Network Management Plan

Traffic Management Act 2004

Camden

Contents

Technical terms and acronyms used throughout this plan are defined below.

(The) 'Act'	Unless specified to the contrary, this refers to the Traffic Management Act 2004.
'Appropriate national authority'	With reference to the *Traffic Management Act 2004*, this means the Secretary of State for Transport with regard to England and the National Assembly for Wales with regard to Wales
BSP	*Borough Spending Plan*. This is an annual bidding document for transport related funding, submitted to TfL
Contravention	Certain parking, bus lane and moving traffic 'offences' previously enforced by the Police are not enforced by Camden Council (for details see the *Interim Parking & Enforcement Plan*). Upon 'decriminalisation' (civil enforcement) these 'offences' are called as contraventions.
CPZ	Controlled Parking Zone
DfT	Department for Transport (Central Government's)
Highway Authority	This has the same meaning as in the *Highways Act, 1980*.
Interim Parking & Enforcement Plan (IPEP)	Under TfL's guidance, each London borough must produce a *Parking and Enforcement Plan* as part of its *Local Implementation Plan*. The PEP sets outs out each authority's parking and traffic enforcement polices and practices, and the actions that are planned over the lifetime of the LIP. Camden's PEP is interim and will be finalised in 2006 following consultation.
GLA	Greater London Authority
GOL	Government Office for London
Local Implementation Plan (LIP)	This is a statutory document that London boroughs must produce under the *Greater London Authority Act 1999*, which sets how each borough intends to pursue transport and traffic schemes in there area that support the Mayor of London's *Transport Strategy*. Camden's LIP is the Council's Local Transport Strategy for the period 2006-2011.
LTA	Local traffic authority (see 'Traffic Authority')
"Schemes"	These are proposals to carry out highway works under the *Highways Act 1980* or to exercise road traffic powers under the *Road Traffic Regulation Act 1984*. In the context of the *Traffic Management Act 2004* 'schemes' that are approved through the notification process (defined in Section 1.3) may then lead to construction 'works' (see Section 3.x).
SRN	Strategic Road Network - this is a network of strategic roads in London, as designated by Part 5 of the *Traffic Management Act 2004*, for which London Boroughs are the LTAs.
Street Authority	This has the same meaning as in the *New Roads and Street Works Act 1991*.
Street works	These are 'works' on the public highway undertaken by utilities rather than the Council. In Chapter 3, 'streetworks' referred to in parenthesis covers works by the Council, utilities and other

	obstructive works paraphernalia such as skips, scaffolds and cranes.
TfL	Transport for London
Traffic Authority	This has the same meaning as in the *Road Traffic Regulation Act 1984*. 'Local traffic authority' ("LTA") means a traffic authority other than the Secretary of State or the National Assembly for Wales – i.e. the appropriate level of 'local government' that pertains to a particular area. In London the 33 London Boroughs (including the Corporation of London) is the LTA for borough roads. TfL is the LTA for the TLRN.
TLRN	Transport for London Road Network (A 'GLA Road' as defined in the *Greater London Authority Act 1999*)
"works"	In this plan "works" mean road works and similar activities on paved areas that involve maintaining or making changes to the streetscape, as well as repair, relocation and other engineering jobs to utilities located under roads or pavements.

References to tables and figures in this plan are shown in bold italics.

Chapter One: Introduction

1.1. Overview

This document lays out Camden's approach to the network management duty placed upon it by the *Traffic Management Act 2004*.

This chapter gives the background to Camden's *Network Management Plan*. Chapter 2 sets out the Council's policies for managing its road network, while Chapter 3 explains how we manage the network practically. Monitoring performance is key to establishing whether this plan is meeting its aims and this is considered in Chapter 4.

The policy directions taken in this plan have been informed by existing Council policy and also by the recent consultation used to develop the Council's *Local Implementation Plan* (the "LIP") - the 'local transport plan' for the borough.

Camden's *Network Management Plan* will be kept under review to ensure that it accurately reflects upcoming legislative changes.

1.2. The Network Management Duty

Congestion and the Traffic Management Act 2004

The Government is committed to tackling congestion on the road network and through the Traffic Management Act 2004 ("the Act") placed the new network management duty on local traffic authorities, to help keep roads clear and traffic moving.

The Government's *Ten Year Transport Plan* (*Background Analysis*, Figure 6) notes that congestion in London is more than 3.5 times the national average. Congestion in Central London is greater than Inner London, which in turn is greater than Outer London as illustrated by average journey speeds surveyed on a regular basis by TfL. Given its central London location, Camden is very aware of the need to manage congestion in a concerted fashion and the Council takes the view that managing congestion requires holistic policies and adopts a proactive stance to dealing with incidents that may add to congestion, through enforcement of parking controls, bus lanes and moving traffic contraventions (see Camden's *Interim Parking and Enforcement Plan*).

Part 2 of the Act: network management by local traffic authorities

The requirement for local traffic authorities ("LTAs") to exercise the new network management duty is given in Section 16 of the Act. This states (Section 16(1)):

"It is the duty of a local traffic authority to manage their road network with a view to achieving, so far as may be reasonably practicable having regard to their other obligations, policies and objectives, the following objectives:

(a) securing the expeditious movement of traffic on the authority's road network; and

(b) facilitating the expeditious movement of traffic on road networks for which another authority is the traffic authority."

The Act explicitly states that 'traffic' includes pedestrians.

In performing this duty Section 16(2) goes on to state that LTAs may take any action that they consider will contribute to securing the more efficient use of their road network or the avoidance, elimination or reduction of road congestion or other disruption to the movement of traffic on their road network or that of others. In doing so, LTAs may exercise any power to regulate or co-ordinate the uses made of any of their roads.

Authorities are required (Section 17) to make appropriate arrangements for planning and carrying out actions to be taken in performing the duty. Part of the arrangements must include the appointment of a 'Traffic Manager'. The Act requires that LTAs need to identify

things causing actual or potential congestion and disruption that have a 'significant' effect on the movement of traffic on their roads, and consider possible actions to take in response.

The 'Section 17 arrangements' must ensure that an authority: determines specific policies or objectives in relation to different roads or classes of road in their road network; monitors the effectiveness of its arrangements and actions in meeting the duty; and, assesses their performance in managing their road network. Such arrangements must be kept under review.

The commencement of the network management duty

The network management duty commenced on 4th January 2005. Given the high levels of congestion in London, particularly in Central London, Camden has always taken its coordination role very seriously and, as such, has been in a position to respond rapidly to the additional requirements placed on it as part of the network management duty. Appendix 1 shows how Camden conducts the requirements relating to network management specified in the Act.

Camden's public highway in context

Camden Council is responsible for 285.7 km of public highway in the borough, with TfL responsible for a further 13.8 km. Most households in Camden, 56%, do not own a car - and this figure is virtually unchanged between the 1991 and 2001 Censuses and is the 6th highest figure of local authorities in England and Wales. Consequently, Camden had the 4th lowest level of car use for journeys to work in 2001, with 51% travelling by public transport, 16% walking and 4% by cycle. These travel patterns reflect Camden's high population density (the 7th highest in England and Wales) and the quantity and quality of public transport services that operate in the borough. There are 23 Underground wholly within Camden or on its borders, 8% of the 275 stations served by the Underground.

1.3. Camden's *Network Management Plan*

The DfT published its guidance - *Traffic Management Act 2004, Network Management Duty Guidance* – in November 2004 for English authorities under Section 18 of the Act. This guidance has been taken account of in developing this plan.

