wheelers (motorcycles) and private cars*
  - *On-street parking*

### **Low Emission Vehicles**

- 5.30 The Council is committed to improving air quality, in particular reducing emissions from road transport. Camden has been designated an Air Quality Management Area, and currently does not meet the long and short term air quality objectives for nitrogen dioxide. The Council is also committed to assisting the Mayor in achieving the goal of reducing London’s CO<sub>2</sub> emission by 60 per cent by 2025 compared to the 1990 base. The Council will continue to promote the use of low carbon vehicles for journeys that are not appropriate by more sustainable means such as walking and cycling.
- 5.31 One of the key initiatives to support lower emission vehicles in London is the Low Emission Zone (LEZ). The LEZ aims to reduce traffic pollution by deterring the most polluting vehicles from driving within the city. The scheme currently applies to buses and coaches with more than 8 seats and vehicles weighing more than 3.5 tonnes. The next phase of the LEZ scheme, which will apply to vans and mini-buses, has been delayed until January 2012 for economic reasons. The introduction of these measures will continue to have a positive impact on air quality across the capital.

- 5.32 Emissions do not respect borough boundaries. Achieving the most effective results will require widespread co-operation at local, regional, national and international levels. At a national level, Camden would welcome UK Government policy initiatives to achieve this through, for example, vehicle excise duty and incentives for take-up of low emission vehicles.
- 5.33 Some of the worst air quality areas in Camden are along Euston Road. This road is also identified in the Mayor's Air Quality Strategy as one of the seven "priority locations" in London in regards to air quality. The Mayor has indicated that there will be a focus on using the cleanest buses for these priority locations.
- 5.34 The area around King's Cross/ St Pancras stations is also an air quality hotspot. The poor air quality of this heavily trafficked area is exacerbated by the large numbers of queuing taxis with idling engines. The Council believes more should be done to reduce the disproportionate impact of taxis on air quality, and would welcome the introduction of more stringent emissions standards for these vehicles through the procurement process that encourage cleaner fuels and better technology.

#### ***Policy 1.4***

- 5.35 *Camden will continue to promote low emission vehicles and support the staged introduction of the Low Emission Zone in London. The Council would also like to see further development of national policy to support local level efforts to improve air quality and tackle climate change.*

#### **Electric Vehicles**

- 5.36 Vehicles powered by electricity offer the potential to significantly reduce emissions of CO<sub>2</sub>, harmful air pollutants and noise from road transport. Since 2005 Camden has been a leader, nationally and internationally, in providing for electric vehicles.
- 5.37 In 2005 Camden set up the widely respected Newride website to help people identify the appropriate electric vehicle for their needs, where they can be purchased and the location of electric vehicle charging points in London. This website has now been complemented by TfL's Source website for London, available at: <https://www.sourcelondon.net> which provides similar information and administers the pan London fobs to use charge posts.
- 5.38 Camden has also completed a life cycle assessment of electric vehicles, from manufacture to operation and disposal, and found that, compared to petrol powered vehicles they can reduce pollution by up to 55 per cent, or up to 70 per cent if they use renewably sourced electricity, in total for their entire life cycle.



- 5.39 Since 2005 Camden has installed 18 on-street and 12 off-street charging points as well as the first on-street electric car club bay in the UK and the first hybrid car club bay in Europe. More recently Camden has also introduced the UK's first off-street charging point for commercial vehicles at the Council's York Way depot.
- 5.40 The majority of charging points are located in the southern part of the borough, however charging points are now being introduced further north which will provide a more widely accessible and balanced network. The Council will also investigate the feasibility of locating electric charging points on its housing estates in partnership with colleagues in Housing and Adult Social Care (HASC).
- 5.41 Electric vehicle use and ownership is steadily growing and the Mayor's pan-London scheme was launched in May 2011 to improve the availability of charge points across the city.
- 5.42 Camden is leading by example and the Council's vehicle fleet currently includes 9 electric vans, 8 hybrid cars and 20 vans that are being upgraded with hybrid assist technology.
- 5.43 Whilst there are significant benefits, there are also various limitations of electric vehicles which include:
- They are less effective than walking and cycling at reducing air and noise pollution, and do not contribute to health benefits of active travel; and
  - They do not reduce traffic congestion and can also contribute to road danger, severance, and parking pressure.
- 5.44 Camden's Electric Vehicle Strategy, provides more detail about the boroughs proposals for electric vehicles.

### **Policy 1.5**

- 5.45 *For essential car journeys, Camden will encourage more residents and businesses to change to electric vehicles, (with electricity generated by renewable sources), to help reduce air and noise pollution. Camden will continue to expand the network of charging points and work with the Mayor of London and other boroughs to deliver the Mayor's pan-London scheme which allows members to use any charge point in London.*

### **Reducing Emissions from Freight Delivery**

- 5.46 Freight traffic contributes a relatively high proportion of air pollution from road transport sources – 40 per cent of PM<sub>10</sub> and 44 per cent of NO<sub>x</sub> emissions. This has a significant impact on air quality in Camden. Freight vehicles additionally generate 20 per cent of CO<sub>2</sub> emissions in the borough which contributes to climate change.

- 5.47 Air quality issues related to the freight sector are complex: they are affected by a combination of factors including the efficiency of delivery practices, size, the type of fuel or technology used to power the vehicle, and whether traffic is moving freely or is congested.
- 5.48 The Freight Operators Recognition System (FORS), managed by TfL and working in partnership with freight companies, is a membership scheme that aims to improve freight delivery in London. The scheme, which is supported by Camden, helps companies to become safer, greener and more efficient, recognising and rewarding excellence through an accreditation scheme. FORS is a free voluntary service for companies operating vans or lorries in the Capital, and can help companies tender for business.
- 5.49 The Council currently works in partnership with retailers, freight operators, Central London boroughs and TfL as part of the Central London Freight Quality Partnership to consider ways to achieve more efficient and sustainable movement of freight. This includes more efficient freight delivery practices such as the use consolidation centres, the use of cycle freight, and the use of low emission vehicles and alternative fuels including bio-methane, electric and hybrid vehicles. Camden has established an electric vehicle charge point in Camden at the Council depot, that is available on a trial basis for private commercial vehicle operators.
- 5.50 Camden will also continue to encourage alternative forms of freight movement that have lower environmental impacts, such as deliveries by bicycle, the potential use of Regent's Canal for deliveries and exploring the use of freight consolidation for the borough.

### ***Policy 1.6***

- 5.51 *Camden will promote best practice for freight through the Freight Operators Recognition Scheme and continued participation in the Central London Freight Quality Partnership. Camden will also seek to improve the efficiency of freight delivery practices and support the use of vehicles or alternative forms of delivery that produce lower emissions.*

### **Improving Driving Behaviour**

- 5.52 Driver behaviour influences fuel consumption, which in turn can increase CO<sub>2</sub> and air pollution emissions. Behaviour that can unnecessarily increase emissions includes leaving a vehicle engine idling, driving fast, driving in the wrong gear, failing to maintain correct tyre pressure and overloading a vehicle.
- 5.53 One area of particular concern in Camden is drivers unnecessarily leaving their engines idling when stationary, which can have a

significant impact on local air quality. Specific locations in the borough where this has been identified as a particular issue include around St Pancras and King's Cross rail stations, South End Green, South Grove/Pond Square, St Giles, Russell Square and Highgate Road near St Albans Road. Signage is erected at a number of bus stand locations but appears to have little effect and further education and possible greater enforcement is required. Camden conducts air quality campaigns that specifically target drivers regarding idling.

- 5.54 Camden trains Council staff on the impact of improved driving behaviour to reduce fuel consumption and emissions. This includes the introduction of eco-driving monitors which monitor driver behaviour (speed, acceleration, braking) as well as assist with navigation to help drivers use the most efficient route to reach their destination, though access to route planners. Camden would like to expand the application of this eco-driving monitor to other drivers such as bus, taxi and HGV drivers.

### ***Policy 1.7***

- 5.55 *Camden will encourage Council staff, residents and businesses to improve driver behaviour through awareness raising initiatives such as events and web based information, and working in partnership with businesses, including through the Camden Climate Change Alliance*
- 5.56 Reducing idling vehicles plays a role in improving local air quality and quality of life in Camden as well as contributing to the delivery of Camden's Air Quality Action Plan.
- 5.57 Camden will investigate the issue of idling engines for buses at bus stands. These emissions are generally very localised and do not contribute significantly to breaching Government air quality standards for PM10 and NO2. In addition to signage at key areas to advise drivers to switch off engines, Camden is taking forward the Code 63 enforcement of idling vehicles at key locations using camera footage of sound and movement. Contraventions will be enforced through Penalty Charge Notices.

### **Camden's Transport Fleet and Driver Behaviour**

- 5.58 Camden has been a leader in the greening of local authority fleets for some years. It operates a fleet of approximately 250 vehicles and has introduced and trialled various technologies including liquefied petroleum gas, bio-methane gas, electric and hybrid. The Council's depot is equipped with liquid petroleum gas and compressed biomethane gas refuelling stations and also operates a recharging point for commercial electric vehicles. Camden was awarded the "Greenest Public Sector Fleet of the Year" in 2010 at the GreenFleet

awards which reflects the Council's commitment and innovative approach towards improving sustainability.

- 5.59 To ensure continued commitment to the environment, Camden has adopted a Green Vehicle Fleet Standard which outlines a set of criteria on Council procurement and operation of its vehicles to achieve maximum reduction in emissions. This also applies to all contractors, such as waste vehicles. The Standard becomes stricter over time to improve environmental performance.

### ***Policy 1.8***

- 5.60 *Guided by the 'Green Vehicle Fleet Standard' for procuring and operating fleet vehicles, Camden will continue to lead by example, and operate a low emission fleet and continue to work towards improving vehicle efficiency.*

### **Reducing Noise on Camden's Streets / the Public Highway**

- 5.61 Road traffic in Camden is the main source of noise, especially in the vicinity of busy roads with high traffic volumes or areas where there is a lot of stop-start traffic. Surveys of noise trends in Camden reveal background noise levels are amongst the highest in the country. Noise can have a number of adverse effects such as sleep deprivation and reduced concentration.
- 5.62 National and EU noise regulations and standards<sup>39</sup> have led to improvements to the smoothness of road surfaces as well as limits on noise emissions from vehicles; this in turn has led to cleaner and quieter engines and quieter road surfaces.
- 5.63 At a more local level, Camden will work within the borough and with other authorities across London to reduce traffic noise through effective management of traffic and highways works, smoother road surfaces, careful consideration of traffic management measures (such as speed humps), encouraging more sustainable vehicles and modes that are quieter, and continuing work on freight management.
- 5.64 Freight deliveries and the presence of larger vehicles also have an impact on noise levels. London Councils operate a London night time lorry ban on behalf of London boroughs, which designates and enforces specific routes in the capital to be used by larger vehicles. Camden will continue to work with authorities and businesses on setting permitted routes for heavy vehicles to limit use as far as possible to main roads away from residential roads, as well as setting appropriate delivery conditions for developments through the planning system.

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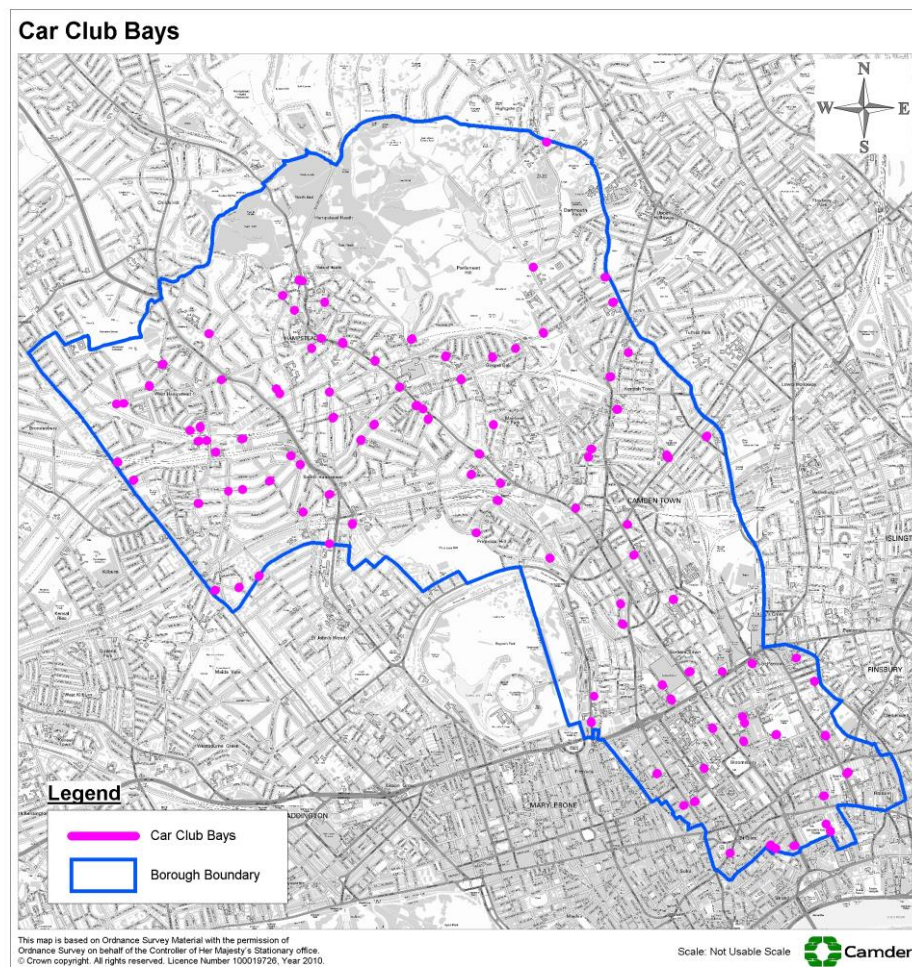
<sup>39</sup> Environmental Directive 2002/49/EC

**Policy 1.9**

- 5.65 *The Council will continue to consider appropriate measures that may help to reduce noise as well as continue to encourage travel by more sustainable modes which are generally much quieter than vehicular traffic.*

**Car Clubs**

- 5.66 Camden has played an important role in establishing car clubs across London, and transport strategies for the borough have included provision for car clubs since 1997. Car clubs help to reduce household emissions and encourage socially inclusive, healthier and less car dependent lifestyles. They also reduce parking stress.
- 5.67 Car clubs offer a 'pay-as-you-drive' alternative to owning a car. For car club members this usually provides a cheaper and more convenient way of using a car without the burden of maintaining a vehicle. Car club vehicles are parked in designated parking bays ready for hire and can be used for an hour, day or all weekend, as required.
- 5.68 The 2009/10 Carplus Annual Members Report, by the Transport Research Laboratory Ltd, which looked at the travel behaviour of 5,382 London car club members from across all 4 operators, showed that 25.5 per cent of members sold a car as a direct result of joining a car club. Each car club vehicle is calculated to remove at least 11 private vehicles from the road.
- 5.69 Car club members also make fewer car trips, averaging 4 – 5 trips under 25 miles per month, compared to 33 trips made by the average London license holder. Furthermore, use of public transport is higher with car club members compared to the London average.
- 5.70 Car club vehicles are newer and 'cleaner' cars than average UK vehicles and are 10 – 33 per cent more fuel efficient.
- 5.71 Currently Camden has 266 car club bays at 159 on-street locations, with a total of 8,937 members. Providing car club bays across the borough is important as people typically join car clubs when a bay is located within a 5 to 10 minute walk from their homes. **Figure 5.1** shows the location of car club bays across the borough.
- 5.72 Camden has integrated policies regarding car clubs, including close links with business travel plans and with the planning system in conjunction with car-free or car-capped housing developments.

**Figure 5.1 - Car clubs bays in Camden**

- 5.73 Camden has worked closely with car club operators to establish this network and now consider that further expansion of the network should be largely self-financed by car club operators. Camden will continue to consider introducing car club bays in deprived areas to increase social inclusion as well as to support innovative projects such as electric car clubs.
- 5.74 Camden, through working with operators, has been a leader in this field through initiatives such as:
- The first car club bays at two council estates in London;
  - Car club bays that provide a range of multi-vehicles to provide members with a choice in the size and types of vehicles available;
  - The launch of the first plug-in hybrid electric car club space in Europe (Bloomsbury Square Car Park) and the first fully electric car club space (Lincolns Inn Field) in the UK.

**Policy 1.10**

- 5.75 *Camden will continue to work with car club operators to support further expansion of the car club network across the borough and to consider further innovative and socially inclusive schemes*

**Travel Awareness Events & Campaigns**

- 5.76 Travel awareness programmes aim to change people's travel behaviour by focusing on attitudes, information and raising awareness of the benefits of sustainable travel choices. The message is designed to support the Mayor of London's goals and Camden's sustainability, health and community safety agendas.
- 5.77 Ensuring that travel awareness messages are consistent across the borough and partnership working are vital to the success of the programme. Officers work with local business improvement districts (BIDs) such as Camden Town Unlimited and Midtown, schools, individual businesses, health sector partners, Metropolitan Police, Camden Cycling Campaign and with the local community
- 5.78 Campaigns and events generally focus on the promotion of walking and cycling, but other key transport initiatives in Camden such as car clubs and lower emission or electric vehicles are also promoted. The travel awareness programme comprises a number of events including walk-to work week, Bike Week, European mobility week, car-free day, walk once a week (WOW) and Safer Travel at Night.
- 5.79 From 2011 travel awareness initiatives will be integrated with area-based schemes outlined in the Corridors, Neighbourhoods and Supporting Measures programme in order to provide a holistic approach to addressing transport concerns at the local level. They will also be linked with other street-based infrastructure projects such as Legible London and the Cycle Hire scheme.

**Policy 1.11**

- 5.80 *Camden will continue to work in partnership with stakeholders in order to develop and implement comprehensive campaigns that promote the benefits of active travel and more sustainable travel options.*

**Street Trees and 'Urban Greening'**

- 5.81 There is a generally accepted view that climate change will result in extreme weather conditions in the future, including hotter summers and more intense periods of rainfall. Street trees and more urban green spaces can help adaptation to weather changes by providing shade from the sun and also help to absorb rain water.

- 5.82 The Council's Tree Strategy (2007-11) and Biodiversity Action Plan (2009) outline the importance of trees and urban green spaces. They 'soften' the urban environment and can help to improve mental health and help create a sense of place.
- 5.83 Trees and green urban spaces also help to protect biodiversity which itself is threatened by climate change. Biodiversity contributes towards sustainable economic and social development. It affects our quality of life and enhances the environments we live in by supporting a number of natural ecosystem processes and services:
- air quality, and climate (both global and local CO<sub>2</sub> sequestration);
  - water purification;
  - disease control;
  - biological pest control;
  - pollination;
  - prevention of erosion
- 5.84 Camden's Climate Adaptation Plan reiterates the importance of this function for mitigating and adapting to climate change, by providing carbon 'sinks', 'fixing' the soil and improving water drainage.
- 5.85 The Council implements a tree planting programme that focuses on streets where there is fewer than the average number of street trees, as well as replacing damaged trees.
- 5.86 The Mayor of London has set a target to increase street trees by 10,000 across the Capital by 2012. Camden will seek to increase street trees as part of the transport schemes that are outlined in Chapter 6 of this Strategy.

### ***Policy 1.12***

- 5.87 *Camden will continue its street tree programme to increase the number of street trees to an optimum level as well as seek to increase the number of street trees as part of area-wide transport schemes.*



## ***Objective 2 - Encourage healthy and sustainable travel choices by prioritising walking, cycling and public transport in Camden***

### **Encouraging Walking and Cycling**

- 5.88 Walking and cycling are the most sustainable modes of transport. They have very little environmental impact and provide important alternatives to car use. They also provide good alternatives to public transport for shorter distance journeys which can help relieve crowding.
- 5.89 The promotion of walking and cycling are essential elements of the Council's efforts to improve air quality, and transport's contribution to climate change. Camden's Corporate Plan (Improvement Plan) identifies several key priority improvements which will help to deliver the Council's overarching Sustainability Community Strategy.
- 5.90 Encouraging transport alternatives such as walking and cycling and promoting exercise, especially among young people, are two key priority areas for the Council. Inactivity is a major factor in ill health, particularly for heart disease and strokes, both of which kill more commonly than any other disease. In addition, the rising obesity problem requires a multi-pronged approach including encouraging active life styles as well as a healthy diet.
- 5.91 These modes generally provide significant wider social benefits in terms of promoting more active, healthy lifestyles and helping to create more vibrant streets and public spaces. Both modes are also the most socially equitable requiring little or no financial outlay to travel. As such the promotion of walking and cycling, and prioritising these modes and resources for them, are essential elements of Camden's approach to sustainably managing growth in the borough.
- 5.92 The Mayor's Transport Strategy has an explicit aim to encourage more people to cycle and sets out an aspiration to increase cycling by 400 per cent by 2026 compared to a 2000 baseline. Introduction of the new cycle hire scheme and the Cycle Superhighways programme will further raise the profile of cycling across the whole of London.

### ***Policy 2.1***

- 5.93 *The Council will continue to encourage, promote and prioritise walking and cycling as the preferred modes of travel in the borough*

### **Health Benefits of Walking and Cycling**

- 5.94 Travelling on foot or by bicycle can have a number of very positive health benefits. Exercise associated with these modes has benefits for

the heart and lungs, can improve bone density, tackle obesity, boost muscle endurance and contribute to mental health improvements. The benefits also extend to helping to defend against the onset or intensity of degenerative health problems later in life.

- 5.95 As well as direct health benefits, a larger presence of people walking and cycling encourages active use of the public realm and contributes to social inclusion, improves personal security and the perception of safety on the street, and reduces local pollution which has a clear benefit for people's health.
- 5.96 The Council promotes these benefits through its travel awareness programme. Travel plans and campaigns such as Walk Once a Week in schools, are key tools in helping schools and businesses to develop a strategy to promote the benefits of walking and cycling.
- 5.97 Strong links have been developed with NHS Camden and the Camden Active Health Team, which has resulted in a stronger message for active travel across the Council and its key partners.

### **Policy 2.2**

- 5.98 *Camden will implement initiatives that promote the health and environmental benefits of walking and cycling through campaigns and travel plan development with schools, businesses and other organisations. Camden will continue to develop and improve health partnerships with key health practitioners, such as NHS Camden and to promote the integration of walking and cycling into leisure and commuting trips.*

### **Pedestrian Crossing**

- 5.99 Camden has invested considerable resources over recent years to provide more accessible and new crossing points at junctions to assist pedestrians to cross roads safely and conveniently.
- 5.100 100 per cent of signalised pedestrian crossings in the borough have good accessibility including dropped kerbs and tactile paving. There are however a small number of signalised junctions in the borough where there are no controlled pedestrian facilities or where the crossings would benefit from being upgraded. Similarly, there are priority controlled junctions that would benefit from improved pedestrian crossing facilities. Improvements to pedestrian facilities will continue to be a priority for Camden to make them safer and/or easier to navigate for pedestrians, particularly for mobility impaired users.
- 5.101 One recent innovative pedestrian crossing initiative is the introduction of pedestrian countdown signals at pilot sites across London, including at the High Holborn/ Kingsway junction outside Holborn tube station. This system involves a number display adjacent to the green man

display showing exactly how many seconds remain to safely cross the road before the 'red man' light comes on. The system is designed to make the junction feel safer for pedestrians by removing any uncertainty and indicating to pedestrians that the "black-out" period at traffic signals is also available crossing time.

### ***Policy 2.3***

- 5.102 *Camden Council will continue to improve pedestrian crossing facilities at junctions across the borough to make them safe and more accessible. Camden will also consider further the roll-out of the pedestrian Countdown system across the borough, in consultation with TfL, depending on the success of the 18-month trial period currently taking place at Holborn.*

### **Pedestrian Signage and Legible London**

- 5.103 Improved pedestrian signage to help people find their way to desired destinations is an important factor in encouraging more people to walk for shorter journeys rather than using the underground, bus or travelling by car. The Legible London pedestrian wayfinding system helps people find their way around London through the use of consistent and simple signage and maps.
- 5.104 Camden has been actively involved in the development of the Legible London pedestrian signage system since its inception in 2005. Following implementation of the TfL pilot in Covent Garden and Bloomsbury, Legible London is now being introduced in several more key areas, including King's Cross, Euston, Tottenham Court Road, Holborn, Somers Town and Camden Town.
- 5.105 The signage will continue to be rolled out at key appropriate locations in Camden, many of them town centres in the north of the borough, as part of area-based Corridor and Neighbourhood schemes.

### ***Policy 2.4***

- 5.106 *Camden will encourage more people to walk by providing effective, consistent and easy to understand Legible London pedestrian signage at appropriate strategic locations in the borough.*

### **Strategic Walking Routes**

- 5.107 There are seven designated London-wide Strategic Walking routes across London that highlight some of the key architectural, natural and historic features of the Capital. Two of these routes pass through Camden - the Jubilee Walkway and the Jubilee Greenway.

- 5.108 The Jubilee Walkway passes through much of Central London and within Camden, including King's Cross, Euston, Russell Square, British Museum, Chancery Lane and Holborn.
- 5.109 The Jubilee Greenway runs through Camden along the Regents Canal, from Regents Park to King's Cross and therefore is maintained and controlled in partnership with British Waterways. Camden is working with British Waterways to complete the directional markers that guide people along the route.

### ***Policy 2.5***

- 5.110 *Working with partners, Camden will maintain the strategic walking routes and will continue to promote these walking routes, as well as other walks within the borough, that highlight some of Camden's finest architectural and historical structures.*

### **Public Seating**

- 5.111 Providing public seating is very important for encouraging people to walk within the borough, particularly the young, elderly, those with mobility difficulties or carrying shopping and luggage. Seating helps people with mobility difficulties to maintain their independence and also attracts more people to streets thereby creating safer, more sociable and pedestrian friendly spaces that help to support the economic vitality and viability of an area.
- 5.112 However seating is sometimes considered to contribute to unwanted loitering and anti-social behaviour. To address this Camden has developed an evidence-based protocol to assess requests for the introduction or removal of public seating. It involves liaison with key stakeholders including Ward Councillors, the Police and Community Safety Teams to assess whether locations are appropriate for seating. Ongoing monitoring is generally conducted after installation to ensure seats do not attract anti-social behaviour.
- 5.113 Camden has also developed a new range of public seating to provide more appropriate benches at particular locations. They have been designed to set new standards for minimising anti-social behaviour, whilst being simple to clean, and more inclusive.

### ***Policy 2.6***

- 5.114 *Camden will aim to increase street seating across the borough at appropriate locations in conjunction with public realm improvements schemes using the street seating protocol.*

### **Cycle Training for Adults and Children**

- 5.115 Camden's comprehensive cycle training programme provides the skills and confidence for people to enable them to cycle safely as well as comply with the highway code. Over the last 3 years more than 3,000 people have attended cycle training or 'Dr Bike' (where cyclists learn basic cycle maintenance) sessions in the borough.
- 5.116 Cycle training in Camden is offered to children aged from 10 years and ranges through to adults at all levels of experience. Recent survey responses indicate that approximately 70 per cent of people who have completed cycle training, cycle more after they have had training.
- 5.117 Significant new initiatives that are part of the Mayor's 'Cycling Revolution' such as the Cycle Hire and Cycle Superhighway schemes are likely to result in more people cycling in central London. Cycle training will play an integral role in helping to ensure the safety of new cyclists.
- 5.118 The conflict between cyclists and heavy goods vehicles (HGVs) continues to be an issue for both users. There is also concern about cyclists and motor cyclist conflicts. The Council is working with all communities in partnership with Metropolitan Police to reduce collisions. The Council has produced awareness raising videos, conducted cycle training for lorry drivers and helped introduce other initiatives such as 'Exchanging Places' which invite cyclists to sit in a lorry driver seat.

### ***Policy 2.7***

- 5.119 *Camden is committed to providing cycle training across the borough and will continue to monitor and improve the cycle training programme. The Council will also organise other initiatives that improve cyclists' knowledge and road awareness.*

### **Central London Cycle Hire Scheme**

- 5.120 Barclays Cycle Hire was launched on 30 July 2010. There are now over 400 docking stations in central London, with 43 stations in Camden. The scheme is the first new form of public transport in London for many years and is an important part of the Council's effort to increase cycle mode share. Cycle hire offers constant access to a bike for short trips across central London at any time of the day or night, at low cost. The scheme adds flexibility to the mode as people no longer need to own a bike, be able to store one or have their bike with them to choose to make a cycle trip.
- 5.121 The scheme is set to expand and intensify. Another 6-8 stations will be built in the southern part of Camden during 2011-12 in areas of peak demand or where there are gaps in the existing network. The Council

is highly supportive of a northward extension of the scheme and has completed outline feasibility work in partnership with TfL on a network of docking station in Camden Town. The area would benefit economically from improved accessibility by bicycle and it would increase the attractiveness of Camden Town as a destination for shopping and leisure trips. TfL will confirm in summer 2011 if they will invest in the extension to Camden Town.

- 5.122 Camden is seeking to secure space for docking stations on or near new developments as part of the planning process. The Council is working with TfL and Argent, the developer for the King's Cross Central development, to explore several potential docking station locations there.

### ***Policy 2.8***

- 5.123 *Camden will improve the functionality of the Cycle Hire Scheme by adjusting the density of the docking station network according to demand. The Council supports the extension of the Cycle Hire scheme further north to Camden Town and other areas across the borough.*

### **Secure Cycle Parking**

- 5.124 Cycle theft is a major deterrent to people either taking up cycling or continuing to cycle if they have been a victim.
- 5.125 In order to address the issue of security, Camden installs cycle parking across the borough in a strategic way to provide a high frequency of stands, particularly at key destinations such as outside stations, shops, commercial buildings, leisure centres and public buildings. Specific requests for new cycle parking are also assessed.
- 5.126 Camden has three different types of cycle stands:
- Camden 'M' stands which replace the previous Sheffield stands and provide easier locking points;
  - Cycle Hoops which can be attached to existing street furniture such as lamp columns, which help reduce street clutter and provide secure locking points where space is limited; and
  - Plant locks which serve the dual purpose of providing secure cycle parking as well as planting areas. They are maintained by local community groups and are particularly appropriate for residential areas.
- 5.127 Camden aims to increase the number of cycle parking facilities across the borough to provide a comprehensive secure bicycle parking network, including on the carriageway. Cycle parking is also installed at schools as part of school travel plans. The Council will also investigate the provision of cycle parking on the Council's own housing estates in partnership with colleagues in Housing and Adult Social Care (HASC).

**Policy 2.9**

- 5.128 *Camden will continue to work with partners to provide secure parking for cyclists to encourage cycling and to help reduce cycle theft as well as educate people on how to lock their bicycles securely.*

**Cycle Stations**

- 5.129 Cycle stations provide larger-scale secure cycle parking at public transport hubs, workplaces and major leisure destinations that do not have their own cycle parking facilities.
- 5.130 Through contributions from planning agreements, Camden has agreed with developers that they will deliver two cycle stations – one as part of the King’s Cross redevelopment (near the Great Northern Hotel) and the other as part of the Regent’s Place (north-east quadrant) development that is located adjacent to Euston Circus. Both of these cycle stations are expected to open in 2013.

**Policy 2.10**

- 5.131 *Camden will encourage more people to cycle by encouraging development of further cycle station proposals across the borough with particular focus on transport interchanges and other areas of high demand.*

**Cycle Superhighways**

- 5.132 Barclays Cycle Superhighways are new cycle routes between central and outer London which aim to provide cyclists with safer, faster and more direct journeys. The segregated blue coloured lanes, logos and signage are designed to raise awareness of cyclists and provide priority at certain locations. TfL aims to implement 12 Superhighways in London by 2015.
- 5.133 A Cycle Superhighway (Route 11 from Marylebone to Hendon) is proposed to run along Finchley Road and Avenue Road in Camden, to be completed by summer 2013.
- 5.134 Camden would also like to see a Cycle Superhighway route to King’s Cross. Camden has expressed this desire to TfL who is considering the possibility of a ‘spur’ road from Highgate in Islington (Cycle Superhighway route 12).
- 5.135 In partnership with TfL, Camden is proposing to complement the Superhighway through a variety of measures. This includes cycle training, cycle parking and other facilities, local promotion through working with the local community, public realm and safety

improvements as well as providing good quality and clearly signposted links to the local cycle network, Greenways and established LCN+ routes.

### **Policy 2.11**

5.136 *Camden supports the Cycle Superhighway proposals and, in conjunction with TfL, will provide complementary measures including cycle training, cycle parking and facilities as well as links to local cycle networks and established LCN+ routes. Camden proposes investment towards other transport projects that will complement the proposed Superhighway route.*

### **Cycle Routes**

5.137 Camden is committed to making the roads safer for cyclists and one of the key ways the borough is achieving this is through the provision of an extensive and high quality cycle network with many defined routes throughout the borough.

5.138 Camden appoints a cycle champion from its ward members to drive forward the cycling agenda in the borough. This has proved a valuable contribution towards raising the profile in cycling and ensuring that our commitment to cycling is maintained.

5.139 The London Cycle Network Plus (LCN+) is a network of radial and orbital routes across London, linking town centres, key trip generators and which provide fast, continuous, safe and easy to use routes. Camden has led the LCN+ project for London since 2001 and, in consultation with stakeholders, particularly Camden Cycling Campaign, has significantly developed and improved the cycle network across the borough. This includes facilities such as cycle lanes, carriageway improvements and signal phases for cyclists.

5.140 Camden has also developed a “Greenways” cycle network along canal towpaths, park pathways and low traffic routes which connect people to facilities, parks and open spaces. These routes are generally suitable environments for learning and leisure activities and can help support people to gain the confidence to take up cycling.

5.141 Camden has also taken a lead role in introducing innovative solutions such as physically segregated cycle lanes, which has helped to encourage a significant growth in cycling in Camden. Such extensive engineering measures however are not always suitable and different options need to be carefully considered.

5.142 Developing borough cycle routes by linking to other cycle networks and routes such as the proposed Cycle Superhighways, offers further potential to increase cycle levels. Clear and consistent signage of



cycle routes is important to help legibility and to direct cyclists along safe and direct routes.

- 5.143 As well as commuting, cycling is a popular leisure activity offering health and wellbeing benefits. Parks offer numerous opportunities for leisure cycling although larger open spaces such as Regent’s Park and Hampstead Heath are managed by The Royal Parks and the City of London. Concerns have been raised in recent years over conflicts between cyclists and pedestrians at these locations. It is important that Camden works with these partners to find suitable solutions that will benefit both cyclists and pedestrians.
- 5.144 Despite continuing development of the cycle network, one of the key issues with cycling remains the “permeability” of certain areas such as Camden Town and King’s Cross to allow cyclists to navigate quickly, safely and easily through an area. To improve the accessibility of certain areas Camden aims to improve permeability and introduce measures that allow two-way cycling on some one-way streets where it is safe to do so.
- 5.145 The Council regularly engages with the Camden Cycling Campaign (CCC) – the local group of the London Cycling Campaign - on scheme development and design in order to improve provision for cyclists. Consultation with CCC in the development of the Camden Transport Strategy identified several issues across the borough such as permeability, safety and traffic free routes. A number of these issues have been captured in the proposed projects outlined in Chapter 6 of this strategy.

### ***Policy 2.12***

- 5.146 *Camden will work with TfL, Camden’s Cycling Champion, Camden Cycling Campaign, Sustrans and other stakeholders to continue to promote, develop and maintain the cycle routes across the borough as well as improve their legibility.*

### **Encouraging People to Travel by Public Transport**

- 5.147 Camden promotes public transport as the principal and desirable option for the majority of journeys where walking and cycling is not appropriate. This policy is strongly supported by a generally efficient, frequent and reliable public transport system in the borough.
- 5.148 However continued enhancement of public transport is vital in order to cope with the anticipated increased demands on the transport system, including for personal security. Camden will benefit from planned improvements to London Underground, London Overground and large-scale rail schemes such as Thameslink and Crossrail.

- 5.149 Maximising the benefits of rail and bus schemes will require close partnership working between the service providers – principally TfL, bus operators and Network Rail – and the Council both as planning authority and highway authority for most roads in the borough.

***Policy 2.13***

- 5.150 *Camden will continue to work with public transport providers to improve the public transport system and encourage modal shift from car travel.*

**Improving London Underground**

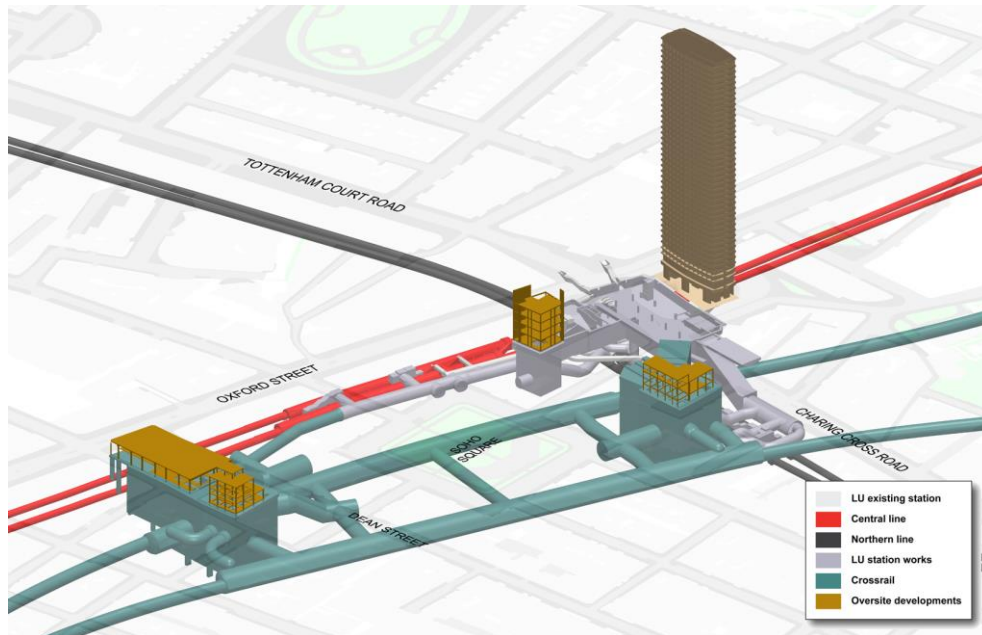
- 5.151 More than one billion journeys are made every year on the London Underground network. Many services are severely crowded during peak periods making for uncomfortable journeys. This is likely to deteriorate as population and employment growth continue to place greater pressure on the network. It is vital that improvements are made to the London Underground in order to accommodate this demand.
- 5.152 The planned tube upgrade will improve services on a number of the London Underground lines that pass through Camden, including the Jubilee, Victoria, Northern, Piccadilly, District, and Hammersmith and City lines. The improvements will deliver nearly 30 per cent more capacity across the network and see the refurbishment of stations and general upgrading of facilities across London.
- 5.153 Camden will continue to work with stakeholders to secure station capacity and accessibility enhancements at some of London's most congested stations and strategic tube interchanges such as Camden Town and Holborn.
- 5.154 Inevitably the works associated with these improvements will have an impact on the normal operation of these services and thus on residents, businesses, and visitors using the services. However reducing overcrowding and improving reliability are essential for the long-term success of Camden, as well as the wider London and UK economy. Camden will continue to work with the operators to ensure that the impacts caused by Underground improvement works are minimised.

***Policy 2.14***

- 5.155 *In order to ensure the London Underground services continues to meet the needs and requirements of residents, businesses and visitors to the borough, the Council will work closely with Transport for London and other key stakeholders on continued improvements to the network, including for personal security. The Council recognises that there are inevitable disruptions to services during improvement works and will continue to work with operators to minimise the impacts in Camden.*

### Rail Improvement

- 5.156 London is more dependent on rail than any other city in the UK: 70 per cent of all rail travel in the UK is to, from or within the capital. Camden has three major national rail terminals – Euston, King’s Cross and St Pancras – as well as the international rail terminal at St Pancras.
- 5.157 A number of projects are currently under construction or are being planned which will increase capacity and reduce journey times within the borough. The Thameslink Programme will double capacity on one of Europe’s busiest stretches of railway and includes significant station improvements at St Pancras and West Hampstead stations.
- 5.158 The extensive refurbishment of St Pancras International station in conjunction with Eurostar services in 2007 has created a significant international gateway into the borough and forms one of the centrepieces of the new King’s Cross regeneration scheme.
- 5.159 Crossrail is a major proposed cross-London rail link passing east-west through the southern part of the borough. The first trains are expected to operate by the end of 2017 and the line is expected to introduce significant social and economic benefits from faster journey times, reduced road and public transport congestion, improved productivity and higher earnings. A study has demonstrated an annual benefit of £64 million per year for Camden from the scheme.
- 5.160 Crossrail will create two key new gateways into the borough - at Tottenham Court Road and Farringdon stations. There are significant developments proposed for both of these interchanges as well as improvements to the Underground station and public realm at Tottenham Court Road (including a new plaza) and rail interchange improvements at Farringdon (**see Figure 5.2**).

**Figure 5.2** Proposed improvements at Tottenham Court Road station

- 5.161 The Chelsea-Hackney line (or Crossrail 2) will also provide significant new rail capacity in London with a proposed safeguarded route that will pass through King's Cross and Tottenham Court Road stations in Camden. The line will help to relieve mainline rail terminals and crowding on London Underground lines such as the Victoria and Piccadilly lines. No funding has yet been identified for this scheme
- 5.162 Euston Station has also been announced as the preferred location for the High Speed 2 terminal that would provide links to significant centres to the north of London. Camden will maintain ongoing dialogue with all stakeholders involved in High Speed 2 to capture benefits and minimise negative impacts for Camden's residents and businesses.
- 5.163 Whilst the increased capacity provided by these, and other rail network enhancements such as the Great Northern line into King's Cross, is vital to accommodate future growth and to support the economy, it will also be very important for Camden to work with Network Rail and other key stakeholders to ensure that additional capacity is provided at these stations. Camden will also seek to work with operators to improve the public realm outside stations to encourage onward journeys on foot or by bicycle.

### **Policy 2.15**

- 5.164 *Camden supports significant investment on the rail network as part of a strategy to create a high, quality, accessible and integrated public transport system. Camden will continue to work with Network Rail,*

*Crossrail and other stakeholders to ensure an integrated network, with a high quality public realm and good walking and cycling facilities surrounding stations to encourage onward journeys by these modes.*

### **London Overground**

- 5.165 London Overground is a suburban network of rail services in London managed by TfL and provides a valuable orbital rail service through the northern part of the borough.
- 5.166 The network is currently undergoing a significant upgrade which will provide passengers with longer trains and a more frequent service. These improvement works will see more than 200 signals, seven kilometres of track and 30 station platforms lengthened across London. Better CCTV, lighting and security, and new customer information systems will also be available.
- 5.167 By May 2011 there will be longer trains that arrive more frequently – every 7-8 minutes from Camden Road to Stratford, every 10 minutes between Willesden Junction and Gospel Oak, and every 15 minutes between Gospel Oak and Barking.
- 5.168 Within Camden a number of local station improvements have directly benefited those who use the Overground service. Recent upgrades have been completed at the stations at West Hampstead, Finchley Road & Frognal, Hampstead Heath, Gospel Oak and Kentish Town West. Camden will continue to liaise with TfL London/London Overground about future improvements to the network.
- 5.169 Investment in the North London Line, which totals approximately £300 million, will improve services and increase capacity between Camden and the Olympic Park at Stratford Regional Station (and other destinations), with up to twice as many trains per hour.

### **Policy 2.16**

- 5.170 *The Council will continue to work closely with Transport for London and other key stakeholders on continued improvements to the London Overground network to ensure services continue to provide an improved high quality orbital rail service through the northern part of the borough. The Council recognise that there is inevitable disruptions to services during improvement works and will continue to liaise with operators to minimise the impacts in Camden.*

### **Bus Network Enhancement**

- 5.171 London's bus network is one of the largest and most comprehensive urban transport systems in the world and plays a key role in providing access to jobs and services across Camden and the wider London

area. The London bus network will have a vital role to play in meeting the increased demand from the growing population.

- 5.172 Bus services are the only mode of public transport that operates 24 hours a day and bus journeys are particularly valuable for shorter journey. They are also important for those on lower incomes as many deprived people do not have access to a car, many live in areas away from rail/underground lines, and they can benefit from concessionary fares. It is by far the most physically accessible form of transport around inner and central London for older people and those with mobility difficulties.
- 5.173 To try and ensure that the limited people-carrying capacity of Camden's road network is being used effectively, the Council and TfL have invested in significant bus priority measures across the borough to increase reliability and journey times which have significantly improved over the last 5 to 10 years. Bus information such as 'spidermaps', improved timetables and iBus (which provides 'Next Stop' announcements and has improved real-time information at bus stops) have also delivered significant improvements to the bus network.
- 5.174 Camden would like to see TfL complete a comprehensive bus network review to address current issues such as crowding and traffic congestion along routes (in some cases caused by the volume of buses) rather than the traditional approach of looking at buses on a route-by-route basis. The review should also consider the changes to other transport infrastructure (such as new rail lines which affect trip patterns) and the location of significant population and employment growth which will significantly impact on passenger demand. There will also be ongoing alterations to the nature and distribution of services and facilities, such as healthcare and schools, which the bus network will need to reflect.

### ***Policy 2.17***

- 5.175 *Camden will continue to work with TfL and London Buses to ensure services are reliable, accessible and meet the needs of those who live and work in Camden.*

### **Countdown at Bus Stops**

- 5.176 Countdown signs are the real-time electronic signs at bus stops that inform bus users when particular bus services are expected to arrive. The existing system, which has been installed in around 10 per cent of London's bus stops, is 20 years old and the technology has become obsolete.
- 5.177 TfL is introducing a new Countdown system strategically across London to improve the quality and level of availability of information at

bus stops. Camden will receive increased Countdown signs as part of the revised system with 104 new signs replacing 92 old ones. However these will not be on a like-by like basis, but will be located at places where they will have the greatest strategic benefits for bus passengers.

- 5.178 Real-time bus information will also be available on the internet and through text messaging services under the new system, providing users with easy to access and comprehensive information.

***Policy 2.18***

- 5.179 *The Council will work with TfL to improve the quality and level of availability of information for passengers about bus services through the new Countdown system.*

**Enhancing Major Transport Interchanges**

- 5.180 Camden's location in Central London means that the borough has a large number of railway stations that serve mainline rail services, London Underground and London Overground services. A number of these stations provide important interchange opportunities such as King's Cross/St Pancras, Euston, Camden Town and West Hampstead. Enhancing these interchanges and making it easy for people to change between rail services as well as to other transport modes will encourage more people to travel by these modes which in turn will help to reduce car trips and ease car parking pressures.
- 5.181 Camden is actively working with stakeholders and transport operators to improve interchanges between different transport services. Some examples include:
- **King's Cross/St Pancras to Euston** – large numbers of people interchange between the mainline rail terminals and underground lines at these stations, and passenger numbers will rise significantly during the London 2012 Olympics with the introduction of the Javelin service at St Pancras that will link to Olympic Park at Stratford. As the distances between the stations are quite small there is clearly potential to encourage walking between the stations. Camden is working with stakeholders to develop a higher quality and clearly signposted walking link between these stations via Brill Place and Phoenix Road that avoids the traffic dominated environment of Euston Road. Improvements will include improved lighting, footway surfaces and decluttering of the street environment to make it a suitable route for visitors with luggage, pushchairs or those travelling by wheelchair;
  - **West Hampstead** – identified in the London Plan and the Mayor's Transport Strategy as a key strategic interchange, West Hampstead provides an opportunity for passengers to swap between radial (Jubilee Underground and Thameslink lines) and orbital (London Overground) services. An improved interchange at West Hampstead therefore can help to reduce travel times and reduce

crowding at Central London rail termini. Off-street interchange is not currently feasible from a cost perspective and therefore Camden has worked with representatives of the local community, TfL and Network Rail to develop improvements to the on-street interchange along West End Lane. This aims to provide better footways, improved signalised crossings for pedestrians and vehicles (including buses), increased cycle parking and improved public realm.

### **Policy 2.19**

- 5.182 *Camden will continue to work with key stakeholders and transport operators to develop and deliver enhancements to interchange between the different transport modes in the borough to encourage more people to travel by more sustainable modes.*

### **Coaches**

- 5.183 Tourist coaches transport millions of local and overseas visitors to the capital's numerous accommodation, leisure and entertainment destinations. Coach transport plays an important role in supporting local tourism in Camden and servicing its leisure facilities such as museums and cinemas.
- 5.184 Coach travel can often provide a cheaper and more efficient mode of travel than car. It is also often cheaper than travel by car and train for longer distance travel and therefore may be more affordable and accessible for those on lower incomes.
- 5.185 Ensuring the provision of setting-down and picking-up points, as well as coach parking where drivers can take their legally required break from driving, provides a significant ongoing challenge in Central London where kerb space is limited and there is pressure to ensure the smooth flow of traffic. Camden officers regularly attend the London Coach Forum with coach operators, TfL and other London boroughs, where the difficulties associated with coach waiting and loading facilities are discussed.

### **Policy 2.20**

- 5.186 *Camden will continue to work with coach operators, TfL and other stakeholders to consider possible improvements to facilities for coaches, taking in to account the balance that needs to be maintained between coaches and other road users.*



### ***Promoting Sustainable Travel through Travel Planning***

#### **School Travel Planning**

- 5.187 School travel planning aims to reduce car use on the journeys to school to address problems of air quality, road danger and traffic congestion before school starts and at school finishing time.
- 5.188 School travel plans (STPs) encourage teachers, parents and children to think about their travel choices from a young age and encourage sustainable behaviour into adulthood. The strategy for the development of school travel in the borough is defined in the Sustainable Modes of Travel Strategy (SMoTS).
- 5.189 Camden also works with other key partners such as the Metropolitan Police and health sector partners to improve safety and help to promote active travel for school students to tackle childhood obesity.
- 5.190 Currently, 90 per cent of all Camden schools have an STP. Camden continues to engage with the remaining schools to try and increase this number to 100 per cent.
- 5.191 Measures outlined in STPs include competitions such as the secondary schools cycle challenge, regular incentive schemes such as Walk Once a Week (WoW), infrastructure such as bicycle parking or safety measures in front of the school, and walking buses.
- 5.192 In partnership with a private bus operator, Camden has also helped to develop a pilot school bus service for the Hampstead, Fitzjohns Avenue and Belsize areas where there is a dense school population to try and reduce school run traffic and the associated problems of traffic congestion and road danger.

#### ***Policy 2.21***

- 5.193 *Camden will continue to work with schools to develop, review and monitor STPs to promote sustainable travel to school and to increase the number of schools who actively maintain their STPs.*

#### **Workplace Travel Plans**

- 5.194 Workplace Travel Planning in Camden predominantly focuses on the promotion of walking and cycling initiatives among the business community to help relieve pressure on the public transport network and enable commuters to integrate healthy activity into their daily lives.
- 5.195 Working with the NHS, Business Improvement Districts, Climate Change partnerships and local business networks, the workplace travel plan programme helps to highlight increased awareness of travel

options and their health and environmental impacts, as well as providing skills (such as cycle training) and encouraging businesses to install facilities, such as shower facilities to support sustainable travel choices.

- 5.196 Linking closely with Camden's Climate Change Partnership, the Workplace Travel Planning programme has provided a seamless service to local organisations wishing to develop or augment environmental initiatives. In the last 18 months Camden has worked with more than 33 new and existing businesses collectively employing around 8,000 staff to develop workplace travel plans.

### ***Policy 2.22***

- 5.197 *Camden will encourage workplaces to develop and implement travel plans, to recognise the significant health, environmental and economic benefits of travelling by more sustainable modes of transport.*

### **Camden Council Travel Plan**

- 5.198 Camden adopted its first Travel Plan in 1998 which has since been reviewed and updated. The plan has become part of the Council's strategy to reduce its impact on the environment, tackle congestion, improve local air quality and its progress towards becoming a low carbon borough.
- 5.199 The Travel Plan has had a significant impact in changing staff travel behaviour. Since 1998 car use for commuting has fallen by 75 per cent while cycling has increased by 50 per cent during the same period.
- 5.200 There have been a number of projects implemented as part of the travel plan, including physical measures such as cycle parking and showers, and a reduction in car parking provision for employees. The Council also offers a Cycle to Work scheme to make it cheaper to buy a bicycle, season ticket loans for public transport, and participates in national campaigns such as Walk to Work Week.

### ***Policy 2.23***

- 5.201 *Camden Council will continue to encourage staff to travel by sustainable means and support the six key objectives for implementation of the 2010 - 2014 Travel Plan:*
- *Reduce staff car commuting and reliance on private vehicle use*
  - *Increase the use of more sustainable modes including walking, cycling and public transport for work trips,*
  - *Promote healthy modes such as walking and cycling,*
  - *Increase the number of 'clean' vehicles used for Council service delivery,*

- *Contribute to the Council's strategies for tackling climate change and improving air quality.*
- *Contribute towards managing the impact of the 2012 London Olympics on staff commuting, staff business travel and the local transport network.*

### ***Objective 3 – Improve road safety and personal security for people travelling in Camden***

#### **Introduction**

- 5.202 Camden, like every highway authority, has a duty under the Road Traffic Act 1988 to prepare and carry out a programme of measures to promote road safety. The Council takes its responsibility to maintain a safe public highway very seriously and considers road safety in all traffic engineering schemes.
- 5.203 Improving road safety is also a major concern among Camden's population. It was ranked the top priority transport issue among residents who participated in the Camden Talks Spring survey in 2010.
- 5.204 Camden recognises the importance of ensuring the safety of all road users. A comprehensive analysis of road safety figures across the borough indicates that more vulnerable users such as pedestrians, cyclists and motorcyclists continue to make up the majority of all road casualties. Our transport policies therefore have a particular focus on improving road safety of vulnerable user groups. In line with The Mayor's Transport Strategy, Camden believes it is important to prioritise vulnerable users when developing road safety programmes to help reduce road casualty figures across the borough.
- 5.205 Camden has been very successful in reducing casualties and has seen the number of people Killed or Seriously Injured (KSIs) reduce by more than half for the 10 year period to 2008. There has however been a slight increase in casualties over the last couple of years, in particular among more vulnerable users.
- 5.206 Camden continues to take a comprehensive approach to road safety including engineering, education and awareness, and enforcement. Partnership with the Metropolitan Police, health agencies, and local community and interest groups can help the Council to deliver these programmes.
- 5.207 A significant proportion of the total number of KSI on Camden roads is concentrated on the Transport for London Road Network (TLRN) and Strategic Road Network (SRN), even though they represent only a small proportion of Camden's road network. Whilst there are more people travelling along these corridors, this does highlight the importance of addressing road safety along these corridors and the importance of the Council working closely with TfL to develop future road safety programmes.
- 5.208 There is also more to be done on residential roads and Camden will also continue to address road safety issues in these areas.

**Table 5.1** - Total Killed and Seriously Injured Casualties in Camden by road type

Road category	Total KSI	Approximate road length (km)	KSI rate per km road length
TLRN	89	12	7.4
SRN	89	20	4.5
London distributor	17	5	3.4
Borough distributor	24	10	2.4
Main local distributor	24	15	1.6
Minor local distributor	29	14	2.1
Residential and other	327	205	1.6

Source: TfL Road Safety Unit

### Pedestrians

5.209 Pedestrians pose the least threat to other road users yet are amongst the most vulnerable to injury, especially serious injury and fatalities. The Mayor of London and Camden have clear objectives that aim to increase the level of walking; it will be very important to continue to ensure safe pedestrian environments to support these.

5.210 Between the period of the baseline average 1994-98 and 2009 the number of pedestrian KSI in Camden has reduced by 38 per cent. Camden has introduced a number of policies and practices to reduce pedestrian casualties including:

- Improving the public realm and reducing the dominance of traffic;
- Improved pedestrian routes away from high vehicular flows such as the route proposed to link Euston and St Pancras stations away from Euston Road;
- Significant improvements to pedestrian crossing facilities;
- Appropriate use or removal of guard railing;
- Speed reduction measures – speed has a significant impact on injury severity: studies show that 90 per cent of pedestrians will be killed or seriously injured when hit by a car travelling at 30mph, whilst this falls to 40 per cent when vehicle speeds reduce to 20mph<sup>40</sup>.

5.211 Camden has made significant reductions in child casualty figures over the past decade; however a rise in the number of serious casualties amongst children in 2009 and 2010 has highlighted this as a continuing high priority road safety issue.

<sup>40</sup> 'New Directions in Speed Management' (DETR, 2000)

- 5.212 The majority of recent child pedestrian casualty incidents occurred on the TLRN which highlights the need for partnership working between Camden and TfL to address this issue.
- 5.213 The primary reasons attributed to serious child casualties were that the 'child crossed the road masked by a stationary or parked vehicle' or 'failed to look properly' when crossing'. These incidents raise concerns both about crossing behaviour and vehicle speed. Camden will continue to address both issues through road safety education and awareness campaigns and measures to reduce traffic speeds.

### **Policy 3.1**

- 5.214 *Camden will work closely with TfL, the Metropolitan Police and other stakeholders to improve safety for pedestrians by:*
- *Providing safe and direct routes for pedestrians across the borough;*
  - *Providing improved pedestrian crossing facilities and improve the public realm environment to provide a safer pedestrian environment;*
  - *Rationalising the use of guard railing and other street furniture where its exclusion may reduce traffic speeds and improve pedestrian safety;*
  - *Exploring the introduction of 20mph speed limits and other appropriate speed reduction methods at priority locations;*
  - *Working with schools, community and other stakeholder groups to identify road dangers for pedestrians and other vulnerable user groups; and*
  - *Working with schools to deliver road safety education and awareness campaigns to improve child pedestrian safety.*

### **Cycle Safety**

- 5.215 Since 2001 surveys indicate that the number of cyclists in the borough has doubled while KSI casualties for this mode have very slightly dropped over the same period. This therefore represents a significant decrease in the rate of injuries per cycling trip.
- 5.216 Camden has developed an extensive network of cycle facilities over recent years to improve road safety for cyclists. In particular, Greenway routes (which are generally off-road routes) can provide suitable environments for learning and leisure activity to help increase cyclist confidence.
- 5.217 Despite making up only a small proportion of Camden's highway network, more than 60 per cent of the cycling accidents occurred on the busiest roads in the borough, comprising the Strategic Route Network and the London Road Network. Whilst it is important to keep traffic moving, Camden will continue to work closely with TfL to address road safety issues on the busiest roads in the borough.

- 5.218 Speed reduction is an effective method for reducing casualties; it also improves both real and perceived safety for people cycling on those roads. Camden will continue its programme of rolling out 20mph zones across the borough as well as other highway engineering measures to manage traffic speeds that will help improve safety for cyclists and other modes of travel.
- 5.219 One in three pedal cycle fatalities in London occurs as a result of left-turning HGVs<sup>41</sup>. Advanced stop lines (ASLs) at signalised junctions provide cyclists with a safer road position, and allow cyclists to pull away in view of other motorists so they are less likely to be involved in collisions. It is important that such facilities are provided on major signalised junctions, especially on routes used by HGVs and other large vehicles, and that motor vehicles do not encroach into these areas when queuing at junctions.
- 5.220 It is important to ensure also that residential areas provide cycle safe friendly environments that are attractive alternative cycle routes to busy commuter roads.
- 5.221 Roads in one way streets are often wider than a single vehicle lane and can often accommodate contra flow cycling without danger. Opening such roads to cycle contra flows could encourage cycling on quieter roads where actual and perceived danger may be lower.
- 5.222 The level of cyclist KSI in the borough remained the same between 2007 and 2009. However, cyclist road safety will become an increasingly important challenge for Camden, as numbers continue to grow. Further reductions of KSIs among cyclists will help promote cycling as a safe form of transport across the borough and support sustainable transport objectives.
- 5.223 The Council is committed to delivering a free cycle training programme to everyone who works, lives or goes to school in the borough, along with awareness raising initiatives such as cycle training for lorry drivers, to improve cycle safety and skills.

### ***Policy 3.2***

- 5.224 *Camden will work closely with TfL, Councillors, Camden's Cycling Champion, Camden Cycling Campaign, the Metropolitan Police and other stakeholders to improve safety for cyclists across the borough by:*
- *Providing direct and safe routes for cyclists across the borough, improving existing and developing new cycle facilities where possible;*

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<sup>41</sup> Mayor's Transport Strategy (TfL, 2010)

- *Improving signposting and measures along cycle routes, especially on quieter residential streets, to make them safer for cyclists;*
- *Camden will explore introduction of two-way cycling on one-way streets where appropriate to allow cyclist to travel to their destination using quieter streets more suited to cycling;*
- *Improve safety for cyclists in the vicinity of HGVs and other large vehicles;*
- *Continue to install ASLs at signalised junctions, particularly where cyclist collisions have been recorded;*
- *Camden will explore the possibility of introducing 20mph speed limits and speed reduction measures on appropriate roads across the borough;*
- *Camden will continue to analyse TfL collision data, prioritising neighbourhoods and corridors with high cyclist casualty figures.*
- *Camden will use education and promotional campaigns to encourage good road user conduct and improve cyclist safety.*
- *Camden will provide adult and child cycle training and run awareness campaigns to improve cyclist safety.*

### **Powered Two Wheelers**

- 5.225 Motorcycle use has increased across London in recent years which may partly be attributable to the exemption of congestion zone charging for motorcyclists.
- 5.226 Despite making up only a small proportion (around 5 per cent) of the traffic in Camden, motorcycle casualties comprise almost 20 per cent of all KSI on Camden's roads.
- 5.227 The highest contributory factors for motorcyclist collisions over the last three years were either a 'poor turn manoeuvre' or 'driver failed to look properly'. Some of the key ways to improve safety for powered two-wheelers includes:
- Motorcycle awareness campaigns to encourage other drivers to be more aware of motorcyclists and educate motorcyclists on good highway conduct;
  - Enforcement of vehicle speeds and design of junctions to slow vehicle speeds;
  - Improved training for motorcyclists;
  - Improve carriageway surfaces through the maintenance programme;
  - Keeping the highway environment free from unnecessary clutter which may obstruct sight lines around junctions;

### **Policy 3.3**



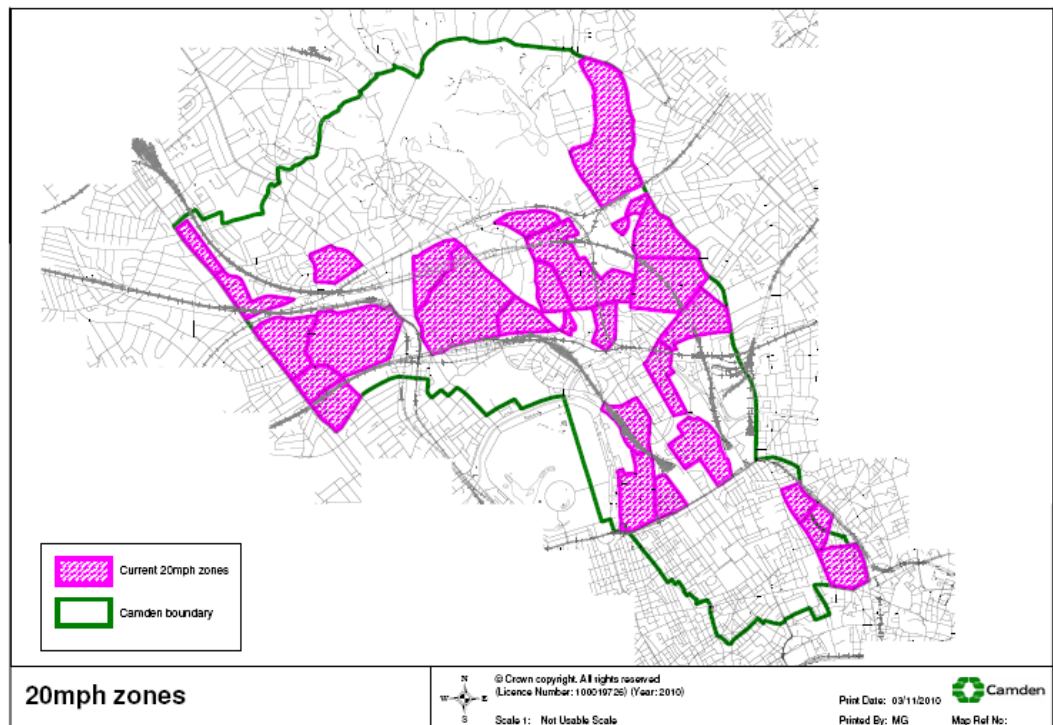
5.228 *Camden will work with stakeholders to deliver measures that improve road safety for powered two-wheelers across the borough including speed reduction measures, road safety awareness and education campaigns for motorcyclists and other drivers, and other engineering measures.*

### 20mph Zones

5.229 Speed restrictions are extremely effective at reducing both the number and severity of casualties. 20mph zones within Camden have achieved average casualty savings of 53 per cent where new zones have been introduced. This includes 34 per cent savings in KSI.