Paragraphs 23 to 25 of the guidance encourages LTAs to take a 'Strategic Approach', noting in particular:

- The importance of an active and co-ordinated management of the road network.
- That in meeting the network management duty, the 'strategies and planning' undertaken must be consistent with wider local, regional and national policies and guidance and the overall policies of the local authority.
- Network management is one element of an authority's transport activities and should complement other policies and actions, and be coherent with the Local Transport Plan, which for London boroughs means their LIPs.

The guidance also notes (paragraph 12) that the duty is placed alongside all the other things that an authority has to consider and does not take precedence. The duty should not, for example, be at the expense of an authority's road safety objectives and the new statutory duty should reflect the importance placed on making the best use of existing roadspace for the benefit of all road users. In taking account of the needs of all road users in minimising, preventing and dealing with problems, priorities need to be set (paragraph 17) and potential conflicts managed (paragraph 5). In recognition of this, the guidance suggests that balanced polices are needed to address issues, such as deciding levels of priorities to different roads and places (paragraph 51).

Paragraph 51 goes onto to state: "Although priority may be given to one mode over another on certain roads, for example pedestrians in town centres or on buses through roadspace

re-allocation on a radial road, an authority should take a balanced approach to overall network management." Paragraph 87 goes further and talks not only about managing different road types (which in 'traditional terminology' may be considered to be a reference to 'road hierarchies', but here will be referred to as '**links**') but also, if need be, to different sections of roads (which here we shall refer to here and treat as '**places**') and establish hierarchies of different road users for these different sections or categories of roads. Such requirements are a reflection of Section 17 arrangements that must be considered in exercising the network management duty.

The Council considers that in meeting the above requirements it should set out its policies transparently and explain how it meets the network management duty in practice. Accordingly, we have produced this *Network Management Plan*. This plan is **not** a statutory requirement, but it is in accord with the Council's general approach to meeting local community needs, which is to lay out its strategies, plans, policies objectives and actions in a straightforward, clear and informative way.

Chapter Two: Camden's Policy on Managing the Network

2.1. Traffic Demand Management

Managing demand on the road network involves two processes: the day-to-day management of the network, including the co-ordination of streetworks; and, setting policies and making plans for managing future traffic demand levels. The former is dealt with in Chapter 3, the latter is considered in this Chapter.

The DfT's network management duty guidance suggests that Local Traffic Authorities should classify their road network in a way that is suitable to fulfil the duty, taking account of land-uses on the network and the road users using it. Camden's integrated approach to land-use and transport planning extends into the Council's network management duty, since the classification of roads and user needs covers not only links (the transport function) but also places (the land-use function). Balancing the composition of traffic across all modes – public transport, pedestrian, cyclists, delivery traffic and general motorised traffic – is critical to traffic demand management and involves planned investment in the network.

The network management duty involves securing and facilitating the expeditious flow of traffic. To achieve this, things that may cause congestion or disrupt traffic have to be recognised and dealt with head-on. There are different approaches to dealing with congestion and these have varying degrees of relevance to Camden, as considered here.

2.2. Tackling Traffic Congestion

2.2.1. Journey speeds in London and different approaches to congestion

Managing the road network in London is challenging given that there is a finite supply of roadspace and kerbspace. Demand for the use of this space - for moving traffic, for servicing and for parking - considerably exceeds capacity in many parts of London, especially in the inner areas. Average journey speeds in London have been falling as congestion levels have risen in concert with rising traffic levels against a backdrop of a relatively fixed amount of roadspace.

Camden, situated in the heart of London, experiences some of the worse congestion in Britain. ***Figure 2.1*** shows declining morning peak traffic speeds over time for different parts of London, with lower speeds for more central locations. Against this trend, speeds in Inner London increased in the early 1990s before falling again, which is probably associated with recession in this period and a reduction in car commuting, but also may be partly explained by of the growth of Controlled Parking Zones (CPZs) across London at this time. Also apparent is the increase in average journey speeds in Central London from 2002 and this is undoubtedly associated with the Mayor of London's congestion charging scheme, which decreased traffic levels and congestion.

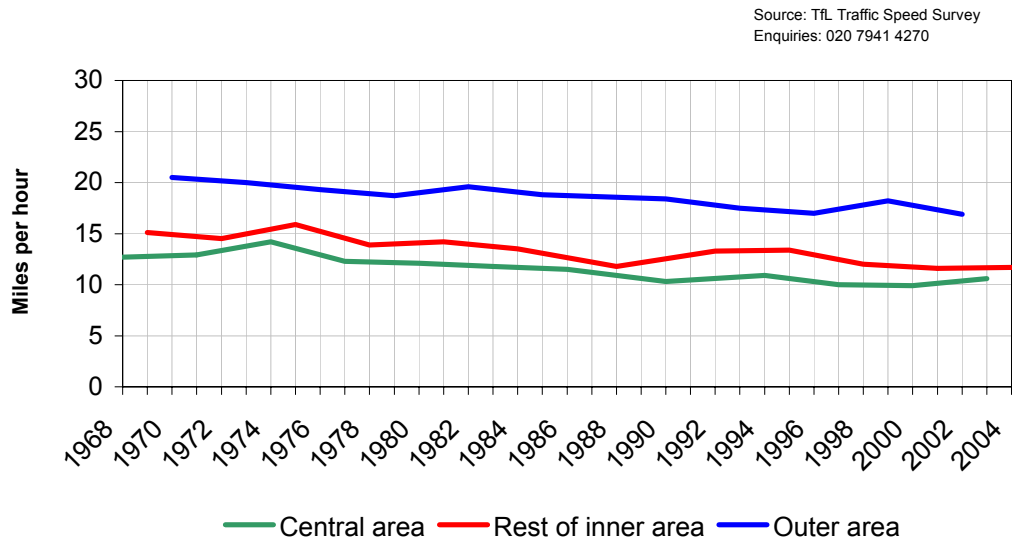


Figure 2.1 London average journey speeds during the morning peak for different parts of London. Source: London Travel Report 2004, TfL, 2004, Chart 4.2.1

Public transport can operate more efficiently if congestion is reduced and this has been demonstrated by the improvement to bus performance measures since congesting charging was introduced.

The Council takes the view that managing congestion requires holistic policies. There are three broad approaches that may be taken in response to congestion that could assist in rebalancing capacity with demand:

- *Approach A: Increasing effective road capacity* - by providing more roadspace (e.g. through road building), increasing effectual roadspace through 'engineering solutions' to road layout and markings or reallocating roadspace for general traffic from other road users (e.g. conversion of bus/cycle lanes or pedestrian spaces).
- *Approach B: Optimising the use of existing roadspace* – this can be achieved, for example, through traffic management and traffic regulation, the enforcement of traffic orders, signal control or new technology such as 'Urban Traffic Management Control' or 'Intelligent Transport Systems' (which are referred to in the DfT's network management duty guidance).
- *Approach C: Measures that encourage mode shift* – demand management techniques can be used to restrain traffic, positive measures can be used to improve public transport, walking and cycling, while a variety of 'soft measures' may be adopted to improve travel awareness and encourage road users to adopt more sustainable transport modes. In addition, land-use policies can be adopted to minimise travel demand or to promote sustainable alternatives.

The Council considers that there is not a universal solution that fits all situations. Comments about these approaches with reference to Camden are given below.

2.2.2. *Approach A:* Increasing effective road capacity

Scope for enlarging roadspace in Camden is severely limited in the extreme. Leaving aside exceptional circumstances, like the development of former railways lands at Kings Cross, there is virtually no prospect to build new roads in the borough, nor is this likely to be acceptable on environmental grounds let alone affordable.