5.230 20mph zones tend to be bounded by major roads which are often not included within the zone, although many of these major roads have high numbers of residential properties. In some locations it may be appropriate to include major roads within 20mph zones. The location of existing 20mph zones are shown in **Figure 5.3**.

**Figure 5.3 - Existing 20mph zones in Camden**



5.231 Traditionally, Camden has implemented vertical traffic calming measures such as speed tables, humps or cushions to support 20mph speed limits. These measures can be expensive and in some cases create noise pollution. Moreover, they have always been introduced into areas based on a history and trend of the number and severity of casualties.

- 5.232 Responses from residents who participated in the Camden Talks Spring survey in 2010, indicated that 82 per cent agreed that, given the casualty saving benefits, Camden should consider the wider use of 20mph zones on roads with a history of collisions and casualties. This dropped to 44 per cent agreement for the use of 20mph zones on roads without a casualty history. However, with 33 per cent and 17 per cent neither agreeing nor disagreeing, this still represented a good level of support for introducing 20mph zones in areas without a history of casualties
- 5.233 Careful consideration should be given to the appropriateness of locations for such measures and, where possible, consideration should be given to alternatives. While there is often widespread support for speed reduction, particularly to help reduce casualties and road danger in residential areas, there are often strong views both in favour and against physical calming measures such as road humps. Camden has therefore investigated alternative options to reduce speed.
- 5.234 In 2006, Camden piloted an experimental 'minimal' 20mph zone in the Belsize area, the aim of which was to minimise the use of physical measures. Traditional 20mph zones have calming on every street. The pilot zone introduced calming on through roads only and reduced signage, to assess whether this would achieve similar results to the traditional 20mph zones. Results demonstrate that speed reductions were achieved on both calmed and uncalmed roads in the zone, although they were inevitably greater on calmed roads.
- 5.235 Camden Town's 'Naked Street' adopted a different approach. Through decluttering (removal of unnecessary guardrailing, bollards and street signs), footway widening and removal of yellow lines and formal pedestrian crossing points, the project aimed to encourage more personal responsibility and awareness among all road users. The scheme, which was implemented on Camden High Street between Camden Town underground station and the markets, also improved the streetscape, including increased tree cover, which improved the attractiveness of the area. Camden's 'Naked Street' achieved speed reductions to below 20mph in some places, while surveys indicate the number of pedestrians on the street has increased by up to 2,000 people an hour.

#### **Policy 3.4**

- 5.236 *Camden will continue to explore the introduction of 20mph zones across the borough particularly focussed on areas that have higher numbers of collisions and casualties. Where appropriate and possible, the speed reduction measures will aim to introduce alternatives to the widespread use of traffic calming measures.*

### **Education and Training Initiatives to Improve Road Safety for Younger People**

- 5.237 The World Health Organisation (WHO) estimates that road accidents are the leading cause of death among children and young people aged 10 - 19 years in the UK. Camden has an annual programme of events, campaigns, performances and workshops that seek to educate school age children about different aspects of road safety.
- 5.238 Child injuries (0-16 years of age) on Camden's roads have dramatically fallen over the 10 year period 1999 to 2009, although there has been a slight increase in the last couple of years. This is in part the result of the Council's planned and progressive road safety education and training programme. Road safety education, training and publicity campaigns also support a variety of national policies for young people, including Every Child Matters (Being Healthy, Staying Healthy, Enjoying and Achieving) and Camden's Children and Young People's Plan (safe from road accidents).
- 5.239 Child KSIs have risen in recent years, however, this must be considered in the context of very low numbers. For example, there was only one child KSI in 2007. Since then numbers have increased to four in 2008 and nine in 2009. In the case of the latter, two of these were on the TLRN.
- 5.240 The Council together with partner organisations hosts a number of annual events and initiatives aimed at promoting road safety awareness both within schools and across the borough.
- 5.241 The Camden Public Safety team also organises annual tours of road safety performances and workshops, which address a variety of risk taking behaviours and encourage young people to make safer choices as pedestrians, car passengers and future drivers. In 2009-10, a total of 4,655 children and young people participated in road safety performances and workshops in Camden schools.

#### ***Policy 3.5***

- 5.242 *Camden will continue to promote road safety in schools through a programme of annual events and initiatives, provision of resources for teachers to incorporate road safety education within the school curriculum, and through partnership initiatives.*

### Child Injury Inequality

- 5.243 The link between social deprivation and childhood road injury is well proven. However, more recent research also shows that young people of African and Caribbean origin are more at risk of road injury than other ethnic groups, especially because they tend to live and go to schools in areas of highly trafficked streets and where, therefore, there are more likely to be accidents<sup>42</sup>.
- 5.244 In 2007 Camden was one of several boroughs funded by TfL to deliver local projects to address child injury inequality. In 2008 a survey by Camden of 'at risk' young people and parents revealed that poorer areas had fewer road safety features in the environment and they recommended improved road safety education in schools using 'dramas, games, visitors and DVDs'.
- 5.245 In response, Camden developed a new road safety drama called 'Crossing Over'. Urban in style and language it tackled many of the risk taking behaviours highlighted in the 2008 survey. As a result, a monitoring survey indicated that over 74 per cent of respondents stated that they might or definitely will act safer on the roads as a consequence of seeing the drama.
- 5.246 Camden is also developing an on-line resource for young people aged 15 and above which addresses personal safety, risk and consequences, responsibility for young drivers and young passengers.

### Policy 3.6

- 5.247 *Camden will continue to ensure that education training and publicity programmes meet the needs of the most vulnerable young road users, through targeted education, training and publicity projects, engaging with education, health and community groups, and ensuring mainstream interventions are inclusive and accessible to all young people in Camden.*

### Adult Education and Community Engagement

- 5.248 Education and community engagement are key to ensuring that improvements to the transport system are socially inclusive and environmentally responsible. Camden aims to improve community engagement to inform people about transport issues that affect them and to better understand the views of a diverse range of local people on transport issues. Primary targets are older people and people with disability or mobility impairments. This has clear links with Camden's

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<sup>42</sup> The Mayor's Equality Framework for London: 'Equal Life Chances for all'

manifesto to protect older, vulnerable residents and support independent living.

- 5.249 One engagement project is with the Kilburn Older Voices Exchange (KOVE) which has given older and vulnerable people a voice in their campaigns. The campaigns have addressed better transport facilities for older and vulnerable pedestrians such as the provision of community seating.

### ***Policy 3.7***

- 5.250 *Camden will continue to share information and engage and support disadvantaged and vulnerable communities in getting their voices heard about transport issues that affect them.*

### **Pedestrian and Cycling Safety Skills for Young People**

- 5.251 Pedestrian skills training supports wider sustainable transport and health policies by promoting walking as a healthy travel mode. The training also seeks to reduce child pedestrian injuries by giving children the skills and knowledge to make independent journeys more safely which is one of the key objectives of Camden's Children & Young People's Plan.
- 5.252 Primary schools are the target audience, particularly those in areas of deprivation, because of the proven relationship between social deprivation and increased child casualty risk. Training is highly interactive, enabling children to acquire road safety language, skills and attitudes which are fitting for their age. Research by the DfT has found that practical roadside training is more effective than classroom presentations and results in behavioural changes in children that have seldom, if ever, been reported from traditional road safety education<sup>43</sup>.
- 5.253 Safer travel to school is also facilitated by the School Crossing Patrol Officers across the borough providing a safer crossing point for children from approximately 18 schools. These patrols act as reassurance to many parents giving them the confidence to allow their children to walk to school independently.
- 5.254 The cycle training programme, which is discussed earlier in this chapter, also significantly increases children's ability to safely travel to school independently by bicycle.

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<sup>43</sup> DfT research report 1996

**Policy 3.8**

5.255 *Camden will continue to work with younger children to develop their skills, confidence and road safety awareness for travelling either on foot or by bicycles. School crossing patrols will continue to be supported by the borough in appropriate locations to encourage safe walking as an appropriate transport mode to school.*

**Anti-Drink and Drug Driving Interventions**

5.256 In 2009, drink drive deaths across the UK were at their lowest level since 1945, but data shows that drug driving is a growing problem amongst young people, who are often unaware that the same penalties as drink driving apply. It is estimated that young people are twice as likely to be driven by someone who is impaired by drugs than by alcohol.

5.257 Attitudes to driving behaviour are formed during childhood, well before driving age, and are influenced by the values and actions of family, friends and other role models. Camden Public Safety has adopted a variety of interventions over the past 5 years, such as road safety drama workshops and short documentary films for 14-18 year olds, designed to raise awareness of the risk to young drivers and passengers, of drink driving and drug driving.

5.258 Camden has also expressed its support for police powers to extend to high visibility random breath testing, in order to raise awareness and redress the current experience of most drivers for whom the likelihood of being stopped is minimal.

**Policy 3.9**

5.259 *Camden will continue to deliver anti-drug and anti-drink drive drama/workshops and other education programmes work with the police to raise awareness of the risks, penalties and consequences of this behaviour.*

**Reducing Crime on the Transport Network**

5.260 Anti-social behaviour and crime are significant deterrents for some people when considering how to travel; in many cases some people will not venture out at all for fear of personal attack. Women, older people, Lesbian, Gay, Bisexual and Transgender groups (LGBT) and those with a disability, especially a mental health disability, are particularly vulnerable. Hotspots for crime include those associated with the night-time economy such as Camden Town and the West End, as well as at transport hubs. Hampstead Heath has also been highlighted by LGBT groups as an area of concern for that community.

- 5.261 Reducing crime, the fear of crime and anti-social behaviour, helps people to feel safe when walking and cycling and using public transport. Through the Council's Community Safety Partnership, Camden has been successful in reducing crime in the borough. Over the three year period 2005-2008, Camden saw a reduction of 30 per cent in crime identified as a priority for the borough, and an overall reduction in the crime rate of more than 10,000 offences a year.
- 5.262 In addition there were 12 crimes per million passenger journeys on London's buses and 13 per million passenger journeys on the underground and DLR in 2008/09. This represents a fall in crime on the bus, Underground and DLR network.
- 5.263 Nevertheless, the perception of crime among many remains high and the Council needs to address these concerns.
- 5.264 One of the themes of Camden's Community Strategy is 'a safe Camden that is a vibrant part of our world city'. It is a key challenge for Camden and its partners to make it a safer place for local residents and those who travel from, to and around the borough. This relates to the transport infrastructure, interchange and pedestrian experience. Camden has developed a partnership approach to tackle anti-social behaviour and crime that links the offer of services with enforcement options.

### ***Policy 3.10***

- 5.265 *Camden will work with partners to tackle crime and anti social behaviour, and personal security, particularly on public transport. The Council seeks to ensure a clear and consistent approach to tackling anti social behaviour and crime on the transport network and within the public realm by focusing on the drivers of crime and supportive interventions to reduce crime.*

### **Reducing Anti-Social behaviour on the bus network**

- 5.266 Camden has a strong night-time economy and many people who visit the borough in the evening rely on the Night Bus service for transport. The bus network can provide an opportunity for crime and anti-social behaviour which can impact on users' ability to travel at certain times, particularly at night. Although Camden experienced a 27 per cent reduction of theft and robbery on buses between 2007-8 and 2008-9, Camden's Community Safety Partnership Scanning Report on bus related incidents in Camden (2010), shows that there are still issues related to night buses.
- 5.267 Camden Town presents particular challenges for transport related safety. Most people who visit Camden Town are from across London and it remains a key challenge to transport visitors from Camden Town to their destinations safely without a detrimental impact on our local

communities. Camden has developed a partnership approach to tackle anti-social behaviour and crime that links the offer of services with enforcement options.

### **Policy 3.11**

5.268 *The Council will continue to work with partners to reduce bus network related crime, particularly on routes where there are higher incidents of crime and anti social behaviour, as well as issues relating to the design and location of bus stops in areas of high usage.*

### **Design Against Crime**

5.269 Camden comprises many areas which, due to popular attractions, their central location and public transport accessibility, attract high numbers of visitors. This means they also tend to be more sensitive to problems of crime and public safety. Camden Town, Covent Garden and areas around the British Museum and British Library are considered sensitive areas.

5.270 However, good public realm design can help to reduce crime and threats to public safety. Community Safety Officers as well as the Police review all major transport projects to assess them for their potential impact on crime. From 2010 onwards local authorities will also have a legal duty to assess the potential impacts of Council projects on crime through a Crime Impact Assessment.

5.271 Technological advancements have played a significant role in reducing crime and improving public confidence. CCTV cameras on buses and at rail stations have helped to tackle crime and anti social behaviour on public transport and around transport interchanges. Improving lighting, permeability and sightlines, and encouraging walking within the urban realm can significantly increase natural surveillance which, in turn, can reduce crime and fear of crime.

5.272 In response to public concerns about anti-social behaviour around public seating, the Council has developed the “Camden bench”, an innovative public seat design that minimises opportunities for crime. It is the first bench in the UK to be tested and approved by the Home Office for stopping ram-raiding vehicles.

### **Policy 3.12**

5.273 *Camden will continue to work with partners and relevant agencies to investigate ways to improve the design of the public realm to reduce crime.*



### **Partnership Working with the Metropolitan Police**

- 5.274 The Council works closely with the Metropolitan Police to address personal security, crime and anti-social behaviour in the borough.
- 5.275 Camden participates in events throughout the year in partnership with Crime Prevention Officers and Safer Neighbourhood Teams (SNTs) to provide advice on reducing bike theft and encourage bike registration through the police endorsed immobilise.com web site. Camden has the second highest level of cycle theft of all London boroughs, although this should be considered within the context of significantly higher cycle use. The wards that consistently have the highest level of cycle theft within the borough include Bloomsbury, and Holborn and Covent Garden. The Council will work with the police to enforce ASLs for cyclists.
- 5.276 Following a number of recent cyclist fatalities on London's roads resulting from collisions with heavy goods vehicles, officers have also worked with the Metropolitan Police initiative 'Exchanging Places' to raise awareness of potential conflicts between HGVs and cyclists.
- 5.277 Partnership work with the Metropolitan Police as part of the Camden Community Safety Partnership, as well as London buses, continues to address problems of anti-social behaviour on buses particularly night services in and around Camden Town.
- 5.278 The Safer Travel at Night (STAN) guide is another joint initiative between the Council and Metropolitan Police which aims to reduce concerns over travelling at night by public transport. It is particularly aimed at women to deter them from using unlicensed taxis.

### ***Policy 3.13***

- 5.279 *Camden will continue to promote initiatives such as reducing bicycle theft, targeting anti-social behaviour, improving cycle safety and safer travel at night in partnership with the Metropolitan Police and other agencies.*

## ***Objective 4 – Effectively manage the road network to manage congestion, improve reliability and ensure the efficient movement of goods and people***

### **Introduction**

- 5.280 The Mayor of London has made smoothing traffic flow a priority. This means creating “less stop-start traffic, more predictable journey times and fewer obstacles for pedestrians”. This benefits the economy in several respects, including improving reliability for people getting to their workplaces, and the efficient and timely delivery of goods and services for businesses.
- 5.281 Reducing congestion was the second top priority concern among residents who responded to the Camden Talks Spring survey in 2010.

### **Managing Congestion in Camden**

- 5.282 Congestion in Central London results in large part from increasing demand for limited and decreasing road space. As well as its network management duty (which is described further in the following section) which has a particular focus on day-to-day management and short-term improvements, Camden takes account of medium and longer term issues.
- 5.283 Responding to growth in traffic through increased road capacity (such as widening roads or building bigger junctions) is not a feasible or appropriate option for Camden. Instead, the main focus of congestion management in Camden is to reduce and limit the demand for motor vehicle travel. Measures such as:
- Enhancing facilities to encourage walking and cycling, which means fewer vehicles are required on the road;
  - Regular liaison with TfL to improve public transport services in the borough;
  - Encouraging less traffic and parking demand through measures such as car clubs;
  - Reducing inappropriate parking through appropriate parking restrictions and enforcement. Camden Council is currently undertaking a review of parking policy and existing parking arrangements; and
  - Implementation of other central London initiatives such as Legible London and the Cycle Hire scheme.

**Policy 4.1**

5.284 *Camden will continue to manage congestion on the road network through encouraging mode shift away from motor vehicles to modes that have less impact on “road space” whilst recognising the needs for reliable and efficient freight and bus services and the role of the strategic road network.*

**Minimising the Impact of Works on the Highway Network**

- 5.285 There are thousands of “openings” of the road and footway surface every year in the borough, particularly along major roads. This not only causes travel delays and congestion but can undermine the structural safety of the roads.
- 5.286 The network management duty introduced by the Traffic Management Act 2004 requires local authorities to improve co-ordination and establish new ways of working with statutory utility companies (those with a right to carry out works on the road – gas, water, power and telecoms) in order to address the issues of congestion.
- 5.287 Camden was one of the first authorities in England to produce a *Network Management Plan* in response to the Act and has produced a recent update called Network Management Duty Report ([camden.gov.uk/nmp](http://camden.gov.uk/nmp)). In fulfilling its network management duty, the Council will ensure that it does all that is reasonably practicable to keep traffic moving to support the aspirations of the Mayor of London. Informing people of works is also very important and all works that affect the footway and carriageway are recorded on the Council’s online Street Works register ([maps.camden.gov.uk/StreetWorks](http://maps.camden.gov.uk/StreetWorks)).
- 5.288 Camden was a founding member of a new roadworks scheme called the London Permits Scheme which was introduced in early 2010. The scheme “aims to ensure that roadworks are undertaken in the least disruptive manner, are completed as quickly as possible and are coordinated so all works required at a single location take place at the same time, wherever practical”.
- 5.289 Camden was also one of two authorities in the UK to trial a lane rental scheme between 2002 and 2004. This successfully reduced journey times, improved standard of reinstatements, improved work site safety standards and increased co-ordination. The Mayor of London supports the introduction of a lane rental scheme which would apply charges to those carrying out roadworks on the busiest parts of the network during peak traffic periods.

### **Policy 4.2**

5.290 *The Council will continue to work with TfL, neighbouring boroughs and utility companies to ensure that disruption from works on the road network are minimised (consistent with our network management duty) and information on those works will be provided to residents, businesses and groups.*

### **Review of Traffic Signals**

- 5.291 In order to avoid unnecessary traffic signals being installed, TfL (who install and manage all traffic signals across London) is encouraging boroughs to only propose new traffic signals where there is no realistic alternative. Boroughs are also being encouraged to consider removing any existing traffic signals that are no longer considered necessary or are no longer serving the purpose for which they were originally introduced<sup>44</sup>.
- 5.292 Changing the operation of a junction or pedestrian crossing facility needs to balance the needs of all users (road safety, congestion, etc) as well as economic and environmental factors.
- 5.293 Camden was one of the first London authorities to remove traffic lights from a junction and replace them with a shared space in Great Queen Street. This has created a much more attractive public realm in a busy central London location. Camden will consider the possible removal of further signals where they are no longer considered necessary at appropriate locations as part of area wide transport schemes.

### **Policy 4.3**

5.294 *Camden will not install traffic signals as part of new schemes unless there is no other realistic alternative for traffic control and, where appropriate, will consider the potential removal of signals as part of future area-wide schemes.*

### **Construction Management Plans**

- 5.295 The impact of construction and demolition on local amenity and the highway network is a material planning consideration and therefore falls within planning rules. Where construction impacts are particularly significant, Camden will ensure they are managed through a Construction Management Plan (CMP).
- 5.296 Camden has been at the forefront of developing the use of CMPs and there is an expectation amongst developers and local people that we will utilise them when it is considered appropriate. In an area like the

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<sup>44</sup> *Guidance on developing Local Implementation Plans (TfL, 2010)*

borough of Camden, all construction and demolition work will cause at least some noise and disturbance.

- 5.297 A CMP sets out the reasonable measures a developer should take (both on site and often off site) to minimise and manage impacts on highway safety and congestion, stability of adjacent properties, and environmental impacts such as dust prevention. It is a “proactive” rather than a “reactive” way of dealing with construction issues, and the process encourages developers to work with the Council and local people in managing the construction impacts from the early planning stage.

#### ***Policy 4.4***

- 5.298 *Camden will ensure that Construction Management Plans are completed for appropriate larger construction and demolition projects to manage and, where possible, mitigate negative impacts associated with those construction activities. Traffic serving construction sites will be coordinated with other street improvements and maintenance works to minimise impacts.*

#### **Managing Freight Deliveries**

- 5.299 Road freight and the delivery of goods are vital to businesses and offices in Camden. However, the range and volume of deliveries, the historic layout of buildings that were not necessarily designed to accommodate larger vehicles, the width of streets and limited available kerbspace combine to create significant challenges for freight delivery.
- 5.300 Camden Council carefully considers waiting and loading restrictions to ensure a fair allocation of road space for freight as well as other road users while ensuring the smooth flow of traffic.
- 5.301 Compliance with waiting and loading restrictions is a concern for the Council. For many companies, the cost of incurring penalty charge notices (PCNs) is sometimes factored into their operating costs, which deters them from complying with waiting and loading restrictions. In this situation Camden generally liaises direct with the business and/or delivery company to resolve the problem through, for example, revised delivery practices, changing local loading restrictions, changed delivery times and encouraging consolidation practices.
- 5.302 The Council has conducted a programme of waiting and loading reviews across Camden’s town centres and commercial areas. The objective of these reviews has been to simplify waiting and loading controls and increase short stay parking provision and loading facilities where possible. This includes reviews and leaflets for use by businesses, their customers and suppliers, for Kilburn, Chalk Farm, Hampstead, Bloomsbury and Camden Town. Further waiting and loading reviews may be included as part of wider area wide schemes.

**Policy 4.5**

5.303 *Camden will continue to consider waiting and loading restrictions, by liaising with businesses and other relevant stakeholders, as part of wider schemes where appropriate to ensure fair allocation of road space.*

**Freight Initiatives and Partnership Working**

5.304 Improvements to London's freight transport infrastructure are crucial to ensure that the capital attracts new investment and retains its current status as a prime location for international and national business. Vital to every business and organisation is the ability to move goods and services efficiently.

5.305 Although Camden's policies and plans enable the reduction of non-essential car trips, especially commuting, ensuring that deliveries can take place reliably and efficiently is essential for continued economic success.

5.306 The London Lorry Control Scheme (LLCS) is an environmental measure that restricts the movements of heavy goods vehicles during the night time and at weekends to specific roads in Camden to help minimise noise pollution in residential areas during these hours. More information about the scheme, which is enforced by London Councils, can be found at <http://www.londoncouncils.gov.uk/services/londonlorrycontrol/>

5.307 Camden has been an active member of the Central London Freight Quality Partnership (CLFQP) which was set up between London boroughs, TfL, freight operators, businesses and other stakeholders to work together on freight transport issues within central London. The partnership has helped Camden and other local authorities gain a greater understanding of freight issues from the hauliers' and business owners' perspectives, and helps to promote best practice.

5.308 Similar efficiencies can be achieved by targeting deliveries to office buildings which account for a significant proportion of freight traffic in London. An innovative micro-consolidation centre using cycle freight is operating in the City of London. An assessment of the operation by the Clear Zone partnership showed delivery by the cargo cycles compared to conventional vehicles achieved a 52 per cent reduction in CO2 per parcel delivered. An extension of this service or a scheme investigating walking freight in Camden would have similar benefits for climate change and air quality.

5.309 Camden will work in partnership with logistics providers and local businesses to seek to establish the potential use of freight

consolidation centres by businesses, including cycle and walking logistics, particularly those in the south of the borough.

- 5.310 Camden's GIS mapping of the borough's transport assets includes the location and details of loading bays which can assist the freight sector in planning deliveries, particularly to congested parts of Camden. Loading bay information can be found at <http://maps.camden.gov.uk/parkingbays/>.

#### **Policy 4.6**

- 5.311 *To support the efficient movement of goods efficiently the Council will continue to work with the freight industry to support sustainable freight practices and share information that improves the reliability and efficiency of deliveries.*

#### **Servicing Management Plan**

- 5.312 Transport of goods and materials is essential to the economy, but needs to be managed to minimise environmental impacts and congestion. Goods vehicles can also have negative impacts on local amenity and traffic movement in certain areas especially where many delivery points are located close together (such as town centres) as well as residential areas and narrow roads. The manoeuvring of goods vehicles can also cause obstructions and congestion, inconvenience and danger to pedestrians and other road users, and potentially damage to footways.
- 5.313 Planning restrictions provide an opportunity for the Council to ensure that the impacts of freight deliveries are minimised. One of the key mechanisms is through Service Management Plans (SMPs) for new developments. These allow Councils to control the frequency and size of service vehicles, where and when they will stop and load, and the routes to and from the site. SMPs ensure, where appropriate, loading facilities are provided off-street and have minimal impact on congestion on the road network. However planning restrictions cannot be applied to businesses that have not changed use (which may have greater loading requirements) and which can result in difficulties at particular locations.

#### **Policy 4.7**

- 5.314 *Camden will manage the impacts of larger new developments on the public highway through Servicing Management Plans that are in line with the objectives and other policies of this strategy.*

### Freight Consolidation

- 5.315 Freight consolidation involves grouping individual deliveries at a 'consolidation centre' that are destined for the same locality. Goods are then delivered to the end destination by fewer vehicles with fuller loads. Use of these consolidation centres has potential benefits for reduced emissions and congestion effects of loading. It also enables deliveries within tight street patterns and with less disruption to the local area. Given the constraints in Camden and other central London locations, consolidation centres would most likely be located in outer London.
- 5.316 Several areas in the south of the borough such as Covent Garden and Tottenham Court Road have a mix of small independent retailers that could benefit from freight consolidation. Larger businesses with more complex delivery requirements have developed more efficient practices and already consolidate loads in most instances. A retail consolidation centre which has been established to serve Regent Street could be extended into Camden, reducing the number of freight vehicles entering the borough.
- 5.317 Similar efficiencies can be achieved by targeting deliveries to office buildings, which account for a significant proportion of freight traffic in central London. An innovative micro-consolidation centre using cycle freight is operating in the City of London. An assessment of the operation by the Clear Zone Partnership showed delivery by the cargo cycles compared to conventional vehicles achieved a 52 per cent reduction in CO<sub>2</sub> per parcel delivered. An extension of this service into Camden would have similar benefits for climate change and air quality.

### ***Policy 4.8***

- 5.318 *Camden will work in partnership with logistics providers and local businesses to seek to establish the potential use of freight consolidation centres by businesses, particularly those in the south of the borough.*



***Objective 5 – Develop and maintain high quality, accessible public streets and spaces and recognise that streets are about more than movement***

**Introduction**

- 5.319 Streets make up more than 80 per cent of public space in the UK. Streets have many functions: they are not just corridors to move through on the journey from A to B, they are also places where people interact, play, shop, live, work, socialise and sit. Improving the quality and attractiveness of public space to facilitate these activities can play a fundamental role in creating a successful neighbourhood. It can promote social inclusion, encourage walking and cycling, economic activity and regeneration, and improve personal security.
- 5.320 Camden Council has made significant improvements to the public realm in recent years. This includes improved street cleansing, lighting, street maintenance, decluttering and implementing streetscape upgrades in key locations such as Fitzroy Square, Bedford Square, Lincolns Inn Fields and Whitestone Pond. Camden aims to mainstream public realm into all projects and as part of planning conditions for significant new development proposals. Enhancing public space was the fourth top priority for residents who participated in the Camden Talks 2010 spring survey.
- 5.321 The development of area-wide larger transport projects ensures that urban design and traffic engineering expertise are developed in tandem. Transport officers seek input from officers involved in community safety, urban design and other areas of expertise within the Council as well as with ward Councillors, local groups and institutions where appropriate. This helps to ensure that local issues are addressed and local people are actively involved.
- 5.322 The Streetscape Design Manual ([www.camden.gov.uk/ccm/content/transport-and-streets/transport-strategies/streetscape-design.en](http://www.camden.gov.uk/ccm/content/transport-and-streets/transport-strategies/streetscape-design.en)) is a key policy document that has helped the Council to deliver better streetscapes across the borough and ensure consistency of design and quality. Several key themes are highlighted in the manual including simplification of the street environment (especially through decluttering), ongoing maintenance, accessibility and social inclusion and consideration of local heritage and character.
- 5.323 Improvements to the streetscape also support the Council's aspirations for key "places" in the borough which are being developed as part of the Council's placeshaping programme. Camden's identity and sense of place contribute directly to its economic success and its attractiveness as a place to live and work. It is widely recognised that a

successful public realm is one of the key components of achieving a successful place.

- 5.324 Camden cleans 180 miles of streets each week and encourages residents, businesses and visitors to maintain a clean environment through waste and recycling opportunities. The Transport team will work with Environment Services to maintain a clean environment.
- 5.325 Camden also recognises the contribution of street trees to the natural and built environment. Camden will continue to investigate opportunities for more street tree planting as part of transport schemes, such as at Euston Circus and Cobden Junction. This is consistent with the Mayor of London's target to significantly increase street trees across London.

### ***Policy 5.1***

- 5.326 *Camden will continue to work with the local community, Councillors, Council staff and other stakeholders to introduce improvements to the public realm and streetscape environment. This will help to encourage more people to walk and cycle as well as make Camden a better place to live and work.*

### **Naked Streets**

- 5.327 The "Naked Street" concept was pioneered and promoted by Dutch Traffic Engineer Hans Monderman, who found that people's behaviour in traffic was influenced more by the built environment than the conventional road layout with traffic signs and controls.
- 5.328 The Naked Street concept is based on the principle of reducing people's reliance on lines, signs and signals as a cue for moving in public space. Focusing on such physical prompts reduces people's awareness of other road users, often to the detriment of pedestrians. The absence of signs and signals therefore compels people to pay more attention to what other people are doing: as behaviour is often unpredictable, this requires everyone to be more vigilant of what is happening around them and move with caution. This results in lower traffic speeds and a safer and more pedestrian friendly environment. Traffic signs and road markings are minimised to comply with regulation, and only then the smallest, simplest and least intrusive format should be used.
- 5.329 The Naked Street principal was introduced in the upgrade of Camden High Street (North) to make the street safer and more attractive, reduce vehicle speeds and make it easier and safer for pedestrians to cross the road. Completed in August 2010, it became London's first "naked street" using the following measures:
- Removing all bollards and guard railing;
  - Removing unnecessary signs;

- Careful positioning of lamp columns to reduce the need for separate posts and traffic signs;
- Combining CCTV cameras onto lamp columns;
- Removal and/or relocation of BT phone boxes.