The Council's transport policies are premised on encouraging mode shift (Section 2.3), so it is remote if not inconceivable that roadspace would or could be reallocated in favour of general traffic from sustainable modes.

On a micro level, the Council is open-minded about schemes for increasing junction capacity and similar small-scale layout changes to improve road capacity, since proposals for individual sites would need to be judged on their merits and subjected to local consultation.

2.2.3. *Approach B:* Optimising the use of existing roadspace

The Council wishes to make the most efficient use of existing roadspace. As discussed below there are various ways of achieving this, some of which, at the level of detailed design, could overlap with approach A.

Parking regulations

Through the 1970s and 1980s growing volumes of traffic and shortages of Police resources to enforce parking controls effectively led to increasing congestion and slower journey speeds. In London the volume of unlawfully parked vehicles that obstructed traffic contributed disproportionately towards congestion and helped to choke the available roadspace, greatly increasing the tendency to gridlock. In 1991 a change of legislation (*The Road Traffic Act, 1991*) enabled local authorities to adopt the powers to enforce parking controls so that enforcement practices could be better matched to the original intent of the parking regulations. Like other London boroughs, Camden adopted the new powers and this led to effective and focussed enforcement practices, greater compliance with parking controls, and less obstruction of traffic by improperly parked vehicles. Traffic flowed more freely and the tendency for London's streets to be become gridlocked was markedly reduced. As Camden's *Interim Parking and Enforcement Plan* (IPEP) explains, the Council enforces its parking, waiting and loading regulations vigorously and will remove vehicles parked in dangerous and obstructive locations in accordance with a defined hierarchy of enforcement response (IPEP, Section 3.17) and clamp vehicles according to another enforcement hierarchy as a visual deterrent to other road users who may be tempted to park in contravention.

Traffic regulation: enforcement of bus lanes and certain moving traffic contraventions

Camden has adopted civil enforcement powers to enforce bus lanes and certain moving traffic contraventions, such as banned turning movements (see the IPEP for details). Camden enforces these contraventions using CCTV cameras and has a Service Level Agreement with TfL for the enforcement of vehicles infringing bus lanes during hours of operation. Surveys show that decriminalised enforcement of bus lanes in Camden has resulted in a sharp improvement in compliance. Camden is in the forefront of enforcing moving traffic contraventions, and commenced its operations in June 2004. Early indications are that CCTV enforcement of these contraventions has improved compliance.

Small-scale traffic management schemes

These may be characterised by features such as short one-way streets, banned turning movements, prohibition of certain vehicles from sections of road, as well as traffic calming elements or road safety features such as raised pedestrian crossings, road humps, and raised tables at junctions.

In response to consultation of the Draft LIP, Camden developed broad guidelines and commented on the issues involved (see the Discussion Box, "Traffic management design issues and different road users" in section 5.10 of the LIP).

Large-scale traffic management schemes: gyratories

There are some large gyratories in Camden, notably those in the congestion charging zone (Tottenham Court Road/Gower Street and in the Holborn area) and those managed mainly by TfL on the TLRN (Camden Town, Swiss Cottage and Kings Cross). These were introduced historically when the prevailing philosophy was to help accommodate increasing traffic volumes associated with growing car ownership.

Camden recognises that these large-scale schemes impact badly on the urban realm, create circulation difficulties for pedestrians, cyclists and buses, and encourage faster traffic speeds, which can impact on road safety and the integrity of town centres. Camden is not looking to implement any new gyratories and seeks opportunities to remove or mitigate those existing. However, given Camden's central location and the sensitivity of traffic to these systems, changes to existing arrangements cannot be undertaken lightly.

Traffic Control and 'Intelligent Transport System's in London and Camden

The London Traffic Control Centre (LTCC) is the central hub for traffic management in London and constantly monitors traffic and co-ordinates responses to congestion 24 hours a day, seven days a week. TfL operates the LTCC in conjunction with the Police, so that events such as traffic disruptions, incidents involving the operation of buses, civil disobedience, criminal activity and terrorist activity can be jointly managed. The LTCC's Traffic Update Desk provides information to the public, media and motoring organisations through various means providing real-time information to travellers and offering a way of mitigating or alleviating congestion. Further information on Intelligent Transport Systems in London can be found in TfL's booklet, *ITS in London, How Intelligent Transport Systems in London are helping to get London moving*.

Camden is a leading authority in the use of CCTV cameras for enforcing various parking and traffic contraventions: for bus lane enforcement, moving traffic contraventions and parking infringements in general. In addition to fixed cameras, Camden also uses mobile CCTV units (see the IPEP for details). Currently, Camden deploys over 100 CCTV cameras, more than the average for London boroughs, and reflects the importance that the Council gives to enforcement.

2.2.4. *Approach C:* Measures that encourage mode shift

In very large cities such as London, measures that encourage mode shift from car trips to sustainable modes - such as public transport, walking and cycling – should be pursued within a holistic framework, not in isolation. Such a framework needs to take account of multi-agency agreements or partnership working between different sectors such as transport, land-use, health, education, environment and energy ('horizontal integration') as well as 'vertical integration' between different tiers of government (e.g. through the Mayor's Transport Strategy and the Mayor of London's *London Plan*).

Demand management techniques to restrain traffic

Parking controls, backed up by effective enforcement, is probably the most important policy mechanism available to local government that can influence the amount of car traffic on the roads and this is particularly true for Camden, given its magnet position in the heart of London. Of the 33 London borough's, Camden has the 3rd largest local economy and attracts about 200,000 commuters into the borough on a daily basis, almost as many people as the resident population.

Camden introduced the last Controlled Parking Zone (CPZ) in August 2004 so there is now controlled parking across the whole of Camden. Ten years ago CPZs covered less than half the borough. Since then, CPZs were implemented with majority support from the local community following extensive public consultation. Parking controls have tended to become more complex over this period to reflect local communities' requirements.

Congestion charging schemes are another effective way of restraining 'inessential' traffic. The congestion charge scheme currently operating in London was developed by TfL on behalf of the Mayor of London. The charging zone includes the southern part of Camden.

Congestion charging has proved to be an effective means of reducing congestion in central London since its introduction in February 2003. The latest monitoring results (*Congestion Charging: Third Annual Monitoring Report*) show that congestion within the zone has reduced by about 30% (measured in terms of excess delays in minutes per km) and traffic entering the zone in 2004 is about 18% less than pre-charging levels in 2002, with car traffic reducing by 33%. The Mayor of London also intends to extend the size of the charging zone westward in February 2007.

Positive measures to encourage sustainable modes

A wide variety of measures can be implemented to encourage sustainable modes and details of these and proposed Camden schemes until 2011 are given in the LIP.

Bus priority – Camden is committed to the delivery of bus priority schemes in partnerships with TfL and others. Bus priority schemes has led to improvements in bus service reliability, although in recent years other factors have been contributing, including increased investment in robust schedules, enhanced route supervision, the introduction of Quality Incentive Contracts and the introduction of congestion charging. Congestion charging has resulted in a substantial amount of mode shift to bus in the central area: 37% more bus passengers entered the charging zone during charging hours in 2003 than 2002. After the first full year after congestion charging there was a 24% reduction in excess waiting time at bus stops due to improved service regularity.

Underground and National Rail – TfL is responsible for the Underground and the railway industry is responsible for the national rail network, stations and services that operate on it. However, Camden Council is working in partnership with rail industry, Groundwork and other partners to make interchange and station access improvements to national rail stations in the borough for a programme charted out in the LIP at a estimated cost of £250,000. The borough's walking and urban realm improvements will also improve accessibility to the borough's Underground and national rail stations.

New public transport infrastructure - Travel demand is growing rapidly in the capital, largely associated with London's increasing population, the buoyancy in London's economy and employment growth. The *London Plan* estimates that London's population is forecast to grow by 700,000 and employment by 630,000 by 2016. TfL estimate that 40% more rail capacity is needed to sustain London as a world city, a key component of which is the construction of the Crossrail link.

Several public transport infrastructure projects are in an advance state of planning, many of which involve additional provision in Camden. These include:

- *Channel Tunnel Rail Link 2* - A new terminal is being constructed at St Pancras main line station
- *Thameslink 2000* – The scheme will provide further connections at higher capacity across London through the tunnel between Kings Cross and Blackfriars.
- *Cross River Tram* - The proposed tram route would operate a core section between Mornington Crescent and Waterloo, with branches to Camden Town and Kings Cross.
- *Crossrail* - Crossrail Line 1 includes a stop at Tottenham Court Road and nearby Farringdon station. Line 2 includes stops at Kings Cross and Tottenham Court Road.

The effect of the new public transport schemes above would make the southern area of Camden around the key stations of Kings Cross/St Pancras, Tottenham Court Road and Farringdon more accessible to a wider catchment of rail commuters and encourage development in these areas.

Walking – The *Camden Walking Plan*, adopted in 1999 was one of the first strategic documents of its kind in the UK and has become an example of best practice. It is due for revision in 2006. Fuller details about pedestrian improvements are given in the LIP. In the last five years over 100 new signalised pedestrian crossings have been installed in Camden, with more planned. From 2003/4 onwards all of Camden's controlled pedestrian crossings have low kerbs and textured pavements designed to help disabled people and a programme to do the same at uncontrolled crossings now is being rolled out across the borough. Walking has also been encouraged by the Council's urban realm improvements.

Urban Realm Improvements – Further details of urban realm improvements planned for Camden to 2010/2011 are given in the LIP. Monies for road maintenance work on the borough's Principal Road Network has been available for a number of years from TfL (and prior to that from the Government Office for London), and maintenance has helped improve road safety. However, like many areas of the country, insufficient budgets have been available for maintenance work on other borough roads. In response to this, Camden Council instigated the **Boulevard Project** to deal not only with the backlog of maintenance funding but also to respond to public demand for better quality and better managed public realm. Camden has developed another innovative approach to making step changes to whole areas under its Local Area Transport Plans programme, with plans in place for Kilburn, Gospel Oak and Holborn. Details about accessibility schemes - aimed to create more socially inclusive spaces, links and facilities for disabled people, the elderly and similar groups that may have difficulty negotiating the urban realm - are given in the LIP. Camden has developed its own *Streetscape Design Manual* that sets out a unified design approach, minimum standards and a palette of materials for use in the borough. The approach reflects and recognises the varying character of areas in the borough and takes account of the 36 Conservation Areas. Improving the public realm in the above ways will help to encourage more people to walk.

Cycling – Like walking, Camden encourages cycling as a sustainable form of transport that has both environmental and health benefits. The *Camden Cycling Plan* was adopted in 2001 as a comprehensive strategy document to encourage cycling and has been reviewed regularly. Amongst other things, the plan supports the development of cycle lanes segregated from the rest of traffic, which has been delivered in a range of projects in the borough. Camden also manages the London Cycle Network (LCN+) for TfL.

Travel Awareness

A variety of 'soft measures' may be adopted to improve travel awareness and encourage road users to adopt more sustainable transport modes and Camden runs various campaigns, details of which are given in the LIP. Camden was an early advocate of travel awareness approaches, which feature in the Council's first *Green Transport Strategy*.

Land-use planning

Land-use policies can be adopted to minimise travel demand or to promote sustainable alternatives. Camden's existing *Unitary Development Plan* seeks to promote development primarily at locations that have high levels of public transport accessibility by applying a 'sequential test' to promote development in certain places in the borough.

2.3. Camden's Network Management Duty in the Context of Other Council Strategies and Plans

The approach used to guide Camden's network management duty must be consistent with the Council's transport and wider policies. A key component of Camden's transport policies is the promotion of mode shift to more sustainable transport modes, and this thread runs through the Council's *Green Transport Strategy*, its *Community Strategy*, the *Unitary*

Development Plan and its principal transport planning and policy document, the *Local Implementation Plan*.

2.3.1. The *Green Transport Strategy* and mode shift

Camden is a leading authority in the development of sustainable land-use and transport planning policies and actions, as well as air quality initiatives. In November 1997 the Council adopted *Camden's Green Transport Strategy, Taking steps for a people friendly Camden – towards a new era*. The strategy has played a key role in helping Camden to achieve traffic reduction and air quality targets in partnership with others, and to thereby improve the quality of life in Camden. The strategy aims to address the following issues:

- To improve the quality of Camden's environment
- To reduce greenhouse gases in recognition of climate change
- To encourage socially inclusive, healthier and less car dependent lifestyles
- To encourage more walking, cycling and better public transport
- To improve accessible transport services
- To reduce traffic pollution
- To improve road safety

These objectives are inter-related and broadly may be achieved by pursuing measures that encourage mode shift. About 85% of air pollution in London comes from motor vehicles. The *Green Transport Strategy* sets out a programme to encourage modal shift from cars to sustainable transport modes - such as walking, cycling and public transport - to help meet the requirements of the *Road Traffic Reduction Act* and the *National Air Quality Strategy* and thereby reduce CO_2 and other emissions that lead to global warming and climate change. The creation of a local environment less dominated by traffic through the implementation of practical transport initiatives should create a more people-friendly borough and improve people's quality of life and 'liveability' within the borough.

The *Green Transport Strategy* provides the basis for the following Council initiatives and actions:

- *Camden Walking Plan* and the *Camden Cycling Plan*
- City Car Clubs
- School Travel Plans
- Business Travel Plans
- Leisure Travel Plans
- The Council's own Travel Plan (*Making Tracks in Camden*)
- Car free housing

The Council's *Green Transport Strategy* influenced the development of the Council's *Unitary Development Plan*, *Camden's Community Strategy* (June 2001) and other related strategies and plans, including the *Local Implementation Plan* (September 2005).

2.3.2. Camden's Unitary Development Plan

The Council's *Unitary Development Plan* (UDP), adopted in March 2000, sets out Camden's strategic planning policies. These reflect the aspirations underlying national *Planning Policy Guidance 13: Transport*. Camden's revised UDP's land use and transport planning policies are consistent with the Mayor of London's *London Plan*, which was adopted in February 2004. Camden's land use and transport plans aim to:

- Reduce climate change through the reduction in motor vehicle use and related pollution.
- Improve people's health by promoting car free lifestyles and improved air quality.
- Secure social cohesion by the promotion walking, cycling and public transport and people's quality of life.
- Improve the quality of the public realm.