### ***Policy 5.2***

5.330 *Camden will assess the impacts of the recently completed Naked Street in Camden High Street and will consider further “naked street” schemes or measures for other locations across the borough.*

### **Street Lighting**

- 5.331 Street lighting plays an important role in transport, particularly in relation to road and community safety. Good lighting can reduce fear of crime and encourage more activity and social interaction in the street. This, in turn, increases the level of natural surveillance in an area. As a result, good street lighting helps to reduce the fear of crime and encourage walking particularly in the evening and during the winter months.
- 5.332 Effective and properly designed lighting on the streets is also particularly important for the safety of drivers, cyclists and pedestrians, especially for those with vision impairments.
- 5.333 The Council is committed to minimising the impacts of street lighting on the environment in a number of ways, including:
- Maintaining existing street lighting to maximise the life and energy efficiency of equipment;
  - Purchasing the most energy efficient street lighting technology;
  - Purchasing lighting columns that are manufactured from recyclable materials wherever possible;
  - Using electricity from renewable sources (and where possible reducing the use of electricity) to supply street lighting and illuminate traffic signs;
  - Shifting to “white” lighting which is more efficient and effective than orange and high-pressure yellow lamps reducing the use of electricity and the number of lamp columns required.
  - Investigating the need to reduce the levels of lighting and the hours of lighting in carefully chosen places.
- 5.334 Officers continually review the best available technology for future schemes and initiatives. The Council has been given approval from the Department for Transport, for example, to use highly reflective non-illuminated bollards (in place of illuminated bollards) which reduce installation and maintenance costs as well as electricity consumption.
- 5.335 In recent years, the Council has taken opportunities to reduce street clutter by using lighting columns for multiple purpose such as to mount

signs, and in certain situations, combine street lights with other street furniture items e.g. CCTV, traffic lights and cycle parking.

### **Policy 5.3**

- 5.336 *Camden will continue to focus on street lighting improvements to improve the public realm that benefit road safety, community safety, sustainability and cost efficiency.*

### **Street Clutter**

- 5.337 Reducing street clutter is at the heart of Camden’s Streetscape Design Manual and the Mayor of London’s “Better Streets” initiative. Reducing street clutter aims to simplify the streets and reveal the character of the area. Street furniture should be minimised as much as possible but provided where there is a benefit to users, such as seating, cycle parking and wayfinding signage. Reducing clutter helps to make streets more attractive and reduces obstacles for pedestrians, which is particularly important in congested areas and for those with mobility impairments.
- 5.338 Camden’s Streetscape Manual establishes a clear policy to minimise street clutter through general guidelines for all highway projects being undertaken. This includes limiting both the number and size of traffic signs wherever possible, combining the functions of street furniture (e.g. lighting columns and signs) and removing unnecessary street furniture including bollards, guardrail and illuminated signs.
- 5.339 Camden has made good progress in reducing street clutter especially in town centres and areas of cultural and tourist importance. Recent projects have sought to mainstream street clutter reduction so that it is included when considering all larger area-wide projects as well as when pavements are being maintained.

### **Policy 5.4**

- 5.340 *Camden will continue to focus on street clutter reduction as part of capital transport projects to make our streets more attractive and to improve conditions for pedestrians.*

### **Guardrail Removal**

- 5.341 Since post war times, Pedestrian Guard Rail (PGR) has been extensively used as a means of segregating motor vehicle traffic and pedestrians with the aim of improving road safety. As a result, there remains extensive guardrail in urban areas including Camden.
- 5.342 The DfT’s ‘Manual for Streets’ (2007) and the Mayor’s “Better Streets” initiative both adopt an approach which moves away from considering streets as corridors to move through as efficiently as possible, and

towards streets as 'places' with character and identity, built form, and aesthetic considerations. The experience of being in a street should be a positive one: they should be attractive places to enjoy, where people may dwell and socialise.

- 5.343 The removal of guardrail may produce safety benefits. Where there is unpredictability, people take more care. Given its uncertain benefits and associated costs, Camden considers that guardrail should only be provided (or retained) where it can be demonstrated to achieve safety benefits that cannot be delivered by other measures. Camden uses a robust guard rail assessment process considers all road users to identify where PGR is necessary on safety grounds. In line with these procedures Camden has removed a significant amount of guard railing across the borough.

### ***Policy 5.5***

- 5.344 *Camden will continue to assess the impacts of recent PGR removal and consider further removal of PGR for the benefit of the streetscape where the assessment methodology for guardrail provision shows that it is safe to do so.*

### **Road and Footway Maintenance**

- 5.345 The roads and footways in Camden inevitably deteriorate over time both through use as well as through the large number of public utilities "openings". Camden invests a significant amount of funding towards maintaining the highway network for many reasons including improving safety for drivers, cyclists and pedestrians, reducing noise which results from uneven surfaces, reducing trip hazards, and as part of the Council's statutory defence against insurance claims.
- 5.346 The footway and road resurfacing works are prioritised through survey information from regular inspection of surfaces, contractors' input (areas of most complaints or areas that are causing concern), insurance claim information, pedestrian flows and statutory utilities works.
- 5.347 Severe weather events can have a significant impact on the condition of road surfaces. The winter of 2009/10, for example, was particularly severe and caused widespread damage to many of Camden's roads which has required significant investment to amend.

### ***Policy 5.6***

- 5.348 *Camden will continue to invest in maintaining the roads and footways across the borough to ensure that Camden's streets are maintained for safety and comfort.*

### **Maintenance of Bridges and Structures**

- 5.349 There are a wide range of structures in Camden – road over rail bridges, rail over road bridges, bridges over Regents Canal, historic tram subways, railway tunnels, pipe subway tunnels and pedestrian subways. Responsibility for many of these structures lies either exclusively or jointly with the Council.
- 5.350 Camden undertakes load assessments, feasibility studies, strengthening, reconstruction, periodic inspections and maintenance works on all the Council owned bridges and ensures that these are also carried out on bridges owned by others.
- 5.351 Funding for bridge assessment and strengthening works is provided to the boroughs in London based on a London-wide prioritisation strategy that ensures that maximum use is made of available funding and that those structures most at risk on the most important routes are dealt with first.

#### ***Policy 5.7***

- 5.352 *Camden will continue to maintain Camden owned bridges in the borough to ensure safety of people as well as to increase the lifespan of structures to reduce extremely expensive major strengthening or reconstruction works.*

### **Management of Highway Assets**

- 5.353 Camden maintains a highway Asset Management Program (AMP), a fully mapped inventory of assets that lie on Camden's public highway. This includes street signs, parking restrictions, traffic signals, lamp columns and bus lanes. Over 220,000 separate entities have been captured, enabling a full electronic adaptation of the streetscape. The AMP is currently a stand-alone electronic mapping system and much of the information is also available on Camden's web site.
- 5.354 To continue to develop this valuable resource, a formal Highway Asset Management Plan (HAMP) is currently being produced which will provide staff with more knowledge of the existing assets and help them better manage and maintain these assets in a cheaper and more efficient manner.

#### ***Policy 5.8***

- 5.355 *Camden will continue to develop its assessment management programme and complete a HAMP to improve management of highway assets.*

### **Streetscape Design Manual**

- 5.356 The Streetscape Design Manual is a design guide for the Council's own highway works as well as for contractors, developers, public utilities and other private agencies working in Camden. The Manual covers a wide range of topics from general issues of conservation to detailed instructions in the use of footway materials.
- 5.357 The Manual is designed to complement other existing guidance and regulatory documents, such as the Traffic Signs Regulations and General Directions 2002, filling in the 'gaps' where necessary, particularly where Camden has a preferred design within permitted variances. Its purpose is to raise the standard of street works consistently throughout the borough.
- 5.358 The Manual is a key policy document that has helped the Council to deliver better streetscapes across the borough, through all of its smaller scale interventions. It helps to bring a consistent approach to design and quality, as well as develop a more holistic approach together with maintenance and capital funding.
- 5.359 The Manual, which is available on the Council web site at <http://www.camden.gov.uk/ccm/content/transport-and-streets/transport-strategies/streetscape-design.en>, is currently in its second edition and was last updated in 2004. Although the document is still very relevant, there are several elements of the document that need to be updated to reflect changes in legislation and policy, such as sustainability and improved public realm. As a result, the Council is reviewing the Manual with a view to providing an updated edition in 2011.

### ***Policy 5.9***

- 5.360 *Camden will continue to use the Streetscape Design Manual in all street works that are planned or carried out in Camden and will review and update the Manual in 2011.*

***Objective 6 – Ensure the transport system supports Camden’s sustainable growth and regeneration as well as enhancing economic and community development***

**Managing Sustainable Growth in Camden**

- 5.361 Land use planning and transport are intrinsically linked. By shaping the pattern of development and influencing the location, scale, density, design and mix of land use, planning can help to reduce the need to travel, reduce the length of journeys and make it safer and easier for people to access jobs, shopping, leisure facilities and services on foot, by bicycle, and on public transport.
- 5.362 New development or redevelopment of existing land or buildings must comply with planning policy and must have planning permission issued in order to be implemented. Applications for planning permission can only be refused for non-compliance with planning policy.
- 5.363 Planning policy in Camden is set out in planning policy documents, including the London Plan (produced by the Mayor of London) and Camden’s Local Development Framework (LDF).
- 5.364 Camden’s transport policies outlined in the LDF promote sustainable travel and integration of development with transport provision and seek to:
- Promote development that will encourage travel by walking, cycling and public transport and not permit development that will depend on travel by private motor vehicles;
  - Locate development that generates high numbers of additional person trip in locations with good to excellent access to public transport;
  - Encourage mixed use development to reduce the need and extent of travel;
  - Ensure that the amount of parking provided as part of development is the minimum necessary. In areas that have good to excellent access to public transport, the Council expects new developments to be car-free (i.e., they will not include off-street parking and occupiers would not be eligible for on-street parking permits). Car-free development can still provide off-street parking for disabled drivers who are also eligible for on-street parking permits;
  - Ensure all impacts of development are mitigated through appropriate management of servicing, construction and travel behaviour;
  - Ensure that there is sufficient capacity in the transport network to accommodate any additional trips generated by a development; and
  - Ensure development is properly integrated into the surrounding highway and wider transport network.



**Policy 6.1**

5.365 *Camden will continue to guide development so that it is well integrated with the transport network, minimises impacts on congestion and promotes sustainable modes of travel such as walking, cycling and public transport. Camden will ensure mitigation measures and transport improvements, secured as part of planning permission for development, align with objectives and challenges described by the Transport Strategy as well as allowing for flexibility to changes over time.*

**Camden's Placeshaping Areas**

5.366 Place-shaping is the process of driving change by local authorities and their partners, and has become a core concept in government and local authority strategies. For Camden, place-shaping is about taking the opportunity to think and act strategically about investment decisions and service improvements in the interests of general health and wellbeing across the borough.

5.367 The place plans produced as part of the Council's placeshaping programme seek to develop more holistic, cross-departmental planning and investment for particular priority areas to develop a coherent sense of place. These areas include Kings Cross, Camden Town, Euston, Swiss Cottage, West Hampstead, Gospel Oak, Kilburn, Kentish Town and Bloomsbury/Tottenham Court Road.

5.368 Camden's identity and sense of place contribute directly to its success as a borough to live in, a borough for businesses, and a borough that people want to visit. Transport has a key role to play in developing the sense of "place" and can contribute to an area's economic success and its attractiveness as a place to live and work. It is widely recognised that a successful public realm is one of the key components of achieving a successful place in a variety of ways. The quality of the local streetscape, for example, has an immediate impact on people's desire to walk and cycle. The cost of Camden's transport and social infrastructure that will be needed to support Camden's growing residential and commercial population will in part be met by Camden's Community Infrastructure Levy when it is set (see paragraph 5.370).

**Policy 6.2**

5.369 *The Council will continue to integrate its transport programme with other placeshaping initiatives to support the development of a sense of "place" and contribute to an area's economic success and its attractiveness as a place to live and work*

### Camden's Growth Areas

- 5.370 As described in Camden's LDF, the Council's overall strategy for managing future growth in Camden is to promote the provision of homes, jobs and other facilities in areas with significant redevelopment opportunities at, or near, transport hubs, and support appropriate development at other accessible locations, with more limited change elsewhere.
- 5.371 King's Cross, Euston, Tottenham Court Road, Holborn and West Hampstead will accommodate most of Camden's future growth. These areas are identified in the London Plan as suitable for large scale redevelopment or significant increases in jobs and homes, and are based around transport interchanges where increased capacity is planned. The majority of these areas will contribute towards the continued success of Central London and to London's national and international role, as well as benefits to the borough and the local area.

### *Policy 6.3*

- 5.372 *Camden will ensure that transport schemes support Camden's growth areas and other areas of intensification to ensure the transport network and urban realm can accommodate future demand.*

### Camden's Town Centres

- 5.373 Town centres play an essential role in people's lives, providing access to shopping, entertainment, leisure, culture, public services and transport; they are concentrations of the physical and social resources needed to carry on economic, social and cultural life. Their sustainable growth and successful operation are essential to the well-being of the communities they serve by both satisfying needs for goods and services and providing a sense of place and so fostering a sense of local identity.
- 5.374 Town centres play a particularly important role in deprived neighbourhoods and are important to those on low incomes by providing local access to goods and services, including food, at affordable prices. They also provide relatively routine or 'gateway' jobs (mainly through the retail sector) often to people who live relatively locally.
- 5.375 Camden recognises the vital contribution that town centres provide to the communities they serve and transport plays a key role in developing and maintaining the economic and social vitality of these centres. Transport investment will be focussed in the town centres to improve the public realm, provide access to and within town centres, and improve safety and security for those that live, work or visit the area.

**Policy 6.4**

5.376 *The Council recognises the economic and social importance of Camden's town centres and will continue to work to ensure the transport network supports the continued growth of the boroughs main town centre areas.*

**Developer Contributions to Transport Improvements**

- 5.377 Given the high levels of congestion on Camden's existing transport network and the highly built up nature of the borough, new development can have a particularly significant impact in transport terms. Developments therefore often generate a need for improvements to Camden's streets and public spaces and to the wider transport network in order to mitigate townscape, transport and environmental impacts, as well as to ensure that new development integrates well into surrounding areas. The need for improvements can be generated both by larger schemes and by smaller schemes that when taken together have a cumulative impact on an area.
- 5.378 Planning obligations (or "Section 106 agreements") are private agreements negotiated between local planning authorities and developers to make a development acceptable which would otherwise be unacceptable in planning terms. In terms of transport this is usually to mitigate a development's impact on the public highway (e.g. through increased public transport provision).
- 5.379 The Community Infrastructure Levy (CIL) is a new levy that Camden Council could choose to charge on new developments under the *Planning Act 2008*. The Council has yet to make a decision on the formal adoption of CIL and what charges might apply. CIL can be used in place of Section 106 contributions. Funds raised through CIL would be spent on new or enhanced infrastructure in the borough and could be spent as a contribution towards utility works, transport or social infrastructure (such as education, housing, leisure, cultural and other community facilities). Throughout this document Section 106 contributions are intended to include CIL contributions when and if these apply.
- 5.380 Developer contributions towards transport and highway improvements can be categorised into three general types:
- Improvements to public transport which are usually provided by TfL for developments that will have a significant impact on the available capacity of public transport provision;
  - Highways works directly outside the development site such as repaving the footway and changes to vehicular crossovers;
  - Pedestrian, cyclist and environmental improvements in the wider area.

- 5.381 Whilst individual developments in many cases may be small, over the years there has been a vast amount of development in inner London, which cumulatively has led to an over strained transport network. The strain is evident to anyone wishing to travel around inner London when they regularly have to contend with overcrowded buses, underground carriages, trains and footways.
- 5.382 In recognition of this cumulative impact, Camden will continue to seek contributions towards highway, traffic management, changes to parking and loading restrictions, projects such as shopmobility that address inequality, public realm improvements, improved lighting and signage, street furniture, major and area-wide transport schemes, cycle parking, car club spaces, electric vehicle bays and other transport improvements that support the transport policies detailed in this document and the LDF.

### ***Policy 6.5***

- 5.383 *Camden will ensure that contributions secured from developers can be used to deliver the policies and objectives outlined in this transport strategy and the LDF. Camden will seek flexibility within the legal agreements securing such contributions so that the funds are, where possible, not tied to a specific improvement. This means that as Camden policy and LIP objectives evolve over time the funding can still be used to deliver the current objectives at the time of implementation.*

***Objective 7 – Ensure the transport systems supports access to local services and facilities, reduces inequalities in transport and increases social inclusion***

**Introduction**

- 5.384 Camden's local centres and community-based services are essential for providing the physical and social resources needed to carry on economic, social and cultural life at a local community level. They provide goods and services, local job opportunities, education and training as well as access to social networks. Good transport and land use planning can help to ensure that people benefit both from local opportunities as well as those further afield.
- 5.385 Barriers to accessing the transport network can however limit the choices people have and the opportunities available to them, resulting in isolation, reduced social cohesion, and a deteriorating quality of life. If everyone is to benefit from Council investment in the borough, the transport needs of all Camden's population should be considered to ensure that, as far as possible, people – particularly the most vulnerable and disadvantaged - are not excluded.

**Inequality and Social Inclusion**

- 5.386 The Equalities Impact Assessment undertaken for this Strategy identifies the following key areas that need to be improved to address accessibility, inequality, promote social inclusion and improve the quality of life particularly for the key equalities strands, but also for all Camden's population, :
- Improve safety and perception of safety, address road danger, personal security, anti-social behaviour/crime;
  - Provide affordable and easily available modes of transport - walking, cycling and public transport ;
  - reduce the dominance of traffic – both volume and speed – to encourage social interaction on the street, including play for young people;
  - Improve reliability of the transport network, including public transport provision;
  - Provide alternatives to public transport, such as transport services;
  - Improve provision and range of information such as timetables, signage, wayfinding, announcements;
  - Improve the physical environment: remove of street clutter and physical obstacles, but include facilities to support mobility impaired people such as seating, toilet facilities, dropped kerbs or step free crossing;
  - Improve treatment by staff on public transport;
  - Provide parking for people with disabilities

5.387 Transport's contribution to supporting regeneration and social inclusion means addressing all of these issues, all of which are priorities for the Council, and are addressed elsewhere in this section and in the Strategy.

### **Supporting Access to Employment**

- 5.388 Camden is a major employment centre within London, with a strong and diverse economy that makes an important contribution to the economy of London and the UK as a whole. It is the third largest employment centre in London after the City and Westminster, and eighth largest in the UK<sup>45</sup>.
- 5.389 Camden employment is very well served by public transport with the latest data from TfL<sup>46</sup> indicating that 91 per cent of working age people has access to employment by public transport.
- 5.390 The majority of jobs in the borough are generally located south of the Euston Road (61 per cent), with the highest concentration in the Holborn and Covent Garden area - one of the most accessible parts of the borough. There are also concentrations of employment at Euston, Camden Town and the town centres in the north of the borough. All these areas are served by at least one Underground or Overground station and will benefit from current or planned improvements to the transport network.
- 5.391 Significant new employment areas are planned for Kings Cross, Euston and Tottenham Court Road. Employment growth in these areas will be supported by significant investment in public transport that serves these areas as well as continued investment in public realm and other local improvements.
- 5.392 Thousands of people travel into the borough every day to work and take advantage of employment opportunities. More than 80 per cent of jobs located in Camden are taken by people living outside of the borough. Camden has large numbers of highly skilled residents, and a large student population. However, the borough also has significant numbers of low skilled residents, high numbers of Council tenants, and areas of deprivation and unemployment. It is also vital that the transport system supports access to major employment areas for those living within the borough.

### ***Policy 7.1***

5.393 *The Council will seek to secure a strong economy and ensure no-one is excluded from employment opportunities in the borough through*

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<sup>45</sup> Annual Business Inquiry, 2007

<sup>46</sup> Benchmarking data for London boroughs, 2010

*ensuring the delivery of transport infrastructure that supports the availability of inclusive, sustainable transport choices.*

### **Access to Local Services**

- 5.394 Camden is home to a wide variety of services and facilities which are of great importance to the life of the borough and to those who live, work and visit it. These services and facilities include education and childcare, health, police and emergency service facilities, libraries, sport and leisure facilities, culture and arts, advice centres, community halls and places of worship.
- 5.395 In a recent TfL assessment of the level of accessibility to employment and essential services, Camden scored very highly when compared with many other London boroughs. On average, the travel time to reach destinations on foot or by public transport, such as education, health services, quality food shopping and open spaces is under 15 minutes.
- 5.396 These facilities not only enhance the opportunities for all, they are also a focus of activity and community life and provide character and identity to local areas and the borough as a whole.
- 5.397 Many local facilities and services are located in Camden's town centres that are all served by at least one rail line and/or by buses. Camden's future strategy for growth aims to ensure, through the planning system, that the services and facilities to support residents and visitors to the borough are provided in suitable locations.
- 5.398 The way that public and private sectors provide services can also be adapted further to ensure that investment decisions are made to promote accessibility to all. NHS Camden, for example, proposes to change the way in which primary health care is delivered over the next 5-10 years. It has a programme of improvements including consolidation and modernisation of facilities to develop fewer larger health facilities and moving towards a network of 'polyclinics' accessible from all parts of the borough. These plans are set out in the NHS Camden Strategy Plan 2008-2013.

### ***Policy 7.2***

- 5.399 *Camden will work with TfL and other transport providers to seek to ensure services and facilities are accessible to all across the borough and that they are provided in suitable locations to meet the increasing demand caused by a growing population.*

## Severance

- 5.400 People living on or close to highly trafficked main roads can experience a high degree of severance from nearby facilities and services, while many pedestrians and cyclists find these roads intimidating.
- 5.401 TfL statistics regarding the TLRN indicate that while its own road network makes up only 5 per cent of roads in London, it carries 33 per cent of London's traffic. There are also borough roads that carry a significant level of traffic and therefore also act as a barrier to movement.
- 5.402 The severance impacts of Euston Road are of particular concern to the Council. Some of the most deprived communities of St Pancras and Somers Town to the north of Euston Road, are effectively cut off from services and amenities south of the borough. Similarly, those south of the borough are somewhat cut off from the extensive facilities and main line rail stations to the north of Euston Road. Large numbers of people using St. Pancras International and Kings Cross stations have created an extra pressure on this busy street.

### **Policy 7.3**

- 5.403 *Camden Council will work with TfL to improve conditions for pedestrians and cyclists using the TLRN, to reduce severance, and to improve safety and access to services and opportunities for all Camden people.*

## Accessible Information

- 5.404 Making sure good information is available as well as making it accessible are as important as providing effective services. The Disabilities Rights Commission (2007) found that, for people with impairments, information was the first hurdle to overcome when accessing transport services, particularly for people with mental disabilities. It is often presented in a way that many cannot understand, and travel staff are not always responsive to their needs.
- 5.405 Signage has a very important role to play, especially for people with visual or aural impairments. Legible London, the pedestrian wayfinding programme for London, is being rolled out in Camden. Countdown, TfL's real-time bus information at bus stops, is currently being reviewed. The Council can play a role in ensuring that web-based information is displayed at public sector locations throughout the borough, such as hospitals, libraries and leisure centres.
- 5.406 Although much information is available electronically, paper-based information still has an important role to play: it is portable and available for those without mobile or internet access. A lot of information, such as bus, tube, cycle and spider maps, is available in



printed format, along with published timetables at bus stops and underground stations.

#### **Policy 7.4**

*5.407 Camden, in partnership with transport providers, will seek to improve information that is easily accessible and in different formats so that it is appropriate for different users of the transport network and increases social inclusion.*

#### **Providing an Accessible Transport System**

5.408 Providing a range of transport options and increasing people's choices of how, where and when they can travel increases their independence. As highlighted above, the level of accessibility to employment and essential services in Camden on foot or by public transport is very high. Walking and cycling, particularly for shorter journeys to local centres, are available for most people and Camden is committed to supporting both modes. As well as being more easily available and affordable walking and cycling are also more sustainable and healthy.

#### **Improving Passenger Access at Bus Stops and Rail/Underground Stations**

5.409 Over the last 15 years, Camden has implemented a programme of bus stop modifications across the borough to increase accessibility for people with mobility impairments and meet DDA requirements. The bus is the only city-wide accessible public transport mode and it is therefore important that the Council continues to make more bus stops accessible to ensure that this mode of transport is easy to use.

5.410 These improvements include ensuring that trees, guardrail or street furniture do not obscure bus doors, the kerb is the correct height to allow a ramp to be deployed from the bus for wheelchair users and maintaining the carriageway and footway surfaces to a high standard. The Council will continue to liaise with key stakeholders including TfL to ensure that bus stops are placed in locations that are convenient for users

5.411 Across London a number of initiatives will improve the level of accessibility across the rail/ underground network. The number of step-free rail stations in London is proposed to increase to 160 by 2017, an increase from 101 in 2010. New tube and rail rolling stock will be compliant with rail vehicle accessibility regulations (RVAR) and the London Overground network is becoming more accessible as part of the significant upgrade of the Overground network.

**Policy 7.5**

5.412 *Camden will continue to work with TfL and other stakeholders to increase the accessibility of public transport, both at bus stops and rail and Underground stations across the borough.*

**Physical Accessibility of the Street Environment**

- 5.413 People with a physical, mental or sensory disability often face significant physical barriers to travel, and in some cases they may prevent people from leaving their homes.
- 5.414 These barriers can include narrow or cluttered footways, poor road or footway surface, lack of pedestrian facilities, insufficient “green man” crossing times, kerb heights, steep dropped kerbs and lack of tactile paving for guidance.
- 5.415 Introducing accessibility improvements that address physical barriers along with regular maintenance and cleansing on the public highway is essential to ensure that people with physical impairments or difficulties can move freely, easily and safely. Camden has completed many schemes in recent years to improve accessibility, with a particular focus on areas that have high numbers of people with mobility impairments and/or pensioner households as well as primary access routes to key destinations such as public transport nodes, shopping centres, and specialist resource centres for people with mobility issues.
- 5.416 For some people with physical disabilities, a car is essential to access local facilities and amenities. The Council aims to improve access for disabled people that require a car by providing bays at key locations as well as in residential areas so that accessibility is addressed for the whole journey.
- 5.417 People with mental or learning disabilities are among the most isolated people in the community, but addressing their travel needs can be more challenging. Often, the main barrier for people with a mental disability is lack of confidence, and accessing relevant and easy to understand information is essential. Camden conducts independent travel training that covers basic skills of how to use streets and the different public transport networks. This provides them with the knowledge and confidence to encourage independent living for the longer term.

**Policy 7.6**

- 5.418 *The Council will continue to ensure that physical barriers in the street environment are considered for amendment as part of highways schemes in order to improve accessibility, particularly on primary access routes to key local destinations. Camden will also continue to assess requests for disabled parking and conduct independent travel training to enhance independence.*

**Camden's Passenger and Transport Services**

- 5.419 The Council provides a range of alternative transport services for those who cannot use the public transport network. Currently, the Council offers a number of schemes for the elderly and those with mobility impairments through the Transport for Adult Social Care team, which are designed to promote independence, choice and mobility for older and disabled residents. The Service also manages the Freedom Pass which offers free travel for older people and those with a disability on almost all public transport.
- 5.420 These services include Shopmobility and Scootability which loans Personal Mobility Vehicles (PMV) and manual wheelchairs, PlusBus – a free door-to-door minibus service and the Taxicard scheme for residents with serious permanent impairments. More details of Council transport services can be found at <http://www.camden.gov.uk/ccm/navigation/transport-and-streets/passenger-and-accessible-transport/>

**Policy 7.7**

- 5.421 *The Council will continue working with statutory, voluntary and private sector partners to see to provide transport services to those living within the borough with mobility impairments.*

***Objective 8 – To ensure that the provision of parking is fair and proportionate by considering the needs of all users, whilst also encouraging sustainable travel choices***

**Introduction**

5.422 Like many other central London boroughs the provision of parking in Camden is a contentious issue. Limited kerb space coupled with a continually growing demand for parking from both residents and businesses make the Council's task of providing an equitable and sustainable parking system a difficult one. However, the Council is committed to simplifying current parking arrangements as well as making the system of permitting and enforcement fairer and more transparent. The changes that Camden is making to its parking regime are outlined in the *Annual Parking and Enforcement Reports* ([camden.gov.uk/pep](http://camden.gov.uk/pep)).

**Controlled Parking Zones (CPZs)**

- 5.423 Controlled Parking Zones are in place throughout Camden to balance demand for parking in a way that maintains the economic viability of the borough, yet reduces congestion and the inessential use of vehicles, thereby helping to ensure the free flow of traffic, including cycles and pedestrians, on the public highway.
- 5.424 Demand for parking in Camden far outstrips the supply of available kerbspace. Camden aims to maintain an active balance between the different demands – from residents, their visitors, businesses and their deliveries and customers, and access for disabled people, while reducing the provision for long-stay commuter-based parking.
- 5.425 The controlled times and boundaries of each of the 19 CPZs across Camden have been designed to meet the demands of that local area. We will continue to consider CPZ arrangements, particularly within the current Parking Policy Review, to ensure the structure is fair and transparent for all road users. The types of parking bays provided will aim to ensure efficient use of kerb space at all times of the day when demands between visitors and residents vary.
- 5.426 In order to make parking simpler for users, the Council aims to make parking times consistent between different areas in Camden as well as with the restriction times in other neighbouring boroughs.
- 5.427 The current Parking Policy Review is examining the structure and times of CPZs to see if there is scope to simplify parking controls. This will take account of sustainability issues.

- 5.428 Camden is also currently considering the possibility of merging some CPZs to further simplify parking. However this creates new challenges as larger areas may encourage people to drive for short journeys in their neighbourhood given the greater freedom to park over a wider area.

### ***Policy 8.1***

- 5.429 *The Council, through working with stakeholders and other London boroughs, will seek to ensure that parking regulations continue to develop to meet the needs of residents, visitors, and businesses. We aim to ensure that all regulations are fair, simple and well balanced, to keep traffic moving, avoid unsafe and obstructive parking, and to make sure there is good access for pedestrians, cyclists, passenger transport, and private motorists.*

### **Permit Charges**

- 5.430 Parking permits and charges enable demand for parking to be managed and better matched with parking space supply. There are a number of different types of permits including resident, visitor, disabled, and business permits as well as dispensations for builders, special events, hospitals, weddings and funerals. Each permit is provided to meet the needs of different users and to try and ensure adequate parking provision is available.
- 5.431 The Council listens to all permitting issues raised and considers how best to meet the various needs of those within the borough by reviewing the types of permits offered and how they are provided. The Council aims to ensure the permit scheme is fit for purpose and accessible to users, fair and transparent, easy to use and flexible as parking demands continue to change.

### ***Policy 8.2***

- 5.432 *Through the provision of permits, the Council will ensure resident, visitor and business parking requirements are being met in a balanced way. Where possible we will aim to make it simpler to purchase permits and enhance customer service through simplifying the application processes, while providing a robust scheme that aims to avoid misuse.*

### **Emission Based Parking System**

- 5.433 Camden was one of the first authorities in the UK to introduce emission-based permit charging for residents' on-street parking in 2007. Permit charges are set at levels proportional to the CO<sub>2</sub> emissions that vehicles produce for a given journey on the 'polluter pays' principle: the minority whose cars are causing greater damage to the environment are charged proportionately more for their parking permits while owners of lower polluting vehicles pay less. Parking

charges therefore are not only designed to more closely match demand and supply but also to encourage the purchase of vehicles with lower emissions.

- 5.434 The Council undertook groundbreaking research on the environmental costs of different vehicles as a function of vehicle size over their whole life cycle. It assessed the operational implications of vehicle emissions, but also the environmental footprint of a vehicle's manufacture and disposal, and that of the production, distribution and transmission of the fuel used for operation. The research shows that larger engine vehicles have greater environmental impacts in terms of resource use, air pollution and CO<sub>2</sub> emissions.
- 5.435 To assist in developing a charging system and tiers appropriate to the composition of Camden's fleet, data was collected in November 2006 on vehicles associated with resident permit applications throughout the borough. Based on the sample fleet data, charges were set so that the overall outcome would be revenue neutral, taking account of set up costs and inflation.
- 5.436 Camden's emission-based permit charging is based on four tariffs – one of the simplest structures for such schemes in the country. The tariffs relate to Vehicle Exercise Duty (VED) bands for vehicles registered on and after 1<sup>st</sup> March 2001 and to engine size for vehicles registered before 1<sup>st</sup> March 2001, in a simple and consistent way.
- 5.437 Emission-based parking charges were extended to include parking on the Council's housing estates in November 2009.

### ***Policy 8.3***

- 5.438 *The Council aims to ensure that permit prices are fair, proportionate and fit for purpose, and believes that the 'polluter pays' principle assists these aims. The Council aims to be transparent about policy changes in this area and provide updates in its Annual Parking and Enforcement Plan which can be found on the internet at [www.camden.gov.uk/pep](http://www.camden.gov.uk/pep).*

### **Parking Enforcement**

- 5.439 It is the Council's duty to keep traffic moving, manage the reduction of unsafe and obstructive parking, and make sure that there is good access for pedestrians, cyclists and all road users. There are high levels of compliance with parking regulations across the borough. Compliance levels continue to grow and the overall number of Penalty Charge Notices (PCNs) issued has reduced by 31 per cent over the last 5 years (from 2005/6 to 2009/10).

- 5.440 Camden recognises its role in addressing the concern that enforcement should be fair and reasonable, and that regulations across London can be inconsistent and confusing.
- 5.441 Camden adopts a fair and proportionate approach to the enforcement of parking restrictions, aiming to help drivers avoid PCNs by having regulations that are clearly identified and simple to understand.
- 5.442 Camden continues to address the problems caused by more serious offenders, persistent evaders and those committing fraud, including abuse of the blue badge scheme. Where possible we work with stakeholders to find solutions to their parking problems. By communicating clearly and comprehensively with drivers we aim to lower the level of unintended parking contraventions and reduce the number of challenges received on PCNs issued.

#### **Policy 8.4**

- 5.443 *Camden will continue to carry out parking enforcement in a fair and proportionate manner and aim to achieve further compliance of parking regulations and reduce the number of PCNs issued, by providing clear information regarding the parking rules in Camden. This includes compliance with the blue badge permit scheme. Camden will continue to play a leading role in working with TfL, London Councils and other London boroughs to ensure a simple and consistent approach is adopted across London. To help transparency, changes to Camden's parking policies will be stated each year in the Annual Parking and Enforcement Reports.*

#### **Parking for Motorcycles (and other powered two-wheelers)**

- 5.444 Camden recognise that the use of motorcycles can potentially deliver congestion and accessibility benefits, however they also contribute to parking pressure and noise and air pollution. While the volume of motorcycle traffic on Camden's roads is declining – a 12 per cent drop between 2001 and 2009 - this decrease is less than the reduction in other motorised traffic at 16 per cent.
- 5.445 Presently, motorcycles are the only form of motorised transport that can generally park in the borough for free – in motor cycle bays. A motor cycle parking strategy will be prepared by Camden to assess whether continuing free parking, especially in Central London, is appropriate.
- 5.446 It is acknowledged that the availability of parking is a major influence on the use of motorcycle vehicles, therefore, a motorcycle parking strategy will aim to find a balance between adequate parking provision and the 'encouragement' of motorcycles as a mode of transport.

5.447 In order to effectively manage the availability of on-street parking, provide fairer parking, and encourage the use of alternative modes of transport, it may be necessary to restrain demand on parking through policies.

***Policy 8.5***

5.448 *Camden will complete a motorcycle parking strategy to help develop a balance between the demand for (especially secure) parking and the desire of the Council to promote more sustainable modes of transport.*



## **Objective 9 - Support the delivery of a successful London 2012 Olympic and Paralympic Games**

### **Introduction**

- 5.449 The 2012 Olympic Games will bring the spotlight of international attention to the Capital. With its numerous venues, attractions and special events, London's cultural heritage will provide a backdrop for the Games for thousands of visitors. Their impression of the Games will therefore, to a large extent, depend on the quality of their experience of facilities throughout the whole city, including its transport network, streets and public spaces.
- 5.450 Although most of the activities will be held at the Olympic Park in east London, Camden will have an important role to play in ensuring that this impression of London is a positive one and securing a lasting impact for the borough. The King's Cross/St Pancras interchange in Camden will function as a gateway for European and international visitors, many of whom will stay in the borough, as well as the starting point for travel to the Olympic venues. Several Camden transport hubs and underground stations such as Holborn and Tottenham Court Road will bring visitors to the borough's theatres, museums, nightlife and parks.
- 5.451 The majority of the Olympic media will be accommodated in Bloomsbury and will have dedicated transport services from Russell Square to Olympic venues. The Olympic Route Network (ORN) will also pass thorough the borough, carrying members of the 'Olympic Family'<sup>47</sup> to and from venues. Supporting these services will be essential for the delivery of a successful Games.
- 5.452 Camden's Plan for the 2012 Olympic & Paralympic Games was launched in 2007 and can be viewed at [www.camden.gov.uk/ccm/content/leisure/olympics/file-storage/camdens-plan-for-the-2012-olympic-and-paralympic-games.en](http://www.camden.gov.uk/ccm/content/leisure/olympics/file-storage/camdens-plan-for-the-2012-olympic-and-paralympic-games.en) The plan sets out a vision of local people benefiting from the Games by getting more active and healthy, accessing cultural opportunities and volunteering, as well as making the most of the economic benefits of the Games by ensuring improvements to the public realm. Camden's Plan for 2012 captures these opportunities, identifies priorities and

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<sup>47</sup> 'The 'Olympic Family' comprises around 77,000 people of which approximately 50,000 will be in the UK and require transport on any one day during the Olympic Games. It includes athletes and team officials, members of National Olympic Committees and International Federations, media, VIPs, IOC, sponsors and Marketing Partners.

provides a framework for partners to plan and work together to bring the benefits of the Games to Camden.

### **Improving Accessibility on Key Routes**

- 5.453 Hosting the Olympic Games in 2012 provides London with a unique opportunity to develop and invest in projects which will leave a legacy long after the Games are over. As host to the Olympic Javelin service, much of the world's media and parts of the ORN, Camden must ensure that these activities allow for the development of projects which will benefit all within the borough.
- 5.454 For many international visitors arriving in London on the Eurostar, King's Cross will create their first impression of the city and many will stay at accommodation in the Bloomsbury area. It is therefore vital that these areas present the best possible face to the public and that improvements are made to the accessibility of key routes. Similarly many domestic travellers will come to the borough to make use of the high speed Javelin service operating to the Olympic Park in Stratford from St Pancras.
- 5.455 The Council, working closely with the ODA and LOCOG must ensure that the urban realm in these and other popular areas within the borough are safe, clean, accessible and welcoming to all.

### **Bloomsbury and the Russell Square Media Transport Hub**

- 5.456 During the Olympic Games, Bloomsbury will be home to over 5,000 media representatives from across the world who will be accommodated in hotels and student housing in the area. They will travel to and from Olympic venues on shuttle buses running from the Media Transport Hub in Russell Square which will operate between mid July to mid August 2012. This represents the most significant impact the Games will have on Camden. Russell Square also forms part of the ORN.
- 5.457 Since 2007 the Council has been working with key stakeholders and residents to deliver improvements to the public realm around Bloomsbury. As part of the Bloomsbury Vision two projects were developed – the Bloomsbury Corridor and Bloomsbury Streets for People – and includes improvements to Russell Square, Malet Street and Montague Place, Great Russell Street and Byng Place. These projects are currently being progressed and will be completed before the Olympic Games when these streets will be used by the 2012 Olympic Games Family for the operation of the Media Transport Hub.
- 5.458 Camden has been working with the London Organising Committee for the Olympic Games (LOCOG), the Olympic Delivery Authority (ODA) and TfL to ensure that their proposals are compatible with Camden's vision for Bloomsbury and to minimise the impact of the Media

Transport Hub on Camden's residents, businesses and visitors to the area.

- 5.459 The walking corridor between Bloomsbury and St Pancras International station is being improved, and will include pedestrian crossing facilities and the pedestrian signage so that the media can easily access public transport alternatives at St Pancras International if they wish.

### ***Policy 9.1***

- 5.460 *Camden will secure the benefits of the London 2012 Games for its residents and businesses and will mitigate as much as possible the negative impacts of hosting the media transport mall. Camden will continue to work with LOCOG, ODA and TfL to ensure that access to the Bloomsbury area remains as open as possible whilst delivering the successful operation of the media transport hub and the ORN.*

### **Euston to St Pancras Station Pedestrian Link**

- 5.461 The underground link between Euston and Kings Cross St Pancras stations is one of the most congested on the network at peak times<sup>48</sup> and is likely to intensify during the Olympic Games. Encouraging people to walk between the stations will help to reduce demand on the network and congestion, while also providing time savings and health benefits to people.
- 5.462 There are two walking routes between the stations. The first, along Euston Road, is dominated by traffic, with poor air quality. The numerous side streets and junctions, many with poor pedestrian facilities make this route unattractive. The alternative, via Brill Place and Phoenix Road, north of Euston Road, is a quiet, direct route linking Euston with the western entrance of St Pancras station.
- 5.463 Camden will improve the Brill Place/Phoenix Road link to provide an attractive walking route between the stations, including Legible London wayfinding boards, level footways and high quality lighting to enhance the area. Camden is working with TfL and station managers to provide consistent wayfinding within the stations to raise awareness of the route and to provide platform level information for visitors.

### **Javelin Rail Service**

- 5.464 During the Olympic Games a rail shuttle service will operate from St. Pancras International Station to Stratford International Station, for the Olympic Park. This temporary Games-time service, branded the 'Javelin', will run 10 trains an hour for most of the days and 12 trains an

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<sup>48</sup> MTS 2010

hour during peak times. Journey time from St Pancras to Stratford Station will be 7 minutes.

- 5.465 Camden will work with National Rail and London Underground to establish measures to manage the predicted large volumes of people to ensure they can use the stations safely and efficiently while also mitigating the impacts of high passenger flows on the public highway.

***Policy 9.2***

- 5.466 *The Council will work closely with the Olympic Delivery Authority (ODA), the London Organising Committee of the Olympic and Paralympic Games (LOCOG) and other key stakeholders to ensure the delivery of the operational plans for the Javelin service.*

## Chapter 6 – Investment in Camden’s Transport System

### *Introduction*

- 6.1 This chapter sets out the proposed programmes and schemes that Camden wishes to implement to make progress towards the Camden Transport Strategy objectives and the Mayoral transport goals.
- 6.2 The programme of investment comprises three programmes (as required by the LIP guidance issued by TfL) which are as follows:
- Corridors, Neighbourhoods and Supporting Measures– schemes that generally involve implementation of on-street measures and infrastructure, such as bus priority measures, improved cycle and pedestrian facilities, 20 mph zones and road safety schemes. It also includes “soft” measures such as education, training and publicity to promote travel by sustainable modes and safety (Smarter Travel);
  - Maintenance – schemes that involve maintenance of the road network and assessment and strengthening of bridges across the borough;
  - Major Schemes – large, area-based schemes that have a minimum value of £1 million that make a transformational improvement and assist in delivering the Mayor’s Better Streets Agenda.
- 6.3 All the projects in the Programme of Investment have been assessed against the criteria included in the SEA, to ensure that potential environmental issues associated with the CTS are considered in some depth and, where possible, negative impacts are minimised or mitigated.
- 6.4 To support programme delivery, each borough receives an annual financial allocation from TfL. TfL confirmed indicative funding allocations for London boroughs in May 2010, which was subsequently revised in November 2010 following the Comprehensive Spending Review. The revised allocations are summarised below in **Table 6.1**.
- 6.5 The specific interventions set out in this Delivery Plan will be delivered by April 2014 (except for the West End Major Scheme which, depending on funding, is expected to be completed by 2017) unless they are ongoing measures, eg road safety engineering measures and education and training. The interventions marked with an asterisk in **Table 6.2** (\*) are considered to be ongoing for the foreseeable future.

**Table 6.1** - Indicative Funding Allocations for Camden - 2011/12 to 2013/14

Funding source	2011/12 ('000)	2012/13 ('000)	2013/14 ('000)	Total ('000)
<b>Integrated Transport (Corridors, Neighbourhoods and Smarter Travel excluding Maintenance)</b>				
TfL - LIP Allocation	2,522	2,419	2,074	7,015
Council capital/revenue	540	540	540	1,620
Council Local Transport Fund – match funding	130	130	130	390
<b>Third Party Sources</b>				
Developer Contributions	500	300	0	800
Business Improvement District Funding	0	250	0	250
<b>Sub Total integrated transport</b>	<b>3,692</b>	<b>3,639</b>	<b>2,744</b>	<b>10,075</b>
<b>Maintenance</b>				
LIP Allocation	345	350	350	1045
Council Capital/revenue Funding	7,200	6,300	6,300	19,800
<b>Sub total maintenance</b>	<b>7,545</b>	<b>6,650</b>	<b>6,650</b>	<b>20,845</b>
<b>Major Schemes</b>				
Bloomsbury Streets-for-people LIP Major Scheme funding	1100	0	0	1,100
Britannia junction				
• LIP Major Scheme funding	770	0	0	770
• Developer contributions	0	0	0	0
• Council funding	0	0	0	0
West Hampstead				
• LIP Major Scheme funding	100	0	0	100
• Developer contributions	0	0	0	0
• Council funding	0	0	0	0
West End				
• LIP Major Scheme funding	150	1100	850	2,100
• Developer contributions	0	0	4000	4000
• Council funding	0	0	0	0
<b>Sub total Major schemes</b>	<b>2,120</b>	<b>1,100</b>	<b>4,850</b>	<b>8,070</b>
<b>Grand Total</b>	<b>13,357</b>	<b>11,389</b>	<b>14,244</b>	<b>38,990</b>

Note: Other than TfL funding for Integrated Transport, all funding for 2012-13 and 2013-14 is indicative only.

***Corridors and Neighbourhoods and Smarter Travel***

- 6.6 The **Corridors, Neighbourhoods and Supporting Measures** programme has been developed based on these funding allocations. This programme is made up of what were previously two separate programmes: Corridors and Neighbourhoods, and Smarter Travel. Combining these programmes into a single 'block grant' was required by the Mayor of London to provide greater flexibility and local accountability for the boroughs.
- 6.7 **Table 6.2** shows the three year programme of investment for the years 2011/12 to 2013/14 for the Corridors, Neighbourhoods and Supporting measures programmes based on the revised funding allocation announced by TfL in November 2010.

**Table 6.2** - Programme of investment for the Corridors, Neighbourhoods, and Supporting measures

Programme areas	Scheme	Ongoing scheme?	Funding (£,000s)				MTS goals					LIP objectives
			2011/12	2012/13	2013/14	Total	Econ. devt and pop growth	Quality of life	Safety and security	Opportunities for all	Climate change	
	<b>Russell Square</b> – Improve pedestrian and cycle environment through safety measures, replacing existing one way traffic gyratory with two-way working around the square, public realm improvements and relocated bus stops.	✓	840	0	0	840	✓	✓	✓	✓	✓	1, 2, 3, 4, 5, 6, 8, 9
	<b>Camden Town east (Camden High Street to St Pancras Way)</b> - Area-wide scheme to improve public realm environment, address road safety issues, improved pedestrian accessibility, bus stop improvements, increased permeability and facilities for cyclists and introduction of street trees. Linkages with potential new cycle hire locations, recent improvements to Camden Road station, public realm scheme at Britannia junction and Legible London.	✓	440	361	85	886	✓	✓	✓	✓	✓	2, 3, 4, 5, 6, 7
	<b>Borough wide road safety improvements</b> - To address road safety issues in the borough this project would include carrying out feasibility studies and introduction of road safety improvements (mostly from feasibility studies in previous years). This would include potential 20mph zones in areas with accident history and/or addressing particular accident hot spots..	✓	120	190	200	510		✓	✓			2, 3, 7
	<b>Bloomsbury Way/Theobalds Road</b> - Improved road safety measures to address collision history and investigate potential 20mph limit along corridor. Also improvements to public realm and cycling accessibility through the area.		190	0	0	190		✓	✓			2, 3, 5, 7
	<b>Fitzrovia</b> - Public realm improvements to complement potential major scheme for Tottenham Court Road. Investigate road safety measures, 2-way working for cyclists (lightweight measures) on one-way streets, Legible London, street trees, bicycle parking, decluttering, waiting/loading review and possible removal of traffic signals.		195	180	0	375	✓	✓	✓	✓		2, 3, 5, 7



Programme areas	Scheme	Ongoing scheme?	Funding (£,000s)				MTS goals					LIP objectives
			2011/12	2012/13	2013/14	Total	Econ. devt and pop growth	Quality of life	Safety and security	Opportunities for all	Climate change	
	<b>Kentish Town</b> - Project to address road safety issues along Kentish Town Road/Fortess Road/ Highgate Road corridor has some of the highest collision statistics in the borough. Other measures include investigate "rat-running", the potential for two-way traffic along Castlehaven Rd/ Hawley Rd to start to "unlock" the Camden Town gyratories, improved directional pedestrian signage, new street trees, cycle parking and cycle permeability improvements, and improvements to public transport accessibility.		0	24	315	339	✓	✓	✓	✓		2, 3, 5, 7
	<b>Kilburn</b> - Road safety and public realm improvements, increased street trees, bus stop location and accessibility review, cycling permeability and parking, improved pedestrian environment, lighting improvements, ASLs, car club bays, electric vehicle charge points, and decluttering.		15	282	0	297	✓	✓	✓	✓		2, 3, 5, 6, 7
	<b>Kings Cross to Holborn Cycle Route</b> - Using minimal engineering along much of the route along Judd St/ Hunter St/ Lambs Conduit Street this project would provide a high-quality north-south sign-posted cycle route. Project would comprise signage, junction improvements, improvement to public realm along Lambs Conduit Street (especially decluttering) to make it more cycle and pedestrian friendly, new street trees and potential removal of the roundabout at the junction of Bernard Street and Hunter Street.		0	190	0	190		✓	✓		✓	1, 2, 3, 5
	<b>Euston Station to St Pancras Station Walking Route</b> - Walking route improvements on Brill Place/Pheonix Road which between the two busiest rail stations in the borough. Measures to include lighting, footway surface improvements and improved crossings.	✓	100	0	0	100	✓	✓	✓	✓		3, 5, 6, 7, 9
	<b>Holborn</b> - Road safety and public realm improvements, extension of central median along Kingsway near Holborn tube station to improve pedestrian crossing opportunities across Kingsway, cycle parking, decluttering, street trees, investigate car club and electric vehicle bays, bus stop accessibility, review of parking/loading arrangements.		0	15	310	325	✓	✓	✓	✓		2, 3, 5, 9

Programme areas	Scheme	Ongoing scheme?	Funding (£,000s)				MTS goals					LIP objectives
			2011/12	2012/13	2013/14	Total	Econ. devt and pop growth	Quality of life	Safety and security	Opportunities for all	Climate change	
	<b>Kings Cross</b> - Area-wide cycling permeability improvements allowing 2-way cycling on 1-way streets. Also minor public realm improvements to include decluttering and new street trees.		40	0	0	40	✓	✓	✓	✓		2, 3, 5, 7
	<b>School Travel Plan engineering measures</b> - Road safety improvements for schools as well as improving pedestrian and cycling accessibility. Measures identified through school travel plans	✓	95	95	90	280	✓	✓	✓		✓	1, 2, 3, 6, 7
	<b>Borough Wide Cycle Parking</b> - Additional cycle parking provision which responds to requests and/or responds to borough cycle parking strategy.	✓	35	29	28	92	✓	✓	✓		✓	1, 2, 3, 8
	<b>West Hampstead</b> - Pedestrian improvements and study for road safety and cycling permeability improvements. Road safety and cycling measures would be introduced in 2012/13 if determined to be feasible.		29	323	0	352	✓	✓	✓	✓		2, 3,4,5,6,7
	<b>Hampstead</b> - Footway widening and junction improvements at the junction of Heath Street and Hampstead High Street (outside Hampstead Underground station). Project would also include decluttering, cycle parking, improvements to pedestrian crossing facilities and possible contribution towards greater cycling permeability.		0	12	283	295		✓	✓	✓		2, 3, 7
	<b>Gospel Oak</b> - Public realm and pedestrian improvements linked to regeneration of the area including improved pedestrian directional signage and crossing facilities, feasibility for sustainable urban drainage system, improved access to Hampstead Heath, improved lighting, car club bays, bus stop accessibility.		0	12	187	199	✓	✓	✓	✓		2,3,5,6,7
	<b>Swiss Cottage</b> - Road safety improvements, cycling route improvements and pedestrian access and permeability improvements, especially linking in with significant expansion of schools on Avenue Road.		15	314	0	329		✓	✓	✓		2, 3, 7
	<b>West Euston</b> - Public realm improvements for deprived area and will also improve pedestrian footway and crossing facilities, investigate potential for cycling and pedestrian permeability improvements, improved signage and lighting, street trees and increased cycle parking where appropriate.		0	15	274	289	✓	✓	✓	✓		2, 3, 5

Programme areas	Scheme	Ongoing scheme?	Funding (£,000s)				MTS goals					LIP objectives
			2011/12	2012/13	2013/14	Total	Econ. devt and pop growth	Quality of life	Safety and security	Opportunities for all	Climate change	
	<b>Electric Vehicle charging points</b> - On-street charge points to continue to enhance the network across the borough.	✓	51.5	30	18	100	✓	✓	✓	✓	✓	1, 8
	<b>Car Club Bays</b> - Support new car club bays across the borough as well as fund innovative car club schemes that increase social inclusion and reduce emissions.	✓	30	15	12	57	✓	✓	✓	✓	✓	1, 7, 8
	<b>ASLs</b> - Borough wide implementation of new or improved ASLs, especially where there has been existing issues with cycle safety.		30	27	0	57	✓	✓	✓	✓	✓	1, 2, 3
<b>Sub Total of Corridors and Neighbourhoods:</b>			<b>2225.5</b>	<b>2114.0</b>	<b>1802.0</b>	<b>6141.5</b>						
	<b>Cycle Training Programme</b> - Includes bikeability training, travel plan support, partnership working, Dr Bike sessions and microscooter training	✓	88	90	92.25	270.3	✓	✓	✓	✓	✓	1, 2, 3
	<b>Sustainable School Travel Initiatives</b> - Funding for a School Travel advisor and associated sustainable school travel initiatives	✓	68	65	51.2	184.2	✓	✓	✓	✓	✓	1, 2, 3, 7,9
	<b>Road Safety Education in Schools</b> - dramas and workshops to promote road safety among young people	✓	39.5	46.75	30.75	117.00	✓	✓	✓	✓	✓	3,7
	<b>Smarter travel initiatives for vulnerable groups</b> to promote equality and social inclusion	✓	21	26.5	22	70	✓	✓	✓	✓	✓	2,3, 7
	<b>Borough-wide Air Quality Campaigns and Promotion</b>	✓	6	16	13	35.0	✓	✓	✓	✓	✓	1
	<b>Area-based Smarter Travel Campaigns</b> - including feasibility study, to encourage behaviour change. Programmes will be linked to areas prioritised for engineering measures in the Corridors and Neighbourhood programme including Tottenham Court Road/Fitzrovia, Camden Town East, West Euston, Kentish Town and Kilburn.	✓	19	30	32	81	✓	✓	✓	✓	✓	1, 2, 3, 4, 6,7
	<b>Sustainable Workplace Travel</b> - funding for workplace travel plan advisor to work with developers to produce, review and assess travel plans that encourage sustainable travel	✓	15	15	15	45	✓	✓	✓	✓	✓	1, 2 ,6

Programme areas	Scheme	Ongoing scheme?	Funding (£,000s)				MTS goals					LIP objectives
			2011/12	2012/13	2013/14	Total	Econ. devt and pop growth	Quality of life	Safety and security	Opportunities for all	Climate change	
	<b>Travel Awareness</b> - borough-wide events to encourage sustainable travel	✓	16.5	13.25	12.5	42.3	✓	✓	✓	✓		2,3
	<b>Central London On-line Cycle Guide</b> - to include cycle routes, cycle hire locations, shops and cycle parking as well as advice		9	0	0	9		✓		✓	✓	1, 2, 6
	<b>Borough-wide Education, Training and Publicity Events</b> - linked to national and regional campaigns	✓	2.5	2.5	3.3	8.3		✓	✓	✓	✓	1, 2, 6
	<b>Air Quality - Dust Suppressant</b> - following successful trial on Euston Rd, the use of dust suppressants on roads in areas of the borough with poor air quality. The use of the suppressants has reportedly reduced local PM10 concentrations in the air by 20%.		3	0	0	3.0		✓			✓	1
	<b>Study to inform and improve Camden's Smarter Travel programme in future years</b> - based on a successful methodology used for Smarter Travel Town Centre project in Sutton, it will allow us to identify people with the propensity to change travel behaviour, and the best way to adapt how we communicate sustainable travel messages and the most effective interventions for different people and at different stages of change, to support and maintain sustainable travel choices.		9	0	0	9.0		✓			✓	1,2
<b>Sub Total of Smarter Travel:</b>			<b>296.5</b>	<b>305.0</b>	<b>272.0</b>	<b>873.5</b>						
<b>Sub Total of all the above (i.e. Corridors, Neighbourhoods and Supporting Measures):</b>			<b>2522.0</b>	<b>2419.0</b>	<b>2074.0</b>	<b>7015.0</b>						
	<b>St Giles</b> - improvement to public space associated with Crossrail at Tottenham Court Road. Includes pedestrianisation		0	0	2000	2000	✓	✓	✓	✓		1,2,3,5,6,7
	<b>Princes Circus</b> - Improvement of public space major scheme		0	0	2000	2000	✓	✓	✓	✓		1,2,3,5,6,7

Programme areas	Scheme	Ongoing scheme?	Funding (£,000s)				MTS goals					LIP objectives
			2011/12	2012/13	2013/14	Total	Econ. devt and pop growth	Quality of life	Safety and security	Opportunities for all	Climate change	
	<b>Euston Road - Kings X link</b>		100	0	0	100			✓	✓		1,2,3,5,6,7
	<b>Minor parking</b> - including disabled bays and motor cycles (subject to approval)	✓	336	120	120	576		✓	✓	✓		8
	<b>Local Transport Fund</b> - match funding for local transport schemes (subject to approval)		130	0	0	130	✓	✓	✓	✓	✓	1,2,3,4,5,6,7,8
	<b>York Way</b> - Improve public realm and road safety, provision of improved pedestrian crossing facilities, and improved safety measures for cyclists.		500	300	0	800		✓	✓	✓		1,2,3,5,6,7
<b>Sub Total of Council Revenue and Section 106:</b>			<b>1066.0</b>	<b>420.0</b>	<b>4120.0</b>	<b>5606.0</b>						
<b>GRAND TOTAL:</b>			<b>3588.0</b>	<b>2839.0</b>	<b>6194.0</b>	<b>12621.0</b>						

## Development of Corridors, Neighbourhoods and Supporting Measures Programme

- 6.8 The recent simplification of TfL funding (from 2011 onwards) requires London boroughs to adopt a more holistic approach to addressing local transport issues through the Corridors, Neighbourhoods and Supporting Measures programme.

### Corridors and Neighbourhoods

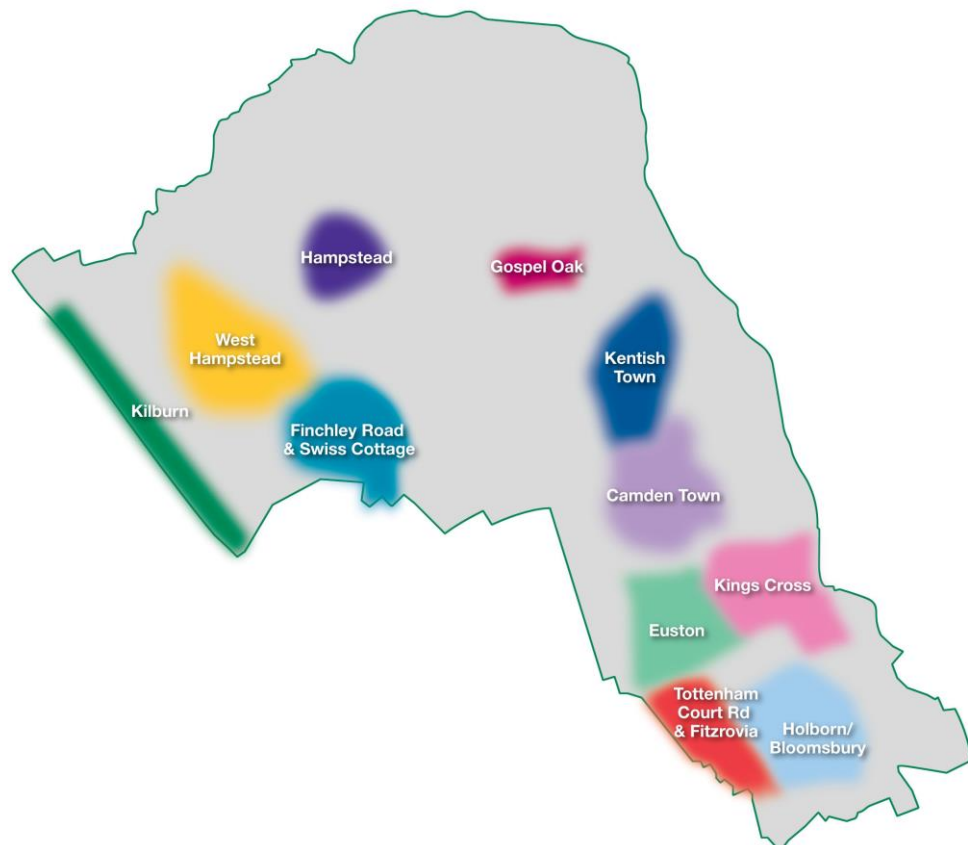
- 6.9 The aim of this element of the programme is to establish priority corridors and neighbourhoods and address all of the known issues (where feasible) within an area-wide approach, rather than looking at each mode of transport separately. This allows more opportunities for efficiencies and greater value for money which is important in the current funding context.
- 6.10 Camden Council has used a robust methodology to identify schemes for the Corridors and Neighbourhoods programme based on existing priorities for the Council. This includes improving road safety and air quality and reducing deprivation, as well as meeting the objectives of the sub-regional and London-wide plans, and CTS objectives and targets.
- 6.11 Some important transport projects do not necessarily fit neatly in with the priority corridors and neighbourhoods areas and some funding will still be set aside for borough-wide or specific local schemes to provide a more even geographical spread.