2.3.3. Camden's *Local Implementation Plan* and Camden's transport objectives

The LIP is Camden's primary transport strategy document. It integrates 'horizontally' with the Council's other strategies and plans and 'vertically' with Mayoral Strategies - in particular the *Mayor's Transport Strategy* and the *London Plan* - as shown on the Green Circle Diagram in Chapter 3 of the LIP. Camden's transport objectives are:

1. To improve road safety in the borough.
2. To reduce motor traffic flows through the borough and encourage a shift to sustainable transport: walking, cycling and public transport use.
3. To improve air quality and reduce transport emissions contributing to climate change.
4. To reduce inequalities in transport and increase social inclusion.
5. To contribute to improved personal security and reduce fear of crime on the streets and transport systems.
6. To maintain and improve the borough's public realm through good design and maintenance, improving accessibility, and by respecting and enhancing local character.
7. To ensure efficient movement of people and goods within the transport network by good traffic management and demand management of private motor traffic.
8. To manage parking and loading controls.
9. To ensure that the transport system helps to sustain economic and community development and urban liveability through the integration of land use and transport planning.
10. To work in partnership with others to help achieve the above objectives.
11. To understand and focus on meeting the transport needs of the local community.

2.3.4. Camden's *Parking and Enforcement Plan*

Parking and enforcement policies offer important and effective means of managing demand: the extent, location and cost of parking have major implications for traffic levels, traffic congestion, the efficiency of public transport services and the health of the local economy. Parking controls should therefore be seen as a fundamental component of wider demand management techniques that restrain traffic and this is recognised in national guidance (PPG13, paragraph 49) and in Camden's existing UDP policy TR10:

"The Council will seek to reduce the volume of motor vehicles on Camden's roads, especially at times and in areas which are most congested by:

a. the use and extension of parking controls;
b. the use of traffic management; and
c. appropriate methods of direct London-wide restraint.

When assessing any such measures the Council will have due regard to:

i the needs of elderly and disabled people;
ii the character and needs of the local area; and
iii the appropriate needs of residents and businesses in the affected areas."

Camden's parking and traffic enforcement polices and practices are laid out in the Council's *Parking and Enforcement Plan*, which under TfL's guidance must be produced as part of the Council's LIP. On-street and off-street parking policies must be integrated to address issues of sustainability, and this is achieved through UDP policies. The level of parking charges is also an important instrument to help control car traffic volumes. The *Parking and Enforcement Plan* gives details of Camden's current parking related charges set by the Council and also of 'fine levels' (Penalty Charge Notices), which are set externally for parking and traffic contraventions.

2.3.5. Legal responsibilities arising from the Act and related matters

The network management duty is established by Section 16 of the Act for all local traffic authorities in England and Wales. This involves not only securing the expeditious movement of traffic on the LTA's own roads (Section 16 (1)(a)) but also facilitating the expeditious movement of traffic on road networks for which another authority is the traffic authority (Section 16 (1)(b)).

In performing this duty, LTAs may take any action that they consider will contribute to securing the more efficient use of their road network (Section 16 (2)(a)), or any action that will contribute to securing the avoidance, elimination or reduction of road congestion or other disruption to the movement of traffic on their road network or that of others (Section 16 (2)(b)).

It is clear from Sections 16(1)(b) and 16(2)(b) that in meeting the network management duty each LTA has responsibilities to other traffic authorities. In London these responsibilities are partially formalised in so far as a scheme on a LTA road that would affect a road on the TLRN, the Strategic Road Network (as designated by Part 5 of the Act, for which London Boroughs are the LTAs) or a 'borough road' in another borough is subject to the notification process that has been established solely for the rather extreme congestion that exists in the capital (***Table 3.1***).

The stated purpose of the notification process and the designation of the SRN in London is to assist TfL's strategic transport role in London and allows the GLA to scrutinise and authorise boroughs' schemes (Chapter 3). Nonetheless TfL has to conduct its network management duty in such a way as to honour its obligations under Sections 16(1)(b) and 16(2)(b) of the Act with regard to:

- Other local traffic authorities that may be affected by its actions – the London boroughs and neighbouring LTAs beyond London's boundaries.
- The Highway Agency with regard to the national strategic road network under the authority of the Secretary of State.

TfL may also need certain consents from local authorities under other legislation in relation to matters affecting the TLRN, such as planning permissions under the *Town and Country Planning Act 1990* (or as amended).

While these legal obligations have to be observed by the parties concerned, in practice Camden considers that effective outcomes can be achieved through partnership working. Camden fully participates in informing TfL and other boroughs of its schemes and examples of partnership working are given in Camden's LIP. Camden representatives regularly attend coordination meetings with neighbouring boroughs (Chapter 3).

2.3.6. Camden's and TfL's policies and partnership working

Camden and TfL have policies in place to promote partnership working and in practice Camden and TfL officers meet regularly to discuss forthcoming schemes and explore ways in which the authorities can work together to improve traffic flow or in other ways improve streetscape arrangements in the borough. (See e.g. the Camden Town speed project in the LIP).

The LIP's transport objective 7, concerned with managing road network demand, is of paramount importance to the network management duty. The LIP's transport objectives are given in summary form in Section 2.3.3; the full version of objective 7 is given below:

"To ensure efficient movement of people and goods within the transport network by good traffic management and demand management of private motor traffic, so as to:

- *Take account of congestion and expedite traffic movements including pedestrians.*
- *Balance competing transport needs by allocating kerbspace use by time of day.*

- *Improve travel choices, especially for people with mobility difficulties.*
- *Improve reliability and capacity of public transport."*

The LIP's transport objectives represent Camden's high-level transport policies, just as the ten key transport system priorities in the *Mayor's Transport Strategy* (p5) represent those of the Mayor of London. In policy terms there is a close match on the matters covered by Camden's and the Mayor's high-level transport policies.

2.4. Camden's Road Hierarchy

The road hierarchy used in the UDP

Camden's *Unitary Development Plan* defines and uses a road hierarchy – though this is used to relate land uses (in development terms) to the transport role of roads, and is therefore thoroughly consistent with Camden's approach to integrating land-use and transport planning. Camden's existing and replacement UDPs set out the Council's road hierarchy, and the aims of the hierarchy in terms of traffic management and access to land uses (which is relevant in determining new developments). The hierarchy has four tiers:

- ***TLRN*** – these provide the distributor network for longer distance vehicle movements within London to the national road network. These former Trunk Roads and Red Routes are the responsibility of TfL and are part of the main bus network and lorry routes. Use for on-street servicing is limited.
- ***London Distributor Roads*** – provide links to the TLRN for journeys between boroughs and access to town centres and are part of the main bus routes. They provide direct access to land uses adjacent to them, but with limited on-street servicing. Works on these roads are considered if local roads are relieved and there is no increase in network capacity.
- ***Local Roads*** – Heavy goods vehicles should only use these roads for essential deliveries and on-street servicing may be allowed subject to impact on safety and the environment. These roads are sub-divided as follows:
  - ***Borough Distributor Roads*** – provide for movement within Camden between London Distributor and Access roads, mainly for local vehicle movements and serve as suitable routes for emergency vehicles and buses.
  - ***Access Roads*** – provide links to land and buildings. The Council seeks to enhance walking on these roads, some of which may be pedestrianised. These roads may not be suitable for full-sized buses and should not be designated as through routes for emergency services. They may be considered for traffic management measures such as road closures, banned turns, traffic calming and local area lorry bans.

The above hierarchy has the following aims:

- To limit the number of routes available to through traffic.
- To remove goods vehicles from unsuitable routes.
- To improve conditions for pedestrians and cyclists.
- To enable bus service to avoid long delays.
- To reduce accidents.
- To reduce the adverse environmental impact of traffic.

In undertaking works on the highways (replacement policy T12), the Council will seek to balance the above aims and will take account of local community views through consultation. Measures intended to restrain inessential road traffic will seek to ease the movement of other forms of transport. For example, the Council will try to ensure that speed humps do not hamper the passage of ambulances and buses, that cyclists are exempted from road closures and that pedestrian crossings are accommodated at junctions.