### Area-wide schemes

- 6.12 The process of prioritising areas to be included in the CTS comprised an analysis of existing Council plans, strategies and targets such as placeshaping priority areas, LDF growth and highly accessible areas, town centres, air quality hot spots, areas of deprivation, road safety hotspots, and areas of potential opportunity and intensification (which are identified in the London Plan). Camden's Transport Strategy Priorities are shown in **Table 6.3**.
- 6.13 The assessment resulted in the following list of highest priority areas:
- Camden Town, particularly the area to the east of Camden High Street
  - Tottenham Court Road/ Fitzrovia
  - Kings Cross/ St Pancras
  - Finchley Road/Swiss Cottage
  - Euston/ West Euston
  - West Hampstead
  - Kilburn
  - Kentish Town
  - Holborn (including Bloomsbury and St Giles)

- 6.14 Other areas that have been identified for transport schemes include Gospel Oak to link with the proposed regeneration of the area, and Hampstead. These areas are illustrated on Figure 6.1

**Figure 6.1** – Priority areas for funding



**Table 6.3 - Camden Transport Strategy Priority areas**

Strategy/area	LDF – Areas for Intense Economic Growth	LDF – highly accessible (growth) areas (Town Centres)	Placeshaping areas	Indicators of Multiple Deprivation	Road Safety Strategy – collision hotspots	Important Area During Olympics	Air Quality Strategy – hotspots for NO <sub>2</sub>	Air Quality Strategy – Hotspots for PM <sub>10</sub>	Cross-Directorate Staff workshops
Camden Town		<b>X</b>	<b>X</b>	<b>X</b>	<b>X</b>		<b>X</b>	<b>X</b>	<b>X</b>
Tottenham Court Rd/ Fitzrovia	<b>X</b>				<b>X</b>	<b>X</b>		<b>X</b>	<b>X</b>
Kings Cross	<b>X</b>		<b>X</b>	<b>X</b>		<b>X</b>			<b>X</b>
Finchley Rd & Swiss Cottage		<b>X</b>	<b>X</b>		<b>X</b>		<b>X</b>	<b>X</b>	
Euston/ West Euston	<b>X</b>		<b>X</b>	<b>X</b>	<b>X</b>		<b>X</b>	<b>X</b>	<b>X</b>
West Hampstead	<b>X</b>	<b>X</b>	<b>X</b>		<b>X</b>			<b>X</b>	<b>X</b>
Kilburn		<b>X</b>	<b>X</b>	<b>X</b>	<b>X</b>				<b>X</b>
Kentish Town		<b>X</b>	<b>X</b>	<b>X</b>	<b>X</b>		<b>X</b>	<b>X</b>	<b>X</b>
Holborn/Bloomsbury	<b>X</b>		<b>X</b>		<b>X</b>	<b>X</b>	<b>X</b>	<b>X</b>	<b>X</b>
Hampstead		<b>X</b>			<b>X</b>		<b>X</b>	<b>X</b>	<b>X</b>
Gospel Oak			<b>X</b>	<b>X</b>					<b>X</b>



- 6.15 The delivery of a number of projects is spread across two or more financial years to enable a balanced transport programme to be delivered in each financial year, and to reduce the chance of non-delivery if a project cannot be completed within a financial year. Feasibility studies will be completed, where appropriate, in the year before implementation so as not to lock the Council into an annualised programme and to help ensure delivery of the schemes.
- 6.16 **Camden Town (especially to the east of Camden High Street):** A feasibility study was undertaken during 2010-11 which identified a number of issues including poor public realm, road safety hot-spots, anti-social behaviour and crime concerns, deprivation, poor east-west permeability for cyclists, and high traffic volumes and associated air quality issues. There are opportunities to link with potential new cycle hire locations, recent improvements to Camden Road station, public realm improvements at Britannia Junction and the introduction of Legible London.
- 6.17 The project aims to improve the public realm, pedestrian facilities and accessibility, reduce casualties at accident hot-spots and address personal security through improved lighting, improve east-west cycling permeability (possibly including signage), increase cycle parking and the number of ASLs, increase street trees, and decluttering. The proposals may also include measures to manage speed.
- 6.18 **Tottenham Court Road/Fitzrovia** Following a feasibility study completed in 2010-11, this scheme includes a number of public realm improvements, 2-way working for cyclists (lightweight measures) on one-way streets, Legible London pedestrian wayfinding, new street trees, bicycle parking, decluttering, review of road safety issues and potential removal of traffic signals.
- 6.19 A review of traffic movements through the area will be completed and waiting and loading in the area will also be reviewed as a result of rising commercial activity. Measures will take account of proposed aspirations to improve traffic flow and public realm on Tottenham Court Road and Gower Street that Camden is seeking funding for through the Major Schemes programme. Measures to address physical accessibility and safety, including personal security will also be included where necessary.
- 6.20 **King's Cross/St Pancras** Camden is proposing an improved walking route from Euston Station to St Pancras / King's Cross Stations along Brill Place/ Phoenix Road for pedestrians as an alternative to Euston Road. The completion of the Thameslink improvements at King's Cross/ St Pancras, potential High Speed 2 rail services at Euston, and the proposed new UKCMRI building will potentially significantly increase the flow of pedestrians between the stations and along this route. The walking route will include improved signing, lighting and providing level access using raised tables at junctions, Legible London

pedestrian signage and potential improvements to the pedestrian crossing facilities adjacent to St Pancras station.

- 6.21 A scheme is also proposed to improve cycling permeability through the area bounded by Euston Road, Argyle Street and Grays Inn Road. Two-way cycling (not two-way traffic) will also be investigated for the western arm of Regent Square. Street trees will be planted and decluttering undertaken where appropriate to improve the public realm in this area.
- 6.22 Significant improvements are proposed for York Way to complement the station upgrade taking place at King's Cross station, to be funded by developers under a Section 106 agreement. The scheme proposes to widen the western footway (directly adjacent to the station wall), improve pedestrian crossing facilities, make changes to the cycle lane to improve safety for cyclists, and improve the lighting levels.
- 6.23 **Finchley Road/Swiss Cottage** Pedestrian and cycle improvements are proposed for the area, especially to serve the significant expansion of the schools to the south-east of the Swiss Cottage gyratory. The scheme will also investigate road safety issues in the area, and sustainable urban drainage measures in an area to the west of the gyratory. Proposals for a Finchley Road/Swiss Cottage area-scheme will be coordinated with the planned Cycle Superhighway Route 11 on Finchley Road.
- 6.24 **Euston/ West Euston** This project brings together the recommendations of previous feasibility studies and will include measures to improve the pedestrian footway and crossing facilities, east-west cycle permeability through to Regent's Park, improved signage and lighting, removal of street clutter, and increase in street trees and cycle parking where appropriate. The scheme will also review waiting and loading along Drummond Street. The possible expansion of Euston Station in conjunction with the High Speed 2 rail proposals, likely Section 106/CIL funding from the Regent's Place development and the proposed improvements at Euston Circus will be taken into consideration.
- 6.25 **West Hampstead** This projects includes road safety, cycling and pedestrian improvements. The scheme will comprise a road safety study to identify potential measures for the area to the east of West End Lane (extending to Finchley Road), and cycle safety and permeability in the area to the south-east of West Hampstead Underground station. Directional signage for pedestrians (Legible London) will also be installed to complement the streetscape improvements along West End Lane being completed in 2010/11.
- 6.26 **Kilburn** Scheme to address road safety as well as public realm improvements, including increased street trees, bus stop location and accessibility review, cycle permeability, improved pedestrian

environment, lighting, ASLs, car club bays, electric vehicle charge points, decluttering and implementation of 20mph zone to the east of Kilburn High Road. Feasibility and implementation will be co-ordinated with Brent Council and an Outer London Funding (OLF) bid.

- 6.27 ***Kentish Town*** Kentish Town Road/Fortess Road/Highgate Road corridor has one of the worst road safety records in the borough. This scheme will aim to address these issues as well as investigate “rat-running” on residential side streets, review waiting and loading at congested locations, improve pedestrian signage, plant new street trees and increase cycle parking. The project will also investigate accessibility barriers, the possibility of introducing measures for two-way working along Castlehaven Rd/Hawley Rd at the southern end of Kentish Town to address the problems associated with the system of traffic gyratories in the Camden Town area.
- 6.28 ***Holborn/Bloomsbury*** Review of road safety issues, improvements to pedestrian permeability together with the possible completion of Drury Lane pedestrian scheme, minor public realm improvements, cycle parking, decluttering, street trees, potential introduction of car club and electric vehicle bays, and bus stop improvements.
- 6.29 ***Hampstead and Gospel Oak*** In addition to the priority areas, area-wide schemes are also proposed for Hampstead and Gospel Oak.
- 6.30 In Gospel Oak improvements are proposed to link to planned regeneration of the area, including Legible London signage, improved pedestrian facilities and access to Hampstead Heath, measures to address fear of crime, and minor public realm improvements.
- 6.31 In Hampstead, the project is proposed to include footway widening and improvements at the junction of Heath Street and Hampstead High Street outside the Underground station, as well as decluttering, cycle parking and improvements to pedestrian crossing facilities across Fitzjohns Avenue.

#### **Other schemes**

- 6.32 ***Russell Square – Public Realm and Two-Way Traffic Scheme*** Completion of the scheme to introduce two-way traffic in Russell Square and improve facilities for pedestrians and cyclists. The scheme includes a local safety initiative at the Russell Square / Bernard Street junction, improved pedestrian facilities around the square, improved public realm, additional footway space and the relocation of bus stop and stand facilities.
- 6.33 ***Road Safety Improvements*** Camden has been very successful in reducing casualties through introducing measures to reduce and manage speed, such as 20mph zones. Addressing speed also helps to

improve the environment for pedestrians and cyclists and therefore encourage those modes. As well as capturing road safety issues in area-wide schemes, specific corridors and neighbourhoods have been identified for road safety improvements based on casualty data as follows:

- 6.34 ***Bloomsbury Way/Theobalds Road – Road Safety Scheme*** There are significant road safety issues on this corridor with high casualty figures among vulnerable road users over a relatively short section of road, especially at some specific junctions. This project will include feasibility, design, consultation and implementation of appropriate road safety measures including a potential 20mph limit. The scheme is likely to include new signage, road markings, ASLs and possibly kerb realignment. Some other minor improvements including, where appropriate, decluttering and street trees and cycle parking would also be investigated as part of this scheme.
- 6.35 ***20mph Zones and Speed Management*** Feasibility studies will be undertaken each year to introduce road safety improvements in collision hotspot corridors or neighbourhoods, and which will be implemented in the same or following year. This will include an assessment of the potential for introducing 20mph zones, signing, road markings, kerb realignment and other speed management measures.
- 6.36 ***ASLs*** Implementation of ASLs for cyclists at signalised junctions with the highest number of cycling casualties to improve cycle safety.
- 6.37 ***School Travel Planning Engineering Measures*** Engineering measures identified by schools as part of their STPs will be implemented to assist schools to meet STP targets to increase walking and cycling, including safety measures. Where possible these schemes will be completed in conjunction with other area-wide schemes.
- 6.38 ***Electric Vehicle Charging Points*** Project will include feasibility, consultation and implementation of on-street electric vehicle (EV) charge points across the borough to improve air quality. New charging points will help to create a more comprehensive network of charge points across Camden, supporting the Mayor's Electric Vehicle Delivery Plan and targets. Where possible, new charging points will be integrated with area-wide transport schemes. Camden has set a target to increase the number of EV charging points in the borough from 10 at the start of 2010 to 46 by 2020.
- 6.39 ***Car Club Bays*** Feasibility, consultation, and implementation of new car club bays across the borough. The scheme will also include further work on innovative car club bay projects such as bays for residential housing estates to increase social inclusion, Streetvan, bays for electric car club vehicles and different types of vehicles. There are also

potential opportunities for working with businesses to reduce private car use through car club bays which would be funded privately.

- 6.40 **Cycle Improvements** Camden Council is committed to increasing cycling levels in the borough and providing measures to encourage and support this mode. As well as the area-wide schemes and road safety improvements which will include measures for cyclists, Camden is proposing to implement the following projects:
- 6.41 ***Judd Street/Hunter Street/Lambs Conduit Street*** This corridor provides an opportunity to introduce a new sign-posted north-south cycle route from Euston Road to High Holborn, and potentially beyond via Chancery Lane. Improvements would comprise signage and minor junction improvements as well as some decluttering on Lambs Conduit Street to make it more attractive and cycle friendly. It may also include the possible removal of the Brunswick roundabout. Proposals could allow new tree planting and reduce car-dominance in an area with large numbers of pedestrians, including children in nearby Coram Fields.
- 6.42 ***Cycle Parking*** To encourage travel by bicycle and reduce crime rates, cycle parking will be increased at locations across the borough. Locations have already been identified through requests from the public, Councillors and the Camden Cycling Campaign. A new Cycle Parking Strategy has also prioritised improved facilities at popular destinations, including parks, stations, shops, health facilities and leisure centres. Camden has set a target to install an additional 1,000 spaces on-street (which will be predominantly the Camden M type) and 1,000 spaces off-street spaces over the three year period 2011/12 to 2013/14.

**Table 6.4** Proposed additional cycle parking

	2011-12	2012-13	2013-14	Total
<b>On-street</b>	275	500	243	1018
<b>Off-street (indicative)</b>	300	350	350	1000
<b>Total</b>	575	850	593	2018

### Supporting Measures

- 6.43 This element (Smarter Travel) of the Corridors, Neighbourhoods and Supporting Measures programme is primarily a marketing tool to encourage more sustainable travel choices and reduce car use. It includes initiatives that raise awareness and promote the benefits of sustainable travel, enhance skills, knowledge and confidence, and provide information about travel. As part of the Smarter Travel programme Camden will work with a range of partner organisations and agencies such as the NHS, Camden's Community Safety Team and the police to deliver borough-wide events and campaigns as well

as working directly with target audiences such as schools, businesses, the community and vulnerable groups

- 6.44 **Cycle Training Programme** Camden Council offers free national standard Bikeability cycle training to children and adults of all experience levels who work, study or live in the borough. One-to-one training will be offered for users of the Cycle Hire scheme aged 14 years and above. The programme will also include events and projects in partnership with the police, the NHS and Safer Neighbourhood Teams.
- 6.45 **Sustainable School Travel Initiative** The main focus of the sustainable school travel initiative is school travel planning which aims to reduce car use on the journey to school. This project includes funding for a full-time School Travel Plan Advisor to work with schools to develop, review and rewrite their plans, and deliver initiatives outlined in those plans.
- 6.46 It is also proposed to make small grants available to schools with approved STPs to help them implement their plans, such as funding for cycle storage, small projects or teaching resources. The Advisor will also coordinate incentive schemes and competitions for schools to encourage walking and cycling, such as Walk to School campaigns and a Legacy Cycle Challenge.
- 6.47 **Road Safety Dramas and Workshops in Schools** The Camden Public Safety team organises annual tours of road safety performances and workshops which address a variety of risk taking behaviours at different ages, and encourage young people to make safer choices as pedestrians, cyclists and future drivers. The programme includes:
- 'Footsteps the Movie' – a workshop for five year olds who make and star in their own road safety video;
  - 'Why Did The Chicken Cross The Road' – a workshop for junior school explores how peer-pressure and mobile phone use impact upon safety;
  - 'Now you See Me; Now You Don't' – targets 11 year olds, prior to their transfer to secondary school when journeys are often more complex;
  - 'Crossing Over' – targets 12-13 year olds and reflects risk taking behaviours as identified in consultation with young people;
  - 'Wasted' - a drug-drive performance which emphasises the responsibility of passengers to say no to drug drivers;
  - 'Never Saw The Day' - examines the repercussions of a road crash and highlights the responsibilities of both passengers and drivers
- 6.48 **Vulnerable Groups, Inequality and Social Inclusion** This project comprises initiatives targeted at groups facing specific barriers to using the transport network and which may result in exclusion. Projects in this group seek to address problems for:

- women travelling at night through the Safer Travel at Night guides and events in Camden Town, Kings Cross and Euston;
- older people and those with mobility impairments who face barriers accessing the public realm through the Kilburn Older People's Voices (KOVE) engagement project;
- school children, particularly those from Black, Minority and Ethnic (BME) groups, who are at higher risk of injury on the roads through the Child Injury and Inequality road safety project;
- People from deprived communities who also suffer health inequalities through a community-based Cycle Champion project.

6.49 **Air Quality Schemes** Transport related emissions, particularly nitrogen oxides and particulate matter, have a negative impact on air quality and on health. As well as promoting walking and cycling, technological innovation and driver behaviour can have an impact on air quality. Camden will implement a range of campaigns to promote responsible behaviour and implement new technology, including:

- Eco-driving campaign to address air quality issues associated with idling vehicles, particularly taxis, focusing on St Pancras Station, as well as coach and bus stands across the borough;
- Use of dust suppressants on roads in areas of the borough with poor air quality;
- Promotional campaign to raise awareness about the environmental costs and benefits of low emission vehicles including hybrid, electric and biomethane. The campaign will highlight where drivers can charge their electric vehicles and refuelling biomethane.
- Dust Suppressants. Following a successful trial on Euston Rd, the use of dust suppressants on roads in areas of the borough with poor air quality will be investigated. The use of the suppressants has reportedly reduced local PM10 concentrations in the air by 20%.

6.50 **Area-based Smarter Travel Initiatives** In order to inform and improve its Smarter Travel programme in the longer-term Camden will undertake a feasibility study to identify the most appropriate communication strategies and interventions to encourage sustainable travel choices for different groups, as well as their propensity to change. This information will be used to target communities in different areas who are most likely to change their travel behaviour. This project will inform area-based approaches for Smarter Travel initiatives linked to areas prioritised for engineering measures including Fitzrovia, Camden Town and Kilburn.

6.51 **Sustainable Workplace Travel** This project provides funding for a part-time workplace Travel Plan Advisor to work with developers to produce, review and assess Travel Plans which are secured through planning requirements.

- 6.52 **Travel Awareness** In partnership with community groups, such as the Camden Cycling Campaign and Living Streets, and partner agencies such as the health sector and Police, Camden will participate in two national campaigns to promote sustainable travel:
- National Bike Week – a week of campaigning and events to promote active travel and health;
  - Car Free Day – an event to highlight the benefits of car free travel, promote air quality and launch a recently-completed urban realm/pedestrian/cycle improvement.
- 6.53 Camden will also coordinate and deliver its annual Ride Around Camden event aimed at encouraging cycling and providing experience for cyclists within the camaraderie of a group.
- 6.54 **Central London on-line Cycle Guide** Working with TfL, central London boroughs and Central St Martins College, Camden Council will investigate and develop an innovative central London on-line cycling guide that will be suitable for Smart Phones. Users will have portable access to an interactive map including all strategic cycle routes, cycle hire locations, cycle shops and cycle parking locations. The app would also communicate key messages, through strategically prompting the user, with secure bike locking advice, cycle training promotion, maintenance and safety advice, and link in with borough campaigns such as Love Camden campaign (to encourage shopping locally).
- 6.55 **Education, Training and Publicity Events** The Council, together with partner organisations such as schools and police, will host a number of annual events and initiatives aimed at promoting road safety awareness. The programme will include the following events:
- Children's Traffic Club - offers parents of pre-school children a variety of activities to help teach young children basic road safety rules;
  - 'Street Feet' – road simulation resource for infant schools to teach road crossing skills in the safety of the school environment;
  - 'Be safe be seen' – annual road safety event;
  - National Walk to School Week – biannual event to encourage children and parents to walk to school;
  - Annual Child Safety Week (June) and National Road Safety Week (October) – support of national campaigns through road safety dramas;
  - Child Restraints - free checks on the fitting of child seats and advice on car seats for children under 12 years old.
- 6.56 **Study to inform and improve Smarter Travel** A study to inform and improve Camden's Smarter Travel programme in future years will be undertaken in 2011/12, based on the successful methodology used for the Smarter Travel Town Centre project in Sutton. It will allow us to identify people with the propensity to change travel behaviour, and the best way to adapt how we communicate sustainable travel messages



and the most effective interventions for different people and at different stages of change, to support and maintain sustainable travel choices.

- 6.57 It will allow us to evaluate campaigns more effectively through: understanding the key messages relevant for the individual areas to be targeted, for example around motivations for behaviour change (financial, health or environment); age groups/types of person most likely to change so that we can use local networks to engage them.

### **Development of the Major Scheme Programme**

- 6.58 Major scheme funding is for large projects (at least £1 million) that seek to transform an area, with a strong emphasis on improving the public realm to support the Mayor's Better Streets agenda.
- 6.59 It is widely recognised that an improved public realm is one of the key ways of achieving a successful place in a variety of ways. The quality of the local streetscape, for example, has an immediate impact on people's desire to walk and cycle. Through the creation of safe, easy and clear routes and public spaces we can encourage people to make sustainable transport choices. A good public realm that is carefully designed also helps to create a healthy and inclusive society. Evidence has shown that investment in the public realm can also play a major part in regeneration and economic growth.
- 6.60 Funding has been secured through the Major Schemes programme for projects in Bloomsbury, Britannia Junction (Camden Town), West End and West Hampstead for 2011-12. We will be seeking further funding for West End as the scheme evolves.
- 6.61 Camden's proposed programme of investment for major schemes is shown in **Table 6.5**

**Table 6.5** – Camden’s proposed programme of investment for Major Schemes

Programme areas	Funding (£,000s)				MTS goals					LIP objectives
	2011/12	2012/13	2013/14	Total	Econ. devt and pop growth	Quality of life	Safety and security	Opportunities for all	Climate change	
<b>Bloomsbury Streets for People</b> - Ongoing Bloomsbury Streets for People project that focuses on public realm improvements. Funding is sought for completion of works on Montague Place (that will commence in 2010/11) and the works proposed to commence in 2011.	1100	0	0	1100	✓	✓			✓	1, 2, 5, 6, 7, 9
<b>Britannia Junction</b> - Junction of Camden High Street, Kentish Town Road, Parkway and Greenland Road. Public realm improvements include simplifying the junction, removal of staggered pedestrian crossings, introduction of a “scramble pedestrian crossing”	770	0	0	770	✓	✓	✓	✓		2, 3, 4, 5, 6, 7
<b>West End Project</b> – Significant improvements to the public realm and introduction of two-way traffic for Tottenham Court Road and Gower Street. The wider West End scheme also includes proposals for Euston Circus at the northern end of Tottenham Court Road	150	1100	850	2100	✓	✓	✓	✓	✓	1, 2, 3, 4, 5, 6, 7, 8
<b>Major Schemes Total:</b>	<b>2020.0</b>	<b>1100.0</b>	<b>850.0</b>	<b>3970.0</b>						

**6.62 West End project** As one of Central London’s most high-profile and visible shopping locations, Tottenham Court Road and the surrounding area would benefit greatly from a dramatic upgrade in anticipation of the increase in people that will use the area in the coming years. The public realm in this area is much degraded with a somewhat shabby and rundown character unfitting for such a high-profile location. The proposed improvements will create a distinctive urban space that London can be proud of. The West End project comprises four interlinked schemes for the wider area:

- Tottenham Court Road 2-way project
- Euston Circus (Euston Road / Tottenham Court Road)
- St Giles Circus (Oxford Street / Charring Cross Road)
- Princes Circus (New Oxford Street / Shaftesbury Avenue)

**6.63** The proposal to reintroduce 2-way traffic into Tottenham Court Road (TCR) and Gower Street is of strategic importance for the West End and Central London, providing significant traffic benefits, journey time

savings and public realm improvements. In addition, implementing the 2-way project helps to unlock the potential to provide three world class high-quality public spaces in the heart of the West End (Euston Circus, St Giles Circus and Princes Circus). The locations of the component projects are shown in **Figure 6.1**.

**Figure 6.1** - Location of West End project



The proposed West End project comprises the following schemes:

- 6.64 **Tottenham Court Road and Gower Street** Introduction of public realm improvements and 2-way traffic along Tottenham Court Road (cycle and buses only) and Gower Street. The scheme would improve journey times for buses, the attractiveness of streets, pedestrian and cycling facilities, and help to remove the queue of buses on New Oxford Street. Funding of £150k has been allocated in the 2011/12 programme to proceed with feasibility.

**Figure 6.2 Before and After - Tottenham Court Road**

Before

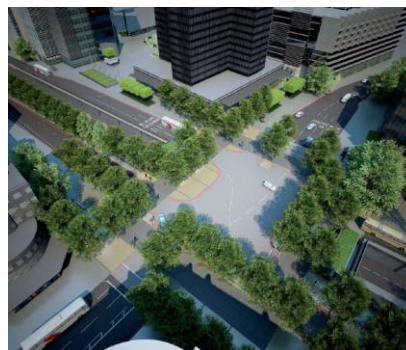


After

- 6.65 ***Euston Circus (junction of Euston Road and Tottenham Court Road)*** Simplify the junction to make it safer and less intimidating for pedestrians and cyclists, thereby reducing the severance effect of Euston Road. It would also provide increased public space outside University College Hospital, Warren Street Underground Station and by Euston Tower.

**Figure 6.3 Before and After - Euston Circus**

Before



After

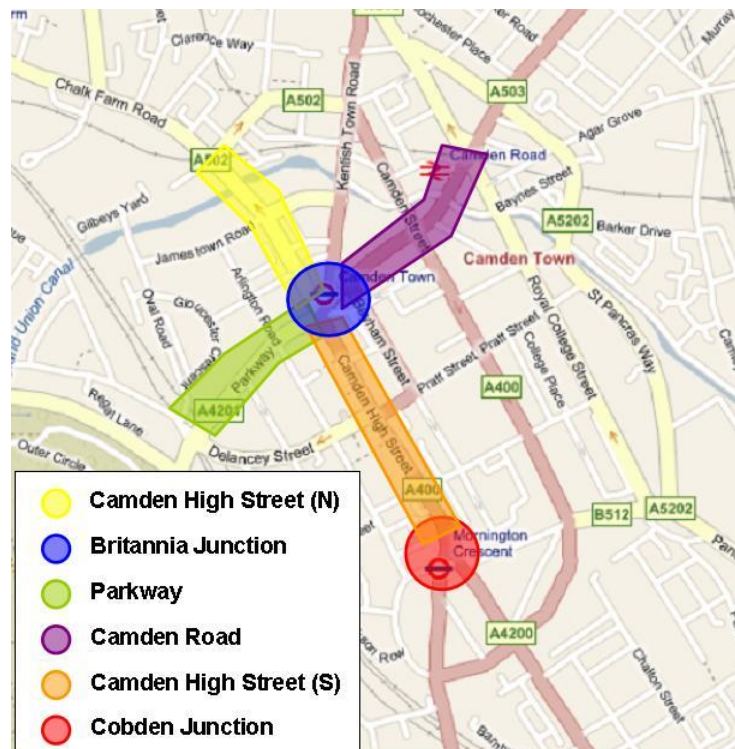
- 6.66 ***St Giles Circus (surrounds Tottenham Court Road station)*** Revise the junction layout to help improve links from the area (including the station) to adjacent areas like Covent Garden, Soho, Fitzrovia, Bloomsbury and Holborn. In addition to increasing legibility and creating new public space where it is most needed, the space will create a high-quality environment, enhanced by improved footway surfaces and an integrated lighting scheme designed to reflect the character of the area and its dynamic night time economy.

**Figure 6.4 - Before and After – St Giles Circus**

- 6.67 **Princes Circus** (consists of two separate triangles of land bounded by Shaftesbury Avenue and Bloomsbury Way). Revise junction to provide two new public spaces, reduce the dominance of traffic and improve lighting and the attractiveness of the area.

**Figure 6.5 - Before and After – Princes Circus**

- 6.68 Camden has already secured a significant amount of funding (approximately £8 million) through various sources. We are expecting further Section 106 contributions from new developments in the vicinity of St Giles Circus, which will be constructed in the area currently occupied by the Tottenham Court Road work sites. Therefore through an investment of £10 million into the TCR 2-way project through the Major Scheme process, a £20 million area wide world-class urban realm project can be delivered across a large portion of the West End. Without converting TCR to 2-way traffic, less public space can be provided in the wider West End Project.
- 6.69 **Camden Town** In 2008, the Camden Town Project was launched in partnership with TfL and Camden Town Unlimited (CTU) to develop public realm improvements to the key streets in Camden Town, as shown in **Figure 6.6**. Camden Town is world famous for its numerous markets and music venues, but it also has a successful creative industry sector which employs 30,000 people. The basic objective of the project is to make the streets safer, accessible and more attractive.

**Figure 6.6 – Location of Camden Town Schemes**

6.70 Camden is seeking (or has received) funding for a series of projects including:

6.71 **Britannia Junction** (junction of Camden High Street, Kentish Town Road, Parkway and Greenland Road). Proposals to improve the attractiveness of the area, improve road safety, increase public space outside Camden Town tube station, remove street clutter, reduce actual and perceived crime levels, and reduce the dominance of traffic.

**Figure 6.7 - Britannia Junction – Before and After**

6.72 **Cobden Junction** (next to Mornington Crescent tube station). Create a better, substantially larger and more accessible civic space by

rearranging the road layout and closing the section of Camden High Street outside Koko. Please see **Figure 6.8**

**Figure 6.8 - Cobden Junction – Before and After**

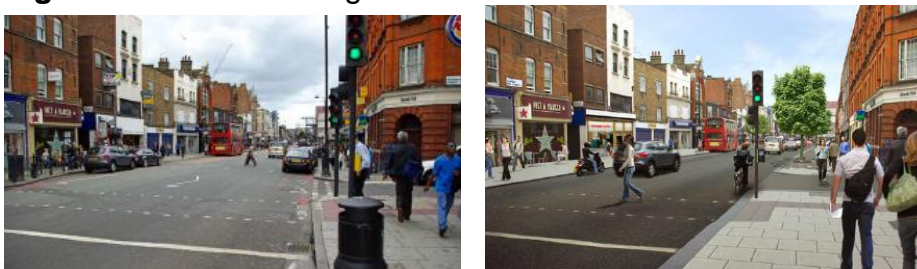


Before

After

- 6.73 **Camden High Street South** (between Mornington Crescent and Camden Town tube station). The proposed improvements would provide a high quality simplified streetscape to match the “naked street” at Camden High Street North.

**Figure 6.9 - Camden High Street South – Before and After**



Before

After

- 6.74 **Bloomsbury** Bloomsbury Streets-for-People project focuses on public realm improvements for some streets in Bloomsbury which concentrate on tourism and education. The project also looks to strengthen the rich cultural offer that Bloomsbury has. Improvements have recently been completed at Byng Place and Great Russell Street. Two components of the scheme will still require completion in 2011/12 as follows:
- Montague Place - Introduce an informal public square and widened pavements outside the British Museum. Proposals include the relocation of the coach parking to the northern side of the street;
  - Malet Street – Widening of footways, provide seating between the trees and cycle parking outside the main institutions. Provide safer junctions for pedestrians and cyclists and focal points outside the key institution entrances.
- 6.75 The funding details for Major Scheme projects in the West End and Camden Town which are the highest priority for Camden in the coming years, are shown in **Table 6.6**.

- 6.76 The funding that has already been secured for these schemes and therefore do not require Major Scheme funding includes:

West End

- Euston Circus - £3.85 million
- St Giles Circus - £2 million
- Princes Circus - £2 million
- Section 106 contribution - £0.75 million

Camden

- Britannia Junction - £900,000

- 6.77 An additional Step 1 submission for the Holborn area is being prepared for a Major Scheme project. This will be submitted in September 2011. As a very accessible part of the borough, Holborn has been identified as one of the areas that will accommodate significant growth. High Holborn, New Oxford Street, Proctor Street and Kingsway are all important streets in the heart of Holborn with retail, leisure and commercial land use. These streets also play an important transport and public realm function with Holborn Station a major interchange and gateway for employment, tourism and residents. There are key concerns for residents and businesses, including road danger and traffic congestion, as well as poor air quality, pedestrian crossings, access to open spaces, pedestrian and cycling environment and that the main roads act as major barriers to local amenities as well as to neighbouring areas such as Soho, Fitzrovia, Bloomsbury and Oxford Street.