Other road classifications used by Camden

Busy bus network – ***Table 2.3*** gives all the roads used by local bus services in the borough. The table distinguishes between busy bus routes, where combined bus frequencies are greater than 15 buses per hour, and less busy routes.

Emergency routes – ***Table 2.3*** gives the routes used by emergency services. Three networks are shown: main roads, local distributors roads used by buses, and all other routes.

Winter gritting roads – The Council's Street Environment Service keeps a list of all the roads in Camden that are gritted in winter. This network is denser than the others given above.

Traffic sensitive roads – these roads have a formal legal meaning in the context of the *New Roads and Street Works Act 1991* in that utility companies cannot undertake street works on these during specific times, in order to ease traffic congestion. They are identified in Camden's *Street Gazetteer*. In lay terms, however, virtually all streets in Camden are 'traffic sensitive': in highly congested circumstances main roads and local distributors reach their capacity limits, the pattern of traffic movement becomes extremely volatile and individual 'local roads' may be prone to wide fluctuations in traffic levels

The road classification being used for the network management duty

To assist in its network management duty, Camden has developed a road classification based on link status, illustrated by ***Table 2.3*** and on ***Figure 2.2***. The highest link status – 'National' - relates to Highway agency roads (e.g. motorways and trunk roads), none of which are located in Camden.

The second highest link status roads under Camden's classification are 'Metropolitan' roads - the TLRN. Responsibility for these roads – in terms of maintenance and the network management duty – lies with TfL, not Camden Council.

All other public highways in Camden are the responsibility of Camden Council, and ***Table 2.3*** shows how these are arranged hierarchically by link status as 'Major', 'District' or 'Local' roads, with subcategories as shown. This classification is consistent with that used in the UDP and the full relationship is shown in ***Table 2.3***.

To maintain network efficiency it is important to keep traffic moving on roads that are higher up the hierarchy. Coordination of road works and their timely execution (as explained in Chapter 3) is especially important for roads of higher link status.

Busy bus services and most of the emergency routes are located on 'Metropolitan' and 'Major' roads. Other bus services are located on 'District roads (main local distributors)', as do many other emergency routes. The residual emergency routes are on 'District' roads (minor local distributors)'.

Boundary roads

Camden's road hierarchy covers only those roads that are within the borough and maintained by Camden. Boundary roads that not within Camden are excluded from Camden's road hierarchy. Thus, Hampstead Lane – which is located in boroughs of Haringey and Barnet – does not feature in Camden's road hierarchy.

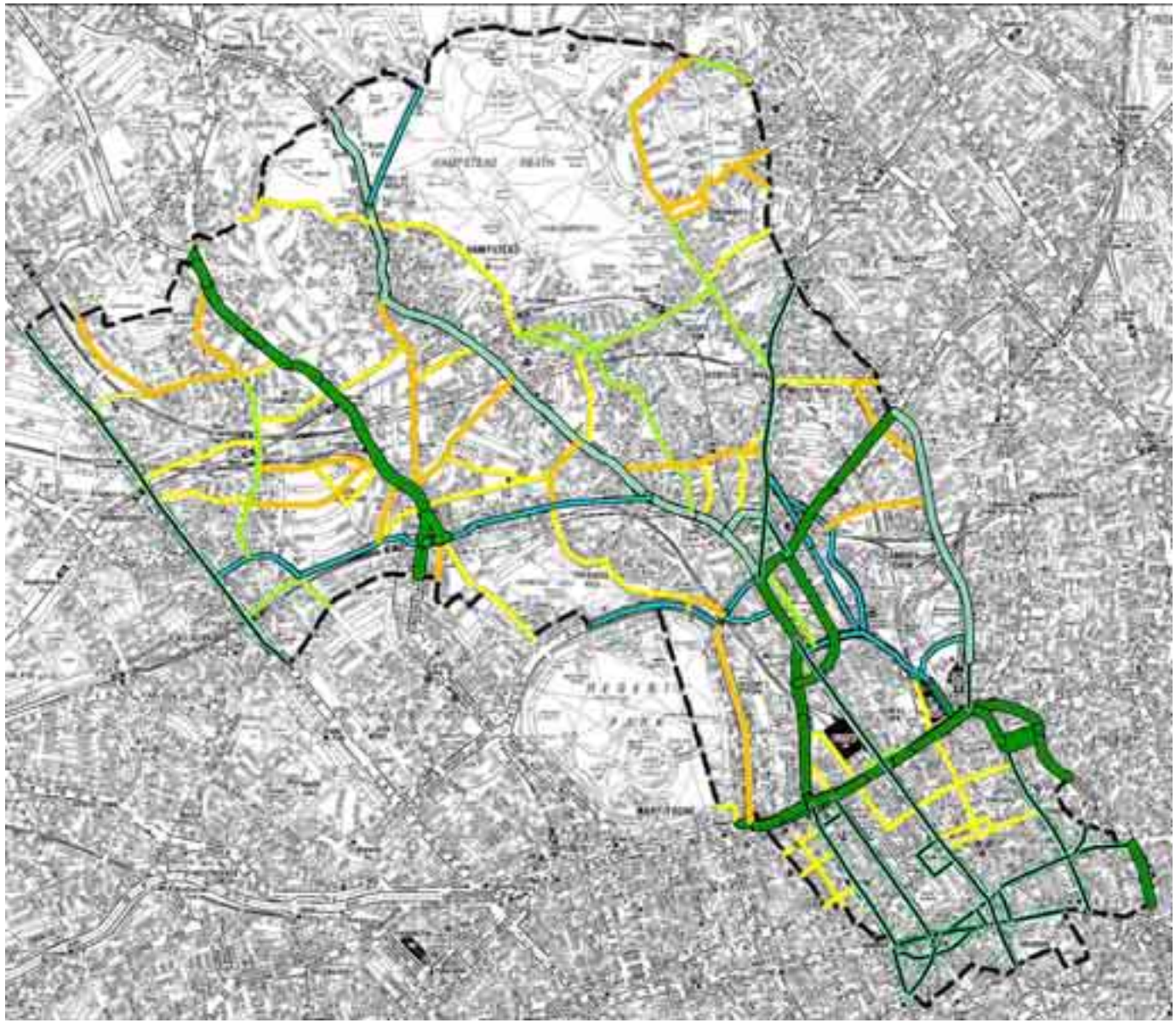
Certain boundary roads are maintained by another authority, so are excluded from Camden's road hierarchy. Examples include Dartmouth Park Hill and Brecknock Road (which Camden would consider as a 'main local distributor').

Link Status	Category	Road Details	PRN	UDP- London Distributor	UDP- Borough Distributor	Bus route	Emergency route
Metro-politan	TLRN	A501 - Euston Road, Swinton Street, Acton Street, Gray's Inn Road (north of Acton Street), Pentonville Road, Kings Cross Bridge				✓	✓
		A201 – Kings Cross Road, Farringdon Road				✓	✓
		A400 - Hampstead Road, Camden High Street (south of Parkway), Camden Street (between Camden Road and Crowndale Road), Oakley Square (south), Lidlington Place, Harrington Square (south)				✓(1)	✓(2)
		A503 – Camden Road				✓	✓
		A41 – Finchley Road and Swiss Cottage gyratory (small sections of Adelaide Road and Avenue Road)				✓	✓
Major	SRN	A400 – Kentish Town Road, Fortess Road and rest of Camden Street*	✓	✓		✓	✓
		'A' roads south of the Euston Road that are not part of the TLRN (A40, A400, A401, A4200 and A5200)	✓		✓	✓(3)	✓(4)
		A4200 - Eversholt Street	✓		✓	✓	✓
		A5 – Kilburn High Road, Shoot Up Hill and Cricklewood Broadway				✓	✓
	Other London Distributor roads	A502 – Chalk Farm Road, Haverstock Hill, Rosslyn Hill, Hampstead High Street, Heath Street, North End Way, Castlehaven Road (south of Hawley Road), Hawley Road	✓	✓		✓	✓
		A5200- York Way, Camden Park Road, Torriano Avenue, Leighton Road (east of Torriano Avenue)	✓(5)	✓		✓	✓
	Other Borough Distributor roads	A5202 – Royal College Street, St Pancras Way, Pancras Road	✓		✓	✓	✓
		A5203 – Prince Albert Road, Parkway, Delancey Street, Bayham Street	✓(6)		✓	✓	✓
		'B509' – Adelaide Road, Hilgrove Road, Belsize Road (between Abbey Road and Fairfax Road), Abbey Road (north of Belsize Road), Quex Road			✓	✓	✓
		B511 – Fitzjohn's Avenue			✓	✓	✓
		B519 – Spaniards Road			✓	✓	✓
		Crowndale Road	✓		✓	✓	✓
		Goods Way			✓		✓
	Other busy bus routes	Highgate High Street, Highgate Road, Ferdinand Street, Malden Crescent, Malden Road, Fleet Road, Agincourt Road, Pond Street, Belsize Road (west of Abbey Road), West End Lane (south of Mill Lane), Harrington Square (east), Pratt Street (west of Bayham Street), Grafton Place, Churchway (south of Grafton Place), Euston Square				✓	✓

Link Status	Category	Road Details	PRN	UDP- London Distributor	UDP- Borough Distributor	Bus route	Emergency route
District (main local distrib-utor)	Less busy bus routes	Albany Street	✓			✓	✓
		Agar Grove, Prince of Wales Road (east of Malden Road), Raydon Street, Chester Road (west of Raydon Street), Swains Lane (south of Chester Road), St Albans Road (west of Brookfield Park), Highgate West Hill, South Grove, Englands Lane, Primrose Hill Road (north of Adelaide Road), Belsize Park, Belsize Avenue, Broadhurst Gardens, Fortune Green Road, Mill Lane (east of Westbere Road), Westbere Road				✓	✓
		Chester Road (east of Raydon Street), St John's Wood Park, Fairfax Road, Canfield Gardens, Cleve Road				✓	
District (minor local distrib-utor)	Other emerg-ency routes	Mill Lane (west of Westbere Road), West End Lane (east of Mill Lane), Iverson Road, Palmerston Road, Hemstal Road, Fairhazel Gardens, Greencroft Gardens (east of Fairhazel Gardens), Belsize Road (east of Fairfax Road), Eton Avenue, Lancaster Grove, Avenue Road (south of Adelaide Road), Lymington Road, Arkwright Road, Lyndhurst Road, Platts Lane (east of Rosecroft Avenue), West Heath Road, East Heath Road, South End Road, Parkhill Road, Primrose Hill Road (south of Adelaide Road), Regents Park Road, Harmood Street, Castlehaven Road (north of Hawley Road), Leighton Road (west of Torriano Avenue), Dartmouth Park Road, Midland Road, Judd Street, Hunter Street, Brunswick Square (west and south), Grenville Street, Bernard Street, Guilford Street, Guilford Place, Sidmouth Street, Regent Square (south), Tavistock Place, Tavistock Square (south), Gordon Square (south and west), Gordon Street, Melton Street, Cardington Street, North Gower Street, Park Square East, Grafton Way (west of Tottenham Court Road), Fitzroy Street, Charlotte Street, Howland Street, Goodge Street					✓
Local		All other borough roads (defined in the UDP as 'Access roads')					

Table 2.3 Road classification used for Camden's network management duty

Notes (1) Except Camden Street (south of Camden Road) and Oakley Square
(2) Except Oakley Square
(3) Except St Giles High Street and Southampton Place
(4) Except St Giles High Street, New Oxford Street, Southampton Place, Drake Street and Procter Street
(5) Except Brecknock Road
(6) Except Prince Albert Road



Key

- TLRN
- SRN
- London Distributor (UDP)
- Borough Distributor (UDP)
- Busy Bus Route
- Main Local Distributor (less busy bus route)
- Minor Local Distributor (other emergency route)

Figure 2.2 ***Road classification used for Camden's network management duty***

Boundary roads (continued)

The hierarchical statuses of certain boundary roads are defined by other legal arrangements and have been retained as such in Camden's road hierarchy. Thus, the A5 corridor (Kilburn High Road, Shoot Up Hill and Cricklewood Broadway), Charing Cross Road and York Road (south of Wharfdale Road) are part of the SRN and show as such here. The rest of York Road is defined in the UDP as a London Distributor. Pentonville Road, Kings Cross Road and Farringdon Road are part of the TLRN.

Highgate High Street is half in Camden, half in Haringey, with that part of the road south of the centre line being maintained by Camden. Highgate High Street is treated here as being a 'busy bus route' and shown as such in our hierarchy.

2.5. Road User Hierarchy

Camden's *Local Implementation Plan* proposes the following general road user hierarchy for the borough:

- Pedestrians
- Cyclists
- Buses and public transport (including taxis)
- Freight (including loading/unloading)
- Private cars and motorcycles
- On-street parking

This hierarchy reflects the residential nature of Camden, centrally located as it is in London, and that in most areas the predominant role of streets is to fulfil an access function rather than to serve as through routes for vehicular traffic. All streets in the borough having people living on them, however important they are in terms the traffic they carry or their position in a 'road hierarchy'. Many roads in Camden have shops and businesses on them and typically have good public transport services on them or nearby, which enhance their mixed-use character and development potential.

However, this hierarchy is not appropriate for all roads in the borough since different conditions apply in different places and on different links. In Camden's road hierarchy, by definition no buses travel on links of 'Local' status, but bus passengers are likely to be a relatively high percentage of the volume of traffic on TLRN roads ('Metropolitan' links) and other roads high up in the 'road hierarchy' (***Table 2.3***) irrespective of place status. Absolute pedestrian flows are likely to be particularly high in locations of high place status. Pedestrian movements are also relatively important in 'residential areas' based around 'Local' roads, which are not suitable for freight use save for local access.

However, having a 'road user hierarchy' and a system of organising links and places in hierarchal terms in themselves cannot quickly and simply sort out the inevitable clashes between different road users and balance interests in a neat way – they are tools to help rather than things that should be rigidly adhered to. In designing new street layout arrangements, traffic management schemes or similar works, competing needs and the interests of different road users have to be balanced accordingly, considering factors such as place and link status, the form and physical characteristics of the location and land uses along the road.