**Table 6.6** – Funding details for Major Scheme projects which have not yet commenced

Project	Priority	Project Stages	Funding	Application Dates
West End	1	Tottenham Court Rd/ Gower Street 2-way traffic	<u><b>Total cost</b></u> <b>£10,000k</b> Section 106                        £750k LIP Funding Required            £9,250k	West End application submitted to TfL in January 2010. Funding of £150k was awarded to Camden to proceed with feasibility in 2011/12 (Step 2 funded).
		Euston Circus – Fully funded	<u><b>Total cost</b></u> <b>£3,850k</b> Section 106                        £3,000k Other TfL funding                £850k LIP Funding Required            £0k	West End application submitted to TfL in November 2009. This component of project is fully funded through S106 and TfL. .
		St Giles Circus –	<u><b>Total cost</b></u> <b>£4,000k</b> Section 106                        £2,000k LU                                        £2,000k LIP Funding Required            £0k	West End application submitted to TfL in November 2009. This component of project expected to be fully funded. Funded through LU and S106.
		Princes Circus - Funding through Section 106	<u><b>Total Cost</b></u> <b>£2,000k</b> Section 106                        £2,000k LIP Funding Required            £0k	West End application submitted to TfL in November 2009. This component of project fully funded.
Camden Town	2	Cobden Junction	<u><b>Total Cost</b></u> <b>£2,000k</b> Funding under negotiation    £500k LIP Funding Required            £1,500k	Application submitted to TfL in January 2010. Step 1 application will be resubmitted in September 2011
		Camden High Street south	<u><b>Total Cost</b></u> <b>£2,000k</b> LIP Funding Required            £2,000k	Step 1 application to be resubmitted to TfL in September 2011

## Maintenance Programme

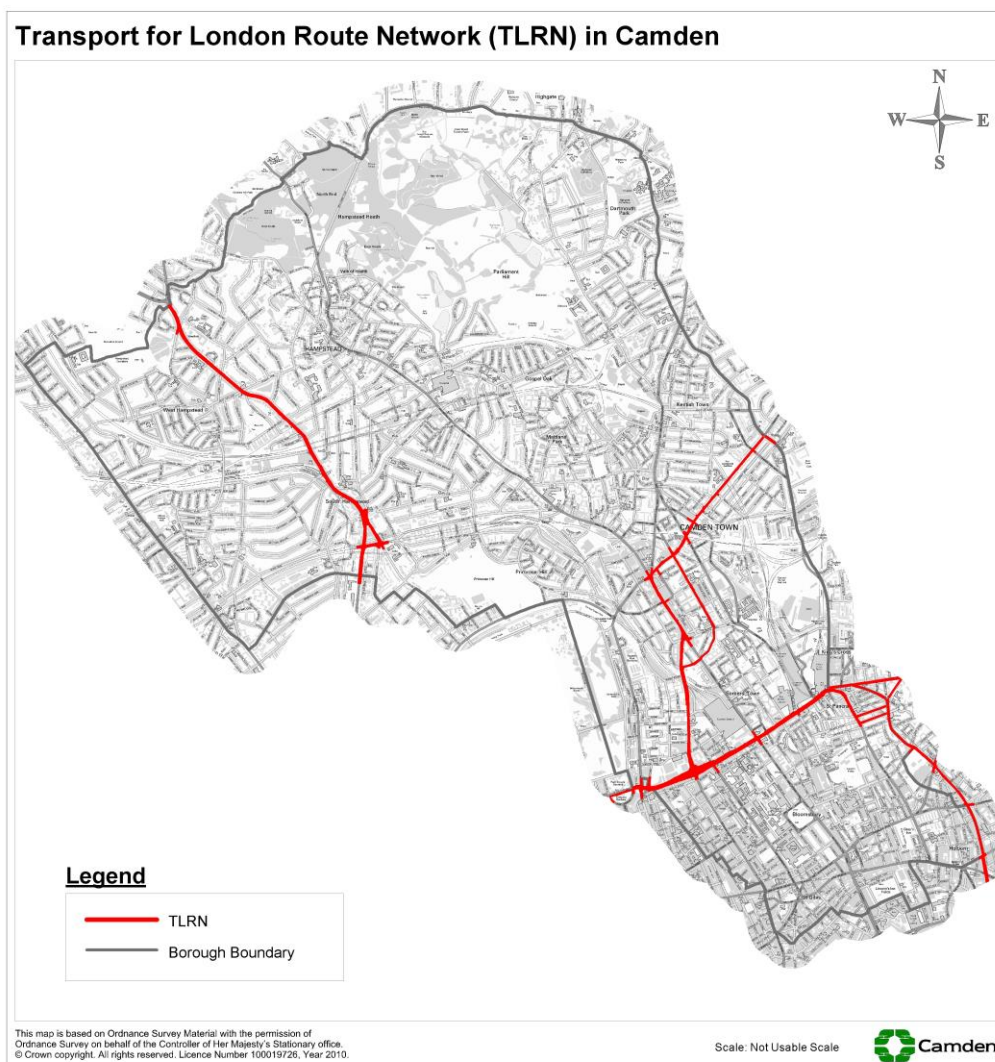
- 6.78 Camden invests a significant amount of money each year to ensure that the borough's roads and footways are maintained to a high standard. This improves safety for all road users, and reduces noise from uneven surfaces and trip hazards.
- 6.79 Maintenance funding is also provided by TfL for use on strategic roads that have high traffic volumes and an important "movement" function in the context of the wider transport network. Maintenance schemes are coordinated with other schemes in Camden where possible to minimise disruption to local road users.
- 6.80 Bridge assessment and strengthening makes up the other part of the Maintenance programme. Funding for bridges is based on the London Bridge Engineering Group (LoBEG) prioritisation system for structures across London and will be commensurate with the condition of proposed bridges within the borough areas.
- 6.81 The borough's maintenance programme takes into account Camden's highway asset management priorities which will be described in the Council's emerging Highway Asset Management Plan.
- 6.82 Camden's proposed programme of investment for maintenance is shown in **Table 6.7**.

**Table 6.7 - Camden's Proposed Programme of Investment –Maintenance.**

Programme areas	Ongoing scheme?	Funding (£,000s)				MTS goals					LIP objectives
		2011/12	2012/13	2013/14	Total	Econ. devt and pop growth	Quality of life	Safety and security	Opportunities for all	Climate change	
<b>St Pancras Way between Agar Grove and Granary Street – Carriageway Renewal works</b>		160	0	0	160	✓					4
<b>Camden Park Road between York Way and Camden Road – Carriageway renewal works</b>		185	0	0	185	✓					4
<b>Pancras Road from St Pancras Way to Chenies Place – Carriageway renewal works</b>		0	119	0	119						4
<b>Kilburn High Road from Belsize Road to Priory Park Road – Carriageway renewal works</b>		0	310	0	310						4
<b>Kentish Town Road from Farrier St to Leighton Road - Carriageway renewal works</b>		0	0	429	429						4
<b>Borough footway maintenance - Priority locations</b>	✓	2000	2000	2000	6000	✓					2, 4
<b>Borough road carriageway maintenance - Priority locations</b>	✓	1500	1500	1500	4500	✓					4
<b>Gray's Inn Bridge - Major deck refurbishment</b>		0	300	0	300	✓					4
<b>Loudoun Road Bridge – Construction of Trief kerb</b>		90	0	0	90	✓					4
<b>Lawfords Bridge - Bridge deck strengthening, replacing parapets and waterproofing</b>		0	50	425	475	✓					4
<b>Water Meeting Bridge - Bridge parapet replacement</b>		35	100	0	135	✓					4
<b>Total of Maintenance:</b>		<b>3970.0</b>	<b>4379.0</b>	<b>4354.0</b>	<b>12703.0</b>						

### Improvements on the TLRN

6.83 TfL is responsible for managing the highway and traffic on the Transport for London Road Network (TLRN) which comprises around 10 per cent of roads in the borough. The TLRN network in Camden is shown in **Figure 6.10** below.

**Figure 6.10** Transport for London Road Network (TLRN) in Camden

- 6.84 These are generally the busiest roads in Camden and are clearly very important road links in the borough. Although not under the control of the Council, Camden works closely with TfL to discuss requests, joint working and even joint funding of some projects on the TLRN and the connecting borough roads.
- 6.85 The key proposed projects to be completed by TfL (some of them jointly with the Council) on the TLRN in Camden are included in **Table 6.8**. It should be noted that these schemes are subject to consultation, funding availability and other decisions, and there is no guarantee that any of these schemes will be completed.

**Table 6.8 – Proposed Improvements on the TLRN**

<b>Project Description</b>	<b>Completion Target Date</b>
<b>Euston Circus</b> – pedestrian, cycling and urban realm improvements at the junction of Euston Road/ Tottenham Court Road/ Hampstead Road. Primarily funded through agreement with developer. Potential strong links to proposed 2-way (bus and cycle only) traffic scheme on Tottenham Court Road.	February 2014
<b>Britannia Junction</b> - enlarged public space adjacent to the Underground station as well as on the north side of Parkway. In addition, direct pedestrian crossings would be installed and street clutter removed.	May 2012
<b>Finchley Road</b> – Improved pedestrian facilities at the signalised junctions of Finchley Rd/ West End Lane and Finchley Rd/ Platts Lane. ASLs are also proposed at Hendon Way and the O <sub>2</sub> shopping centre access junction	March 2013
<b>Camden Town Centre</b> – Includes major schemes outlined above at Cobden Junction as well as Camden High Street (south) to improve the urban realm and the pedestrian environment. Proposals also for Camden Road.	March 2015
<b>Swiss Cottage</b> – Improvements to pedestrian facilities, especially widening the pedestrian islands, and introduction of ASLs around the gyratory. Will take in to account significant increase in school students in coming years.	March 2014
<b>Camden Road/ St Pancras Way</b> – Improved pedestrian facilities at the junction, including new crossings across the eastern and southern arms.	October 2011
<b>Camden Road Station</b> – Improve the quality of the urban realm and pedestrian facilities in the vicinity of Camden Road station.	August 2011
<b>Kings Cross Junction Improvements</b> – Improvements to the pedestrian crossing facilities and widened footways at the junctions of Euston Road/ York Way and Euston Road/ Pancras Road.	February 2012
<b>Euston Road/ Churchway</b> – Investigate potential for provision of improved pedestrian facilities at the junction.	March 2013
<b>Hampstead Road</b> – Cycle improvements including new cycle lanes, improved signage and introduction of ASLs.	January 2012

### Timescales for Delivery of Interventions

- 6.86 The projects set out in the programme of investment will be delivered by the end of March 2014 with the following exceptions:
- Ongoing measures (such as road safety education, cycle training and development of the electric vehicle network) will continue beyond the immediate 3-year life span of the current programme of investment. The interventions marked with an asterisk are considered to be ongoing for the foreseeable future; and
  - Depending on funding allocations being made available to Camden, all components of the major scheme projects are unlikely to be completed by March 2014.
- 6.87 The programme of investment outlined in this Chapter will be “refreshed” for the subsequent three years (2014-2017) in time to commence implementation in April 2014. This allows new projects to be developed that reflect the changing baseline situation, capitalise on

opportunities and successes, and address any new issues or priorities that arise.

### Risk Assessment

- 6.88 Inevitably there are risks to the delivery of the schemes outlined in the programme of investment. Of particular importance is the funding, both from within the Council and from TfL.
- 6.89 Camden has measures in place to understand risks and manage them to minimise problems and maximise the success of the delivery of the Camden Transport Strategy.
- 6.90 **Table 6.9** identifies a range of risks and mitigation measures regarding the delivery of the overall LIP programme, and the achievement of outcomes.

**Table 6.9 – Key Risks to Programme and Mitigation Measures**

Risk	Mitigation Measure
Insufficient time to complete the work	<ul style="list-style-type: none"> <li>• Completion of feasibility studies and consultation where possible for area-wide schemes in the year preceding implementation to allow sufficient time for delivery of the scheme;</li> <li>• Programming of projects from the start of the project;</li> <li>• Close working will be conducted with Councillors, colleagues across the Council, other stakeholders and the community to develop a scheme that has “buy-in” from those involved and helps to avoid timely and costly design changes at advanced stages of the scheme;</li> <li>• Where it is clear that a project cannot be delivered in the year to which funding is allocated, then funding will be reallocated to bring forward another project from a future year and allow delivery the following year;</li> </ul>
Compatibility of policy and design of schemes	<ul style="list-style-type: none"> <li>• This strategy has a strong evidence basis and the schemes included in the programme have been developed to support the nine key objectives of the strategy.</li> <li>• Camden’s transport section has restructured to develop close links between transport planning and engineering to ensure that policy, innovation and good design are all integrated to achieve high quality projects that are consistent with CTS and Mayoral objectives</li> </ul>
Cost increases / budget reductions	<ul style="list-style-type: none"> <li>• Project costs are reviewed internally on a bi-monthly basis. Where the spend on projects is likely to be under or over the allocated budget then the project is either revised or funding is rebalanced between projects to ensure highest priority projects are delivered.</li> <li>• Any reductions in overall LIP funding will be accommodated through either reduced spending on proposed schemes or deletion/ postponement of schemes that are not the highest priority for delivery</li> </ul>
Lack of support for schemes during consultation	<ul style="list-style-type: none"> <li>• Involving the community and stakeholders at an early stage to improve the scheme development and ensure a comprehensive understanding of issues</li> <li>• Widespread consultation on this strategy will help to increase early awareness of schemes and allow the community to provide comments on proposed interventions at a very early stage.</li> </ul>

## Chapter 7 – Consultation

### *Summary of the draft LIP consultation*

7.1 Camden undertook extensive consultation on the draft Transport Strategy from January to March 2011 through a variety of channels and formats, as follows:

- Correspondence with statutory groups
- Ward Members
- Transport groups
- Postal survey: with Camden Talks resident panel to identify the top three transport priorities as part of the development of the LIP;
- Workshop with Equalities Stakeholder Group comprising representatives from all equalities strands as part of the development of the LIP;
- Engagement with Living Streets, Camden Cycling Campaign and Friends of the Earth to identify key barriers to sustainable travel, as part of the development of the LIP;
- Camden Talks website: an online community for people to discuss and comment on the draft Strategy;
- Officer attendance at local Area Action Groups resident forums
- Workshops: a workshop with the Camden Talks Citizens Panel and a session about the Transport Strategy at Camden's 2<sup>nd</sup> Green Summit in January 2011 as part of the development of the LIP;
- Email and letter contact with 1000 community groups and Tenants and Residents Associations (TRAs)
- Engagement with Council officers and Council forums
- Press releases and press articles
- Distribution in libraries.

7.2 A full and summary copy of the Draft Transport Strategy was made available on the Council's website, together with a questionnaire covering all sections of the strategy as well as specific areas of interest. A limited number of hard copies were also produced of both the full and summary versions of the document.

7.3 Statutory groups who were consulted included:

- The Automobile Association
- The British Motorcyclists Federation
- Camden Ambulance Service
- Camden Chamber of Commerce & Industry
- Camden Civic Society
- Camden Cycle Campaign
- Confederation of Passenger Transport
- Royal Mail Central London

- The Cyclist Touring Club
- DISC
- The Freight Transport Association
- Guide Dogs for the Blind Association
- London boroughs: Barnet, Westminster, City of London, Islington and Brent,
- Camden fire offices - Kentish Town, West Hampstead and Rosebery Avenue
- The Licensed Taxi Drivers Association
- Living Streets
- London Ambulance Service
- London Fire Brigade
- Metropolitan Police (Traffic Management Team)
- Motorcycle Association Group
- National Car Parks
- Owners/Drivers Society
- Royal National Institute for the Blind
- Road Haulage Association
- TfL - London Transport Buses, Routes and Places, Road Network Development,
- Transport and General Workers Union
- Transport for All
- Centre for Accessible Environments
- Relevant Council Officers

7.4 The Equalities Impact Assessment and Strategic Environmental Assessment were also consulted on during their development and as part of the final consultation process.

7.5 Following consultation, Camden produced a Consultation Report and changes were made to the draft Transport Strategy to reflect areas of concern; however these changes were not substantive. The final Camden Transport Strategy/LIP was approved on 3 August 2011.



## Chapter 8 - Performance Monitoring Plan

### *Introduction*

- 8.1 To ensure that Camden's Transport Strategy delivers change, the policies and projects have been developed to work towards targets that will represent progress towards meeting the objectives.
- 8.2 The LIP guidance issued by TfL requires boroughs to measure their performance against a number of "core" targets. Camden has also set a number of local targets which cover outcomes that are of particular priority locally.
- 8.3 A full list of targets and the MTS goals and Camden Transport Strategy objectives that they are designed to work towards are included in **Table 8.1**
- 8.4 The target information and trajectories are then described for each of the targets, looking forward to interim targets for 2013/14 and longer term targets for 2019/20.
- 8.5 The Council is aware that many of these targets cannot be achieved by working alone; efforts will include working in partnership with all sectors of the local community, government and external stakeholders, including TfL, the health sector, businesses and employers, bus operators, schools and neighbouring authorities.
- 8.6 The targets that have been set for Camden help to contribute to meeting the key objectives of the CTS, particularly encouraging sustainable travel and reducing the impacts of transport on the environment and health, in line with the SEA.
- 8.7 In setting these targets every effort has been taken to ensure they are ambitious but also realistic, ensuring the best possible level of service is provided to those living in the borough within available funding. The projects and policies that support the plan are described as well as the important role of local partners.
- 8.8 Meeting each target involves an element of risk, particularly with regards to funding.
- 8.9 It is noted that these targets assume that no Major Scheme funding will be awarded as required by the LIP Guidance produced by TfL. As the proposed Camden Town and West End projects are complex and comprise a number of components, the specific impact of each of these targets has not been described but has been summarised below:
  - Increased travel by sustainable modes including walking and cycling

- Increased street trees and cycle parking as part of public realm improvements
- Reduction in casualties – both schemes are in areas of the borough with higher casualty rates
- Some minor improvements in bus reliability, but this is unlikely to change the overall borough target

**Camden Transport Strategy Targets**

**Table 8.1 – Camden Transport Strategy Targets**

Camden Transport Strategy Targets	MTS objectives						Camden Transport Strategy Objectives								
	Economic development and population growth	Quality of life	Safety and security	Opportunities for all	Climate change	Delivery of London Olympics 2012	Reduce environmental impacts of transport	Encouraging healthy and sustainable travel	Improve road safety and personal security	Manage congestion and improve reliability	Develop and maintain high quality accessible streets	Support sustainable growth and regeneration	Access to local service and inequalities	Parking that is fair and proportionate	Support delivery of London Olympics 2012
<b>Transport for London Core Targets</b>															
<b>Walking mode share</b> – Increase proportion of resident trips by walking from 38.9 per cent to 40.9% by 2019/20		✓	✓		✓	✓		✓	✓		✓	✓			✓
<b>Cycling mode share</b> – Increase proportion of resident trips by cycling from 3% to 8% by 2025/26		✓	✓		✓			✓	✓		✓	✓	✓		
<b>Bus Reliability</b> – Maintain the excess wait time for high frequency bus services at 1.2 minutes	✓					✓		✓		✓					✓
<b>Condition of road surfaces</b> – Ensure the proportion of principal roads in need of repair does not increase beyond 6.6% in 2019/20	✓					✓					✓				✓
<b>Road Safety (Total casualties)</b> – Reduce the total number of casualties to 770 by 2019/20															
<b>Road Safety (KSI's)</b> – Reduce the total number of people killed and seriously injured to 92 by 2019/20		✓	✓						✓						
<b>CO<sub>2</sub> emissions</b> – Reduce CO <sub>2</sub> transport emissions to 94 kilo tonnes by 2025		✓			✓		✓			✓					
<b>Local Targets</b>															
<b>Traffic Flow</b> - Reduce the current proportion of resident's trips made by car and motorcycle to 17% in 2019/20	✓	✓		✓								✓	✓		
<b>Cycling trips</b> – Increase cycling's proportion of road traffic flow to 20.5% in 2019/20		✓	✓		✓			✓	✓						

Camden Transport Strategy Targets	MTS objectives						Camden Transport Strategy Objectives								
	Economic development and population growth	Quality of life	Safety and security	Opportunities for all	Climate change	Delivery of London Olympics 2012	Reduce environmental impacts of transport	Encouraging healthy and sustainable travel	Improve road safety and personal security	Manage congestion and improve reliability	Develop and maintain high quality accessible streets	Support sustainable growth and regeneration	Access to local service and inequalities	Parking that is fair and proportionate	Support delivery of London Olympics 2012
<b>Local authority fleet</b> – Increase the proportion of fleet vehicles which are electric, hybrid and biomethane to 70% in 2019/20					✓		✓	✓							
<b>Car clubs</b> - Increase the number of on-street car club spaces to 410 by 2020				✓	✓		✓						✓	✓	
<b>School travel plans</b> - Increase the proportion of schools with travel plans to 100% by 2020		✓	✓		✓		✓	✓							
<b>Bicycle parking</b> - Increase the number of on-street cycle parking (public space) to 3800 in 2020			✓	✓				✓			✓	✓		✓	
<b>Street Trees</b> – Increase the number of newly planted street trees by 500 in 2020		✓			✓						✓				

**Detailed Target Tables****Target 1 – Proportion of Resident Trips by Walking**

<b>Increase proportion of resident trips by walking from an average of 38.9% each year across 2006/07 - 2008/09 to 40.9% by 2017/18 - 2019/20</b>																											
<b>Target type</b>	Mandatory																										
<b>Long term target</b>	40.9 % residents' trips by walking by 2017/18 - 2019/20 (3 year average)																										
<b>Short term target</b>	39.7 % residents' trips by walking by 2011/12 - 2013/14 (3 year average)																										
<b>Baseline Data Source</b>	Travel in London Report, TfL																										
<table border="1"> <caption>Proportion of Residents Trips by Walking</caption> <thead> <tr> <th>Financial Year</th> <th>% trips by walking</th> </tr> </thead> <tbody> <tr><td>2006/07 - 2008/09</td><td>38.9</td></tr> <tr><td>2007/08 - 2009/10</td><td>39</td></tr> <tr><td>2008/09 - 2010/11</td><td>39.1</td></tr> <tr><td>2009/10 - 2011/12</td><td>39.3</td></tr> <tr><td>2010/11 - 2012/13</td><td>39.5</td></tr> <tr><td>2011/12 - 2013/14</td><td>39.7</td></tr> <tr><td>2012/13 - 2014/15</td><td>39.9</td></tr> <tr><td>2013/14 - 2015/16</td><td>40.1</td></tr> <tr><td>2014/15 - 2016/17</td><td>40.3</td></tr> <tr><td>2015/16 - 2017/18</td><td>40.5</td></tr> <tr><td>2016/17 - 2018/19</td><td>40.7</td></tr> <tr><td>2017/18 - 2019/20</td><td>40.9</td></tr> </tbody> </table>		Financial Year	% trips by walking	2006/07 - 2008/09	38.9	2007/08 - 2009/10	39	2008/09 - 2010/11	39.1	2009/10 - 2011/12	39.3	2010/11 - 2012/13	39.5	2011/12 - 2013/14	39.7	2012/13 - 2014/15	39.9	2013/14 - 2015/16	40.1	2014/15 - 2016/17	40.3	2015/16 - 2017/18	40.5	2016/17 - 2018/19	40.7	2017/18 - 2019/20	40.9
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2017/18 - 2019/20	40.9																										
Evidence that the target is realistic and ambitious	The current proportion of walking trips by residents puts the borough in the top quartile London-wide. Only the City of Westminster and the City of London have a higher proportion of walking trips. The Council prioritises walking in its road user hierarchy																										
Key actions for the Council	Our key actions are to: <ul style="list-style-type: none"> <li>• Promote the health and environmental benefits of walking</li> <li>• Encourage walking through school and work place travel planning</li> <li>• Improve the public realm</li> <li>• Improve road safety through measures such as pedestrian crossings</li> <li>• Increase pedestrian signage and Legible London.</li> <li>• Provide pedestrians skills training.</li> </ul>																										
Key actions for local partners	Camden will continue to work with its Smarter Travel partners in schools and businesses throughout the borough. The Council will also work strategically with its Central and North sub regional partners.																										
Principal risks and how they will be managed	Increased walking trips, especially amongst more vulnerable groups such as younger and older people will present road safety challenges. The Council is committed to providing road safety training and improved pedestrian facilities. In light of budget constraints we will seek to ensure delivery of our projects by effective project management.																										

**Target 2 – Cycling Mode Share**

Increase the proportion of resident trips by cycling by increasing mode share from an average of 3% across 2006/07 - 2008/09 to 8% across 2023/24 - 2025/26	
<b>Target type</b>	Mandatory
<b>Long term target</b>	8% residents’ trips by cycling by 2023/24 - 2025/26 (3 year average)
<b>Short term target</b>	4.5% residents’ trips by cycling by 2011/12 - 2013/14 (3 year average)
<b>Baseline Data Source</b>	Travel in London Report, TfL
Evidence that the target is realistic and ambitious	Camden has one of the highest cycle mode shares of all London boroughs and the borough prioritises sustainable travel. The target is for 4.5 per cent average of all residents’ trips by bike between 2012/13 – 2015/16, and 8 per cent average from 2023/24 - 2025/26. Work undertaken by TfL on cycling potential identified a “high density of potentially cyclable trips” in Camden, which helps justify Camden’s ambitious cycling target. The cycle improvements in the borough, the continued travel awareness programme and initiatives such as cycle hire and Cycle Superhighways will increase the uptake of cycling in Camden.
Key actions for the Council	Our key actions are to: <ul style="list-style-type: none"> <li>• Implement initiatives to encourage people to cycle and increase cycle training;</li> <li>• Increase the provision of secure cycle parking;</li> <li>• Support the expansion of cycle hire to the north of the borough;</li> <li>• Support the introduction of Cycle Superhighway routes;</li> <li>• Continue to invest in new cycle routes, improve cycle facilities and increase cycle permeability</li> </ul>
Key actions for local partners	Camden will continue working with schools and businesses throughout the borough. The Council will work strategically with its Central and North sub regional partners to encourage cycling. The Council will continue to work with TfL to expand the Cycle Hire network to the north of the borough and the Cycle Superhighway scheme.
Principal risks and how they will be managed	Increasing numbers of cyclists, especially for those new to cycling, may increase casualties which may deter some people from cycling. Cycle theft and lack of funding for cycle measures could also affect meeting the target. Camden will continue to fund cycling measures, cycle training and ensure secure cycling parking is provided across the borough to reduce theft.

**Target 3 – Bus Service Reliability**

<b>Maintain the excess wait time (EWT) for high frequency bus services at 1.2 minutes in 2019/20</b>	
<b>Target type</b>	Mandatory
<b>Long term target</b>	To maintain excess wait time of 1.2 minutes by 2019/20
<b>Short term target</b>	To maintain excess wait time of 1.2 minutes by 2013/14
<b>Baseline Data Source</b>	Travel in London Report, TfL
Evidence that the target is realistic and ambitious	In 2009/10 Excess Wait Time was 1.2 minutes on average. The TfL business plan forecasts an increase in bus EWT. Through managing congestion on the road network we expect the excess wait time to be maintained at its current level.
Key actions for the Council	Our key aims are to: <ul style="list-style-type: none"> <li>• Encourage modal shift towards cycling and walking to relieve congestion on the highway network to improve reliability;</li> <li>• Investigate bus priority measures as part of area-wide schemes where appropriate</li> </ul>
Key actions for local partners	Bus operators can support this target through driver behaviour and contract management by TfL.
Principal risks and how they will be managed	A key risk is increased levels of traffic congestion on routes within the borough. The Council is committed to ensuring that proposals as outlined in the Strategy are put in place to reduce vehicle levels thereby improving bus reliability within the borough. The proposed major scheme along Tottenham Court Road would also benefit bus journey times and could help reduce impacts elsewhere.

**Target 4 - Asset (highway) Condition**

<b>Ensure the proportion of principal roads in need of repair does not increase beyond 6.6% in 2019/20.</b>															
<b>Target type</b>	Mandatory														
<b>Long term target</b>	Ensure the proportion of principal roads in need of repair does not increase from 6.6% in 2019/20.														
<b>Short term target</b>	Ensure the proportion of principal roads in need of repair does not increase from 6.6% in 2013/14.														
<b>Baseline Data Source</b>	Travel in London Report, TfL														
<div style="text-align: center;"> <p><b>Proportion of Principal Roads in Need of Repair</b></p> <table border="1"> <caption>Data for Proportion of Principal Roads in Need of Repair</caption> <thead> <tr> <th>Year</th> <th>% principal roads in need of repair</th> </tr> </thead> <tbody> <tr><td>2010</td><td>6.6</td></tr> <tr><td>2012</td><td>6.6</td></tr> <tr><td>2014</td><td>6.6</td></tr> <tr><td>2016</td><td>6.6</td></tr> <tr><td>2018</td><td>6.6</td></tr> <tr><td>2020</td><td>6.6</td></tr> </tbody> </table> </div>		Year	% principal roads in need of repair	2010	6.6	2012	6.6	2014	6.6	2016	6.6	2018	6.6	2020	6.6
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2010	6.6														
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2014	6.6														
2016	6.6														
2018	6.6														
2020	6.6														
Evidence that the target is realistic and ambitious	The current percentage of principal roads within the borough in need of repair puts the borough within the 2 <sup>nd</sup> quartile London-wide. The target is to ensure this does not increase by 2013/14 or 2020. This is considered realistic in the context of reduced funding.														
Key actions for the Council	Enhancements will be targeted at roads with the highest UKPMS (i.e. the roads in most need of repair) as well as complementing other TfL funded schemes.														
Key actions for local partners	Close working with contractors and TfL to ensure continued delivery of highways work schemes.														
Principal risks and how they will be managed	A number of factors beyond the control of the Council can impact upon the condition of the boroughs roads. The weather is one such example, as shown during the winter 2009, where considerable damage was caused to many of Camden's roads and footways.														



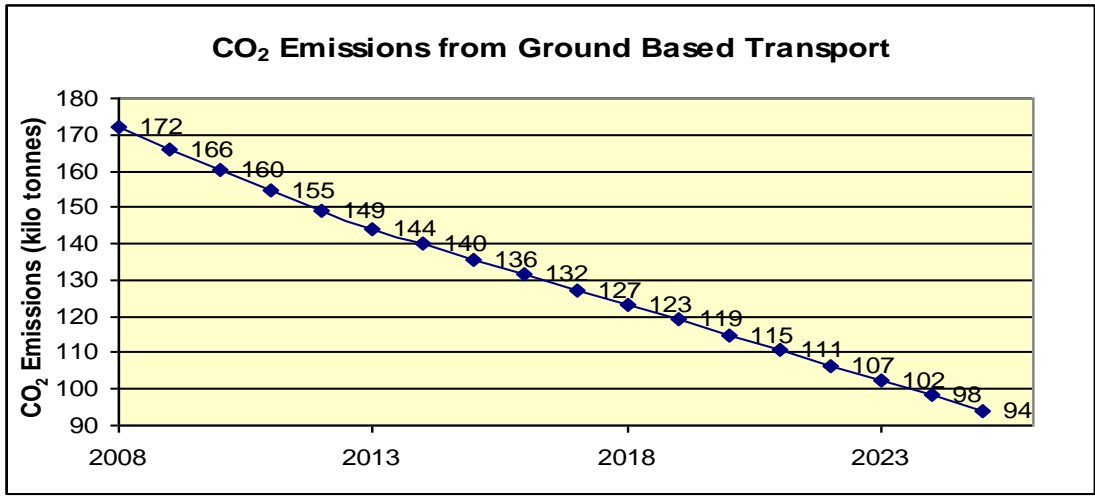
**Target 5 – Total Road Traffic Casualties**

<b>Reduce the average number of road traffic casualties each year from 867 across 2007-2009 to 770 across 2018-2020.</b>																											
<b>Target type</b>	Mandatory																										
<b>Long term target</b>	Reduce the number of road traffic casualties each year to 770 across 2018 - 2020.																										
<b>Short term target</b>	Reduce the number of road traffic casualties each year to 823 across 2012 – 2014																										
<b>Baseline Data Source</b>	Travel in London Report, TfL																										
<table border="1"> <caption>Total Number of Road Traffic Casualties</caption> <thead> <tr> <th>Fiscal Year</th> <th>Number of Casualties</th> </tr> </thead> <tbody> <tr><td>2007 - 2009</td><td>867</td></tr> <tr><td>2008 - 2010</td><td>858</td></tr> <tr><td>2009 - 2011</td><td>849</td></tr> <tr><td>2010 - 2012</td><td>841</td></tr> <tr><td>2011 - 2013</td><td>832</td></tr> <tr><td>2012 - 2014</td><td>823</td></tr> <tr><td>2013 - 2015</td><td>814</td></tr> <tr><td>2014 - 2016</td><td>805</td></tr> <tr><td>2015 - 2017</td><td>796</td></tr> <tr><td>2016 - 2018</td><td>788</td></tr> <tr><td>2017 - 2019</td><td>779</td></tr> <tr><td>2018 - 2020</td><td>770</td></tr> </tbody> </table>		Fiscal Year	Number of Casualties	2007 - 2009	867	2008 - 2010	858	2009 - 2011	849	2010 - 2012	841	2011 - 2013	832	2012 - 2014	823	2013 - 2015	814	2014 - 2016	805	2015 - 2017	796	2016 - 2018	788	2017 - 2019	779	2018 - 2020	770
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Evidence that the target is realistic and ambitious	There was an average of 867 casualties in the borough each year from 2007 to 2009, with pedestrians comprising 26%, car driver/passengers 23% and motorcyclists 21%. The target to reduce total casualties to an average of 823 each year from 2012 to 2014 and then to 770 each year (on average) from 2018 to 2020 represents a 10% reduction on current levels. Road casualty reduction programmes have been delivered over many years and it is increasingly difficult to make substantial reductions in the short term. Data for London has shown a levelling out in the reduction of KSI casualties since 2004. This target is ambitious and will be partly dependent on works being carried out on the TLRN. Increases in cycling and walking are likely to bring extra challenges.																										
Key actions for the Council	Our key actions are: <ul style="list-style-type: none"> <li>Investigate further 20 mph zones, traffic calming measures and also focussing investment on particular collision “hot-spot” locations.</li> <li>Continue with Road Safety Education, Training and Publicity Programme (ETP)</li> <li>Prioritise neighbourhoods and corridors with the highest casualty figures.</li> <li>Improve pedestrian crossing facilities and the public realm to provide a safer pedestrian environment.</li> </ul>																										
Key actions for local partners	A number of casualties occur on the TLRN; if targets are to be met then the Council must work closely with TfL, the police and schools in the borough as part of their education programme and with young people’s services.																										
Principal risks and how they will be managed	The growing number of cyclists is one identified risk to meeting targets. However, higher numbers also increases visibility and brings safety benefits. Smarter travel and increased levels of roads safety education should help to mitigate this.																										

**Target 6 – Total Killed or Seriously Injured (KSI)**

<b>Reduce the average number of people killed and seriously injured (KSI) each year on roads in Camden from 123 in 2007– 2009 to 92 by 2020.</b>																											
<b>Target type</b>	Mandatory																										
<b>Long term target</b>	Reduce the number KSIs to 92 by 2019/20.																										
<b>Short term target</b>	Reduce the number KSIs to 109 by 2013/14.																										
<b>Baseline Data Source</b>	Travel in London Report, TfL																										
<div style="text-align: center;"> <p><b>Number of Killed or Seriously Injured (KSI) on Roads within Camden</b></p> <table border="1"> <caption>Data for Number of Killed or Seriously Injured (KSI) on Roads within Camden</caption> <thead> <tr> <th>Fiscal Year</th> <th>Number of KSI's</th> </tr> </thead> <tbody> <tr><td>2007 - 2009</td><td>123</td></tr> <tr><td>2008 - 2010</td><td>120</td></tr> <tr><td>2009 - 2011</td><td>117</td></tr> <tr><td>2010 - 2012</td><td>115</td></tr> <tr><td>2011 - 2013</td><td>112</td></tr> <tr><td>2012 - 2014</td><td>109</td></tr> <tr><td>2013 - 2015</td><td>106</td></tr> <tr><td>2014 - 2016</td><td>103</td></tr> <tr><td>2015 - 2017</td><td>100</td></tr> <tr><td>2016 - 2018</td><td>98</td></tr> <tr><td>2017 - 2019</td><td>95</td></tr> <tr><td>2018 - 2020</td><td>92</td></tr> </tbody> </table> </div>		Fiscal Year	Number of KSI's	2007 - 2009	123	2008 - 2010	120	2009 - 2011	117	2010 - 2012	115	2011 - 2013	112	2012 - 2014	109	2013 - 2015	106	2014 - 2016	103	2015 - 2017	100	2016 - 2018	98	2017 - 2019	95	2018 - 2020	92
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2018 - 2020	92																										
Evidence that the target is realistic and ambitious	The average number of KSI each year from 2007 to 2009 was 123. The target is to reduce KSIs to 109 in 2014 and then to 92 in 2020. This is in line with draft DfT consultation which outlines a preliminary target to reduce KSIs by 25%. Data for London has shown a levelling out in the reduction of KSI casualties since 2004.																										
Key actions for the Council	Our key actions are to: <ul style="list-style-type: none"> <li>• Investigate further 20 mph zones, traffic calming measures and also focussing investment on particular collision “hot-spot” locations.</li> <li>• Continue with Road Safety Education, Training and Publicity Programme (ETP)</li> <li>• Prioritise neighbourhoods and corridors with high cycle casualty figures.</li> <li>• Improve pedestrian crossing facilities and the public realm to provide a safer pedestrian environment.</li> </ul>																										
Key actions for local partners	As mentioned above a number of casualties occur on the TLRN, and if targets are to be met the Council must work closely with TfL, as well as with schools as part of their education programmes and with police and young people’s services.																										
Principal risks and how they will be managed	One risk is associated with the growing number of cyclists on the roads. Smarter travel and increased levels of roads safety education should help to mitigate this. However, increased cycle numbers tend to increase cycle safety through raised profile and visibility.																										

**Target 7 – CO<sub>2</sub> emissions**

<b>Reduce tonnes of CO<sub>2</sub> emanating from ground based transport from 172 kilo tonnes in 2008 to 94 kilo tonnes by 2025.</b>	
<b>Target type</b>	Mandatory
<b>Long term target</b>	Reduce tonnes of CO <sub>2</sub> emanating from ground based transport to 94 kilo tonnes in 2025.
<b>Short term target</b>	Reduce tonnes of CO <sub>2</sub> emanating from ground based transport to 144 kilo tonnes in 2013.
<b>Baseline Data Source</b>	Travel in London, TfL
	
Evidence that the target is realistic and ambitious	The total CO <sub>2</sub> levels in 2010 place Camden in the 2 <sup>nd</sup> quartile London wide. The Council's target for 2013 is 144 kilo tonnes. Our target is for CO <sub>2</sub> from ground based transport to be 94.08 kilo tonnes by 2025. The MTS has a target of 60% reduction in ground based transport CO <sub>2</sub> emissions by 2025, which for Camden equates to 94 kilo tonnes. The targets are considered to be challenging given the proposed increased population and employment growth in the borough.
Key actions for the Council	Our key actions are to: <ul style="list-style-type: none"> <li>• Continue to reduce motor vehicle flows and improve air quality.</li> <li>• Improve driver behaviour.</li> <li>• Support the use of electric vehicles and other low emission vehicles.</li> <li>• Implement planning policies to reduce the need to travel and to encourage sustainable transport through provision of minimum and maximum car parking standards.</li> <li>• Encourage car clubs and car pooling.</li> </ul>
Key actions for local partners	Camden will continue to work with its Smarter travel partners in schools and businesses throughout the borough. The Council will work strategically with its Central and North sub regional partners to encourage walking and cycling and travel by public transport.
Principal risks and how they will be managed	Potential of low take-up for electric vehicles. However, participation in a London-wide electric vehicle scheme should increase take up.

**Target 8 – Traffic Flow**

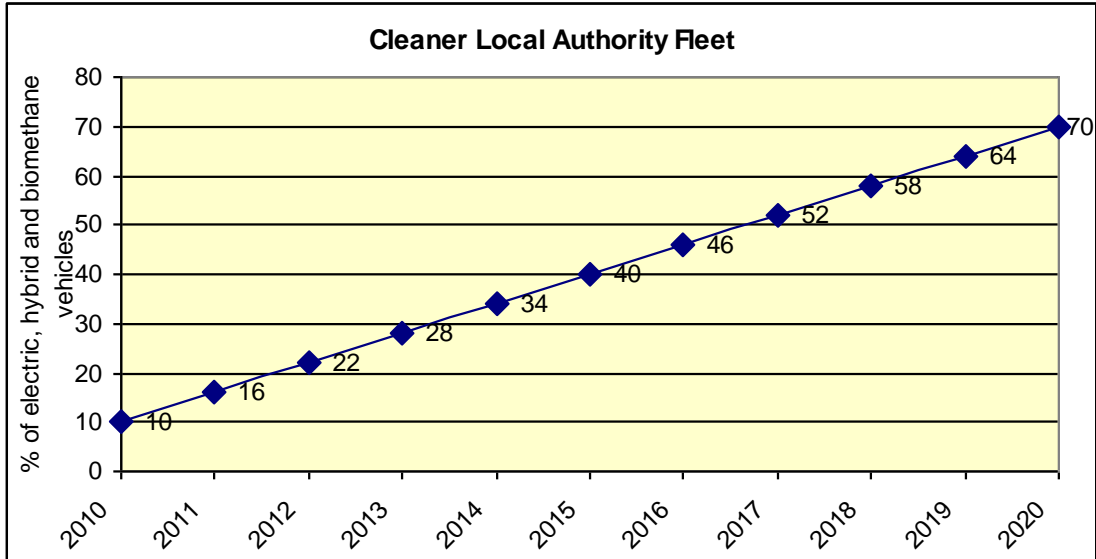
<b>Reduce the current proportion of residents’ trips made by car and motorcycle from an average of 19% across 2006/07 – 2008/09 to an average of 17% across 2016/17 – 2018/19.</b>																									
<b>Target type</b>	Local																								
<b>Long term target</b>	Reduce the current proportion of residents’ trips made by car and motorcycle to an average of 17% across <b>2016/17 - 2018/19</b>																								
<b>Short term target</b>	Reduce the current proportion of residents’ trips made by car and motorcycle to an average of 18.1% across 2012/13 - 2014/15																								
<b>Baseline Data Source</b>	Travel in London Report, TfL																								
<div style="text-align: center;"> <p><b>Proportion of residents trips made by car and motorcycle</b></p> <table border="1"> <caption>Data for Proportion of residents trips made by car and motorcycle</caption> <thead> <tr> <th>Fiscal Year</th> <th>% trips made by car and motorcycle</th> </tr> </thead> <tbody> <tr><td>2006/07 - 2008/09</td><td>19.0</td></tr> <tr><td>2007/08 - 2009/10</td><td>18.8</td></tr> <tr><td>2008/09 - 2010/11</td><td>18.6</td></tr> <tr><td>2009/10 - 2011/12</td><td>18.5</td></tr> <tr><td>2010/11 - 2012/13</td><td>18.3</td></tr> <tr><td>2011/12 - 2013/14</td><td>18.1</td></tr> <tr><td>2012/13 - 2014/15</td><td>17.9</td></tr> <tr><td>2013/14 - 2015/16</td><td>17.7</td></tr> <tr><td>2014/15 - 2016/17</td><td>17.5</td></tr> <tr><td>2015/16 - 2017/18</td><td>17.4</td></tr> <tr><td>2016/17 - 2018/19</td><td>17.2</td></tr> </tbody> </table> </div>		Fiscal Year	% trips made by car and motorcycle	2006/07 - 2008/09	19.0	2007/08 - 2009/10	18.8	2008/09 - 2010/11	18.6	2009/10 - 2011/12	18.5	2010/11 - 2012/13	18.3	2011/12 - 2013/14	18.1	2012/13 - 2014/15	17.9	2013/14 - 2015/16	17.7	2014/15 - 2016/17	17.5	2015/16 - 2017/18	17.4	2016/17 - 2018/19	17.2
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2013/14 - 2015/16	17.7																								
2014/15 - 2016/17	17.5																								
2015/16 - 2017/18	17.4																								
2016/17 - 2018/19	17.2																								
Evidence that the target is realistic and ambitious	The current proportion of Camden residents’ trips made by car and motorcycle is one of the lowest in London. The target is 18.1% of trips each year on average across 2012/13 - 2014/15, and 17% each year on average across 2016/17 - 2018/19. Investment in the public transport network and encouraging cycling and walking will encourage a shift away from car use.																								
Key actions for the Council	Our key actions are to: <ul style="list-style-type: none"> <li>• Ensure funding is available for investment in walking and cycling to encourage modal shift.</li> <li>• Support TfL and Network Rail with transport infrastructure improvements.</li> </ul>																								
Key actions for local partners	The Council will continue to work with key stakeholders to ensure modal shift is achieved.																								
Principal risks and how they will be managed	The Council must ensure that funding of major transport improvements and upgrades continues, if modal shift is to be achieved. Camden will also need to continue to invest in projects that encourage people to travel by more sustainable modes, which may be affected by funding constraints.																								

## Target 9 – Cycling

More than double cycling's proportion of total traffic flows from 9.7% in 2009/10 to 25% in 2019/20.																									
Target type	Local																								
Long term target	Increase cycling's proportion of total traffic flows to 25% in 2019/20.																								
Short term target	Increase cycling's proportion of total traffic flows to 15.8% in 2013/14																								
Baseline Data Source	Annual Screenline Traffic Survey, LB Camden																								
<table border="1"> <caption>Cycling's Proportion of Road Traffic Flows</caption> <thead> <tr> <th>Fiscal Year</th> <th>% trips made by cycling</th> </tr> </thead> <tbody> <tr><td>2009/10</td><td>9.7</td></tr> <tr><td>2010/11</td><td>11.2</td></tr> <tr><td>2011/12</td><td>12.8</td></tr> <tr><td>2012/13</td><td>14.3</td></tr> <tr><td>2013/14</td><td>15.8</td></tr> <tr><td>2014/15</td><td>17.4</td></tr> <tr><td>2015/16</td><td>18.9</td></tr> <tr><td>2016/17</td><td>20.4</td></tr> <tr><td>2017/18</td><td>21.9</td></tr> <tr><td>2018/19</td><td>23.5</td></tr> <tr><td>2019/20</td><td>25.0</td></tr> </tbody> </table>		Fiscal Year	% trips made by cycling	2009/10	9.7	2010/11	11.2	2011/12	12.8	2012/13	14.3	2013/14	15.8	2014/15	17.4	2015/16	18.9	2016/17	20.4	2017/18	21.9	2018/19	23.5	2019/20	25.0
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2019/20	25.0																								
Evidence that the target is realistic and ambitious	In 2009/10 cycling comprised 9.7% of the total traffic flow. In 2013/14 this should increase to 15.8%. The Council hopes to see a significant increase by 2020 to 25%. This figure reflects the predicted rise in the popularity of cycling in the borough, the Council's commitment to sustainable travel and cycle initiatives such as the TfL Cycle Hire and Cycle Superhighways projects.																								
Key actions for the Council	Our key actions are to: <ul style="list-style-type: none"> <li>• Implement a range of initiatives to encourage people to cycle and to increase cycle training;</li> <li>• Increase cycle parking provision;</li> <li>• Support the expansion of cycle hire to the north of the borough;</li> <li>• Support the introduction of Cycle Superhighway routes;</li> <li>• Continue to invest in new cycle routes, improve cycle facilities, safety and cycle permeability;</li> </ul>																								
Key actions for local partners	Camden will continue working with schools and businesses throughout the borough. The Council will work strategically with its Central and North sub regional partners to encourage cycling. The Council will continue to work with TfL to expand the Cycle Hire network to the north of the borough and introduce the Cycle Superhighway scheme.																								
Principal risks and how they will be managed	Potentially increased cycle volumes, especially for those new to cycling, may increase casualties which may deter cycling. However, increased numbers also increase visibility that has safety benefits. Cycle theft and lack of funding for cycle measures could also affect delivery. Camden will continue to fund cycling measures, cycle training and ensure secure cycling parking is provided across the borough to reduce theft.																								

**Target 10 – Local authority fleet**

<b>Increase the proportion of electric, hybrid and biomethane vehicles in the Camden owned fleet from 10% in 2010 to 70% in 2020.</b>	
<b>Target type</b>	Local
<b>Long term target</b>	Increase the proportion of electric, hybrid and biomethane vehicles in the fleet to 70% in 2020.
<b>Short term target</b>	Increase the proportion of electric, hybrid and biomethane vehicles in the fleet to 28% in 2013
<b>Baseline Data Source</b>	LB Camden



Evidence that the target is realistic and ambitious	Camden is already a market leader for its sustainable vehicle fleet and will continue to expand the number of sustainable vehicles as vehicles are replaced.
Key actions for the Council	Our key actions are to: <ul style="list-style-type: none"> <li>• Continue to lead by example, and operate a low emission fleet</li> <li>• Continue to work towards improving vehicle efficiency;</li> <li>• Adopt the 'Green Vehicle Fleet Standard' when procuring and operating fleet vehicles</li> </ul>
Key actions for local partners	Camden will continue to ensure the most environmentally efficient vehicles are procured.
Principal risks and how they will be managed	Current financial constraints may make procuring new, green vehicles more difficult. However, short term costs will be evaluated against long term gains.

**Target 11 – On-street Car Club Spaces**

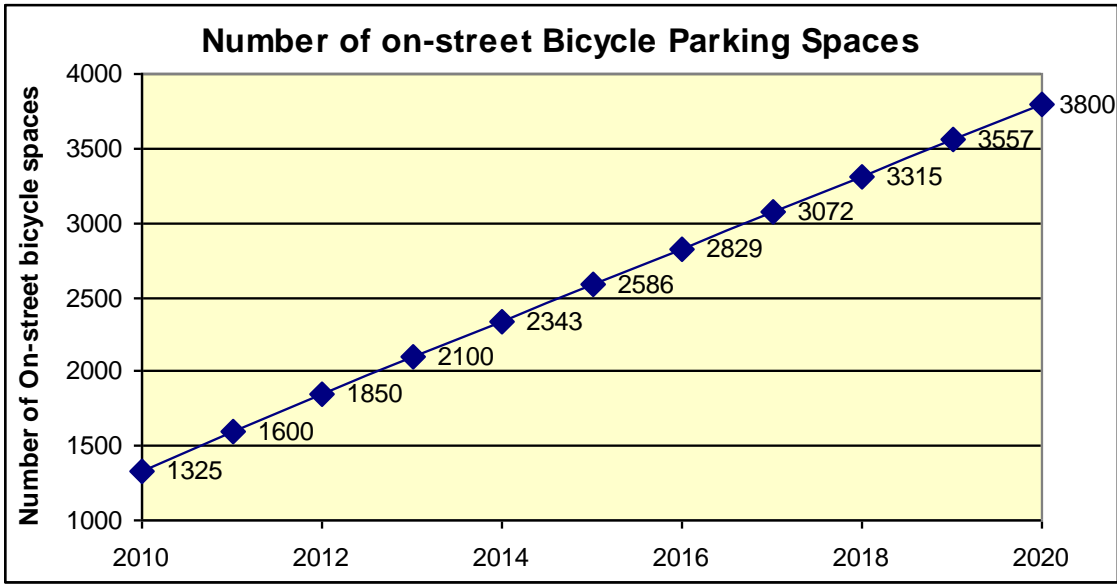
<b>Increase the number of on-street car club spaces to 410 by 2020</b>																									
<b>Target type</b>	Local																								
<b>Long term target</b>	Increase the number of on-street car club spaces to 410 by 2020																								
<b>Short term target</b>	Increase the number of on-street car club spaces to 264 by 2013																								
<b>Baseline Data Source</b>	LB Camden																								
<div style="text-align: center;"> <table border="1" style="margin: 10px auto;"> <caption>Total Number of On-street Car Club Spaces</caption> <thead> <tr> <th>Year</th> <th>Number of Spaces</th> </tr> </thead> <tbody> <tr><td>2010</td><td>202</td></tr> <tr><td>2011</td><td>223</td></tr> <tr><td>2012</td><td>244</td></tr> <tr><td>2013</td><td>264</td></tr> <tr><td>2014</td><td>285</td></tr> <tr><td>2015</td><td>306</td></tr> <tr><td>2016</td><td>327</td></tr> <tr><td>2017</td><td>348</td></tr> <tr><td>2018</td><td>368</td></tr> <tr><td>2019</td><td>389</td></tr> <tr><td>2020</td><td>410</td></tr> </tbody> </table> </div>		Year	Number of Spaces	2010	202	2011	223	2012	244	2013	264	2014	285	2015	306	2016	327	2017	348	2018	368	2019	389	2020	410
Year	Number of Spaces																								
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2018	368																								
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2020	410																								
Evidence that the target is realistic and ambitious	As at March 2010 there were 202 on-street car club spaces within the borough. This figure is predicted to rise to 264 by 2013. This is an ambitious target which represents a doubling of provision over ten years. Car clubs form an important part of the Council's agenda to manage congestion and mitigate climate change.																								
Key actions for the Council	Our key actions are to: <ul style="list-style-type: none"> <li>• Continue to encourage the use of car clubs, ensure that parking is limited to an appropriate amount and ensure that the planning system continues to support reduced travel by private vehicles.</li> <li>• Continue to work with car club operators to support further expansion of the car club network across the borough and to take forward innovative and socially inclusive schemes. Funding for expansion of the general car club network will be sought from operators.</li> </ul>																								
Key actions for local partners	The Council will continue working with key stakeholders especially car club operators to ensure modal shift is achieved. Provision of new car club spaces will also be requested from developers as part of the planning process.																								
Principal risks and how they will be managed	The Council is increasing the number of car club spaces available in the borough, but we must ensure that there is enough demand to support this growth rate.																								

**Target 12 - School Travel Plans**

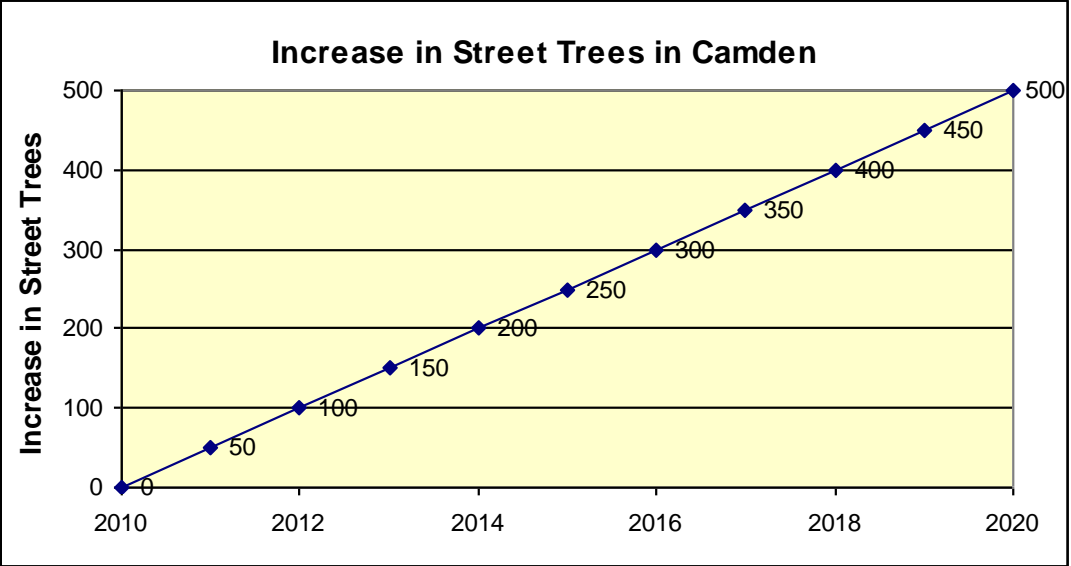
<b>Increase the number of schools with travel plans from 88% 2010 to 100% 2020</b>																									
<b>Target type</b>	Local																								
<b>Long term target</b>	Ensure 100% of schools have travel plans by 2020																								
<b>Short term target</b>	Ensure 92% of schools have travel plans by 2013																								
<b>Baseline Data Source</b>	LB Camden																								
<table border="1"> <caption>Proportion of Schools with Travel Plans</caption> <thead> <tr> <th>Year</th> <th>% of schools with travel plans</th> </tr> </thead> <tbody> <tr><td>2010</td><td>88</td></tr> <tr><td>2011</td><td>89</td></tr> <tr><td>2012</td><td>90</td></tr> <tr><td>2013</td><td>92</td></tr> <tr><td>2014</td><td>93</td></tr> <tr><td>2015</td><td>94</td></tr> <tr><td>2016</td><td>95</td></tr> <tr><td>2017</td><td>96</td></tr> <tr><td>2018</td><td>98</td></tr> <tr><td>2019</td><td>99</td></tr> <tr><td>2020</td><td>100</td></tr> </tbody> </table>		Year	% of schools with travel plans	2010	88	2011	89	2012	90	2013	92	2014	93	2015	94	2016	95	2017	96	2018	98	2019	99	2020	100
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2015	94																								
2016	95																								
2017	96																								
2018	98																								
2019	99																								
2020	100																								
Evidence that the target is realistic and ambitious	The Council is committed to ensuring that 100% of schools within the borough (state and independent) have STPs in place by 2020. In 2010 88% of schools within the borough have STPs. By 2013 this will be 93% of schools and by 2020 this figure should be 100%.																								
Key actions for the Council	Our key actions are to: <ul style="list-style-type: none"> <li>• Continue to work with all schools to develop and monitor STPs.</li> <li>• Target schools that do not have an approved STP and work with them to develop and implement STPs.</li> <li>• Ensure that STPs are provided for new school developments, and that they are effective and produced and implemented to a high standard.</li> <li>• School travel data will be used to develop carbon data for each school based on how pupils travel to school.</li> </ul>																								
Key actions for local partners	Work closely with local schools to ensure that where STPs have been established they are maintained and expanded where appropriate.																								
Principal risks and how they will be managed	There is currently a gap between the uptake of travel plans between state and private schools. If the Council is to achieve its target it must actively engage with private schools. Reduced funding may impact on achieving the target.																								



**Target 13 - Bicycle Parking**

<b>Increase the number of on-street parking spaces to 3800 by 2020.</b>																									
<b>Target type</b>	Local																								
<b>Long term target</b>	Increase the number of on-street bicycle parking spaces to 3800 by 2020.																								
<b>Short term target</b>	Increase the number of on-street bicycle parking spaces to 2100 by 2013																								
<b>Baseline Data Source</b>	LB Camden																								
 <table border="1"> <caption>Number of on-street Bicycle Parking Spaces</caption> <thead> <tr> <th>Year</th> <th>Number of On-street bicycle spaces</th> </tr> </thead> <tbody> <tr><td>2010</td><td>1325</td></tr> <tr><td>2011</td><td>1600</td></tr> <tr><td>2012</td><td>1850</td></tr> <tr><td>2013</td><td>2100</td></tr> <tr><td>2014</td><td>2343</td></tr> <tr><td>2015</td><td>2586</td></tr> <tr><td>2016</td><td>2829</td></tr> <tr><td>2017</td><td>3072</td></tr> <tr><td>2018</td><td>3315</td></tr> <tr><td>2019</td><td>3557</td></tr> <tr><td>2020</td><td>3800</td></tr> </tbody> </table>		Year	Number of On-street bicycle spaces	2010	1325	2011	1600	2012	1850	2013	2100	2014	2343	2015	2586	2016	2829	2017	3072	2018	3315	2019	3557	2020	3800
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Evidence that the target is realistic and ambitious	Camden aims to increase the number of cycle parking stands in the borough to 3800 by 2020. This represents an ambitious increase over ten years - almost triple the baseline amount for 2010. Cycle parking will be provided in a number of ways including M-stands, cycle hoops and plant locks.																								
Key actions for the Council	Our key actions are to: <ul style="list-style-type: none"> <li>• Ensure cycle parking provision is included in urban realm schemes, where appropriate</li> <li>• Continue to work with partners to provide appropriate facilities for cyclists to encourage cycling and maintain cycle use, to help reduce cycle theft as well as educate people on how to best lock their bicycles.</li> <li>• Install new cycle parking stands in line with the cycle parking strategy which is currently under development.</li> </ul>																								
Key actions for local partners	Camden will continue working with its Smarter travel partners in schools and business throughout the borough. The Council will work strategically with its Central and North sub regional partners to encourage cycling.																								
Principal risks and how they will be managed	To meet the targets and ensure a comprehensive network of cycle parking provision will require close working with TfL to ensure sufficient provision along the TLRN.																								

**Target 14 - Number of Newly Planted Street Trees**

<b>Plant additional street trees each year to ensure 500 new trees have been planted by 2020</b>	
<b>Target type</b>	Local
<b>Long term target</b>	Plant 500 new trees by 2020
<b>Short term target</b>	Plant 200 new trees by 2014
<b>Baseline Data Source</b>	LB Camden
	
Evidence that the target is realistic and ambitious	The Council will ensure that wherever possible all new developments and urban realm schemes include trees in their design. This figure represents the planting of new trees both through Camden’s transport programme and the street trees team.
Key actions for the Council	Our key actions are to: <ul style="list-style-type: none"> <li>• Ensure new trees are considered where appropriate in the design process, including Section 106 planning obligations.</li> <li>• Close working between the transport and street trees teams to ensure a strategic approach to street tree planting.</li> <li>• Continue the street tree programme to increase street tree numbers to an optimum level. Area-wide transport schemes through the Corridors and Neighbourhoods programme will also include assessment and where appropriate implementation of new street trees as part of improving the street environment.</li> </ul>
Key actions for local partners	Work closely with TfL and other stakeholders to ensure street trees are provided where possible.
Principal risks and how they will be managed	Tree planting in some areas is complicated by the presence of services and other items beneath the footway. Tree pits will be dug in advance to identify areas where tree planting is appropriate.

**Target 15 – Reduction in Motor Car Flows**

<b>Reduce the flow of motor cars in Camden to 37.5% by 2020</b>																											
<b>Target type</b>	Local																										
<b>Long term target</b>	Reduce motor car traffic flow to 37.5% by 2020																										
<b>Short term target</b>	Reduce motor car traffic flow to 43% by 2014																										
<b>Baseline Data Source</b>	Annual Screenline Traffic Survey, LB Camden																										
<div style="text-align: center;"><b>Porportion of Motor Car Flow in Camden</b></div> <table border="1"> <caption>Data for Porportion of Motor Car Flow in Camden</caption> <thead> <tr> <th>Year</th> <th>% of motor cars as proportion of total traffic flows</th> </tr> </thead> <tbody> <tr><td>2009</td><td>47.5</td></tr> <tr><td>2010</td><td>46.6</td></tr> <tr><td>2011</td><td>45.7</td></tr> <tr><td>2012</td><td>44.8</td></tr> <tr><td>2013</td><td>43.9</td></tr> <tr><td>2014</td><td>43.0</td></tr> <tr><td>2015</td><td>42.0</td></tr> <tr><td>2016</td><td>41.1</td></tr> <tr><td>2017</td><td>40.2</td></tr> <tr><td>2018</td><td>39.3</td></tr> <tr><td>2019</td><td>38.4</td></tr> <tr><td>2020</td><td>37.5</td></tr> </tbody> </table>		Year	% of motor cars as proportion of total traffic flows	2009	47.5	2010	46.6	2011	45.7	2012	44.8	2013	43.9	2014	43.0	2015	42.0	2016	41.1	2017	40.2	2018	39.3	2019	38.4	2020	37.5
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Evidence that the target is realistic and ambitious	Reducing the proportion of motor car use in Camden from 47.5% in 2009 to 37.5% in 2020 is ambitious, but this represents the current borough trend since 1991. This figure represents a 21% decrease in motor car traffic in 10 years and includes private cars only.																										
Key actions for the Council	Our key actions are to: <ul style="list-style-type: none"> <li>• Ensure funding is available for investment in walking and cycling to encourage modal shift.</li> <li>• Support TfL and Network Rail with transport infrastructure improvements.</li> </ul>																										
Key actions for local partners	The Council will continue working with key stakeholders to ensure modal shift is achieved.																										
Principal risks and how they will be managed	The Council must ensure that funding of major transport improvements and upgrades continues if modal shift is to be achieved. Camden will also need to continue to invest in projects that encourage people to travel by more sustainable modes, which may be affected by funding constraints.																										

***Monitoring Data***

- 8.10 Camden will work together with TfL, London Councils and other boroughs to develop and share best practice on interventions that are particularly effective in delivering LIP objectives and make a visible difference to local areas. This information will be used to establish best practice and gather evidence about the impact of different interventions. It will also provide important supporting evidence for Camden and others on the effectiveness and value for money of different types of schemes, and could help inform future target setting and scheme prioritisation.
- 8.11 Camden will collect bi-annual screen line data to establish trends in traffic flows, as well as use other data, such as TfL Travel Reports in London and Road Traffic Collision Data, to monitor progress towards meeting the targets set out in this LIP.
- 8.12 TfL's benchmarking tool will also be used to assist Camden in the identification of transport trends and the setting of local targets and trajectories. For each borough data is provided for indicators for safety, travel behaviour, network performance, CO2 emissions, accessibility and road condition.
- 8.13 Transport targets established in the LIP are reported to, and monitored by, the Directorate Management Team (DMT) through Quarterly Performance Reports. This team comprises the Executive Director of the Supporting Communities Directorate and directors of all the Directorate services, including regeneration and planning.
- 8.14 The transport team will coordinate quarterly meetings to monitor progress in meeting targets. This will include identifying barriers and solutions, as needed, in partnership with Council officers and community groups.