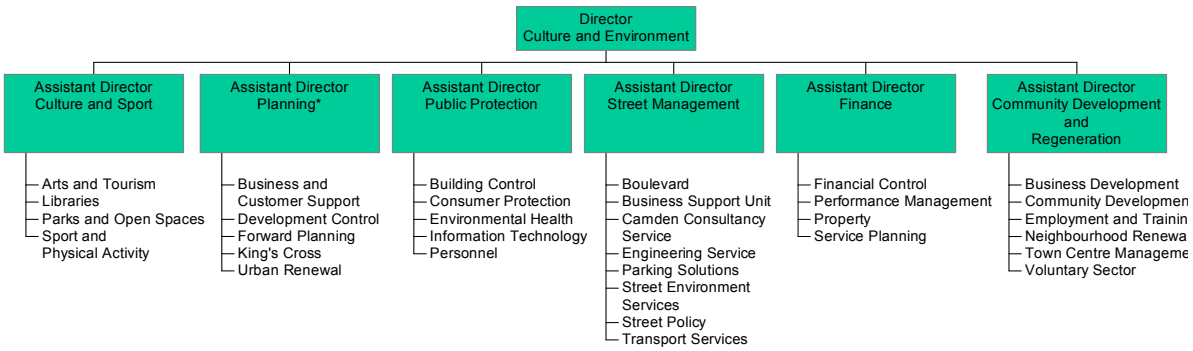
Chapter Three: Operations - How We Manage The Network

3.1. Introduction

The main approach the Council takes to dealing with congestion relates to the promotion of modal shift, as discussed in Chapter 2. The proposed investment programme of works on Camden Council's public highways between 2005/6 to 2010/11 is set out in the Council's LIP. The known investment programme to which the Council is working, taking account of existing funding arrangements is set out the *Engineering Services' Business Plan*. The notification system for works that 'affect' the highways of others is explained in section 3.2.3.

3.2. Organisation

The post of Traffic Manager (section 17 (2) of the Act) is a statutory post for all Local Transport Authorities. Camden has appointed the Assistant Director of the Street Management Division within the Culture and Environment Directorate in this role. A decision was made to appoint at this level since this post covers highways and traffic engineering works by the Council (mainly by the Engineering Service), road and pavement maintenance, parking, traffic enforcement, management of utilities works applications, street cleansing, street lighting and trees.



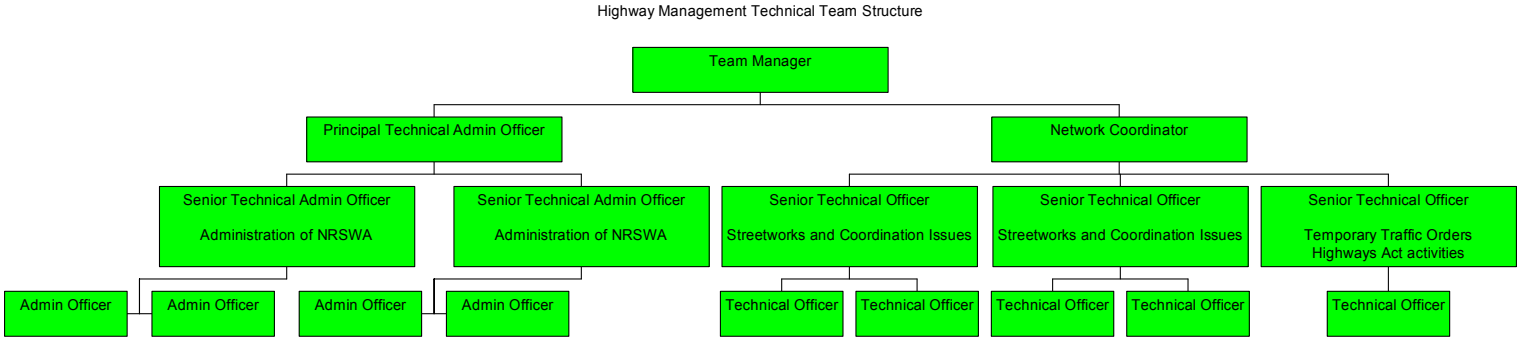
The Traffic Manager is responsible for overseeing the various activities that have the potential to result in congestion if poorly co-ordinated, or that could result in long-term problems if insufficient provision is included during their inception and meets Service Team Leaders on a weekly basis.

Camden's Network Management Steering Group meets on an approximately monthly basis to discuss matters relevant to the network management duty and was inaugurated prior to the duty going live. At the first meeting of this Group a *Network Management Duty Action Plan* was tabled to assist the authority in meeting all aspects of the duty in relation to the Act itself and guidance arising from it. The *Action Plan* acted not only as a precursor to this document, but is still a live document being regularly updated in response to further parts of the Act being enacted through secondary legislation and further guidance.

3.3. A Whole Authority Approach

Camden has taken a strategic approach to its network management duty. The structure within the Street Management Division is already such that virtually all of the functions that fall within the scope of the duty come under the Traffic Manager. The Network Coordinator is based within the Highway Management Team of the Engineering Service. The team has responsibility for many of the day-to-day activities that can contribute to congestion, for example utility works. Currently, there are approximately 14,000 separate utility works in Camden each year. Due to the complex rules associated with the notification of these works, Camden receives approximately 50,000 notices in relation to these utility works.

The Network Coordinator has been assigned the task of ensuring that all those involved in undertaking works on the borough's roads and pavements correctly notify the highway authority to enable all works to be effectively coordinated. These works activities can be divided into two groups, as discussed below.



Planned and cyclic activities

These include, but are not limited to:

- Street works (Statutory Undertakers)
- Highway works undertaken by the Council or in relation to incremental new infrastructure as licensed activities (private apparatus) under the *New Road and Street Works Act 1991*
- Temporary Traffic Orders (section 14 (1) & (2), section 15 & 16)
- Abnormal load movements
- Waste management (refuse collection)
- Arboriculture works
- Parking issues
- *Highways Act 1980* licensed activities (skips/scaffolds)
- Filming
- Special events
- Works by adjacent authorities on boundary roads
- Transport for London works on the TRLN in Camden

The Network Co-ordinator will collate information regarding planned events as above and will include other activities such as:

- Carnivals
- Street Festivals
- Parades
- Refuse collection times & days

- Winter maintenance routes

Unplanned activities/contingency planning

There are many such unplanned activities/incidents or short notice events that may occur:

- Statutory Undertakers plant problems (burst water mains, gas escapes)
- Security Issues
- Marches/Demonstrations
- Filming – In 2005 there were 880 filming "days" in the London Borough of Camden
- Adverse Weather Conditions
- Emergency unplanned maintenance to Council infrastructure (e.g. collapsed roads and *Highways Act* matters)

The strategic locality of the borough - combined with the volume of activities undertaken, particularly at short notice, by both Statutory Undertakers and Camden's own contractors - leaves it vulnerable to compromises in security. Camden has an Emergency Planning Team and the Lead Officer will be in dialogue with the Traffic Manager should any unforeseen event take place on the highway. This will ensure the impacted area is kept to a minimum and alternative provision for vehicle and pedestrian traffic movements in the borough is assessed and maintained. The Emergency Planning Officer and Traffic Manager (or delegated representative) will remain in contact as a situation develops, thereby allowing the traffic management impact to be continually reviewed.

3.4. Partnership Working and Coordination

Camden has taken a number of steps to ensure the maximum possible opportunities for coordination. These include:

- Quarterly coordination meetings with utilities, adjoining boroughs and the Highway Engineering and Traffic Engineering Teams.
- Monthly coordination meetings within the Engineering Service during which, officers from the service discuss existing and potential schemes that will impact the highway.
- Network Co-ordinator or representative attends other works meetings to ensure all activities are co-ordinated to minimise disruption.
- Updated information from the Film Office.

In addition, Traffic Management Liaison Meetings are held every other month where new schemes are discussed at a preliminary stage to maximise opportunities for coordination and to ensure that each scheme has an optimum design. These meetings allow representatives from the emergency services and London Buses to comment on initial proposals for traffic schemes prior to the formal consultation stage. This is valuable both for council officers in seeking to ensure that scheme designs reflect the needs of the emergency services whose views are heard early and at the stage where it is easiest to modify proposals. This process also allows a discussion on areas where the needs of particular services may conflict.

Public information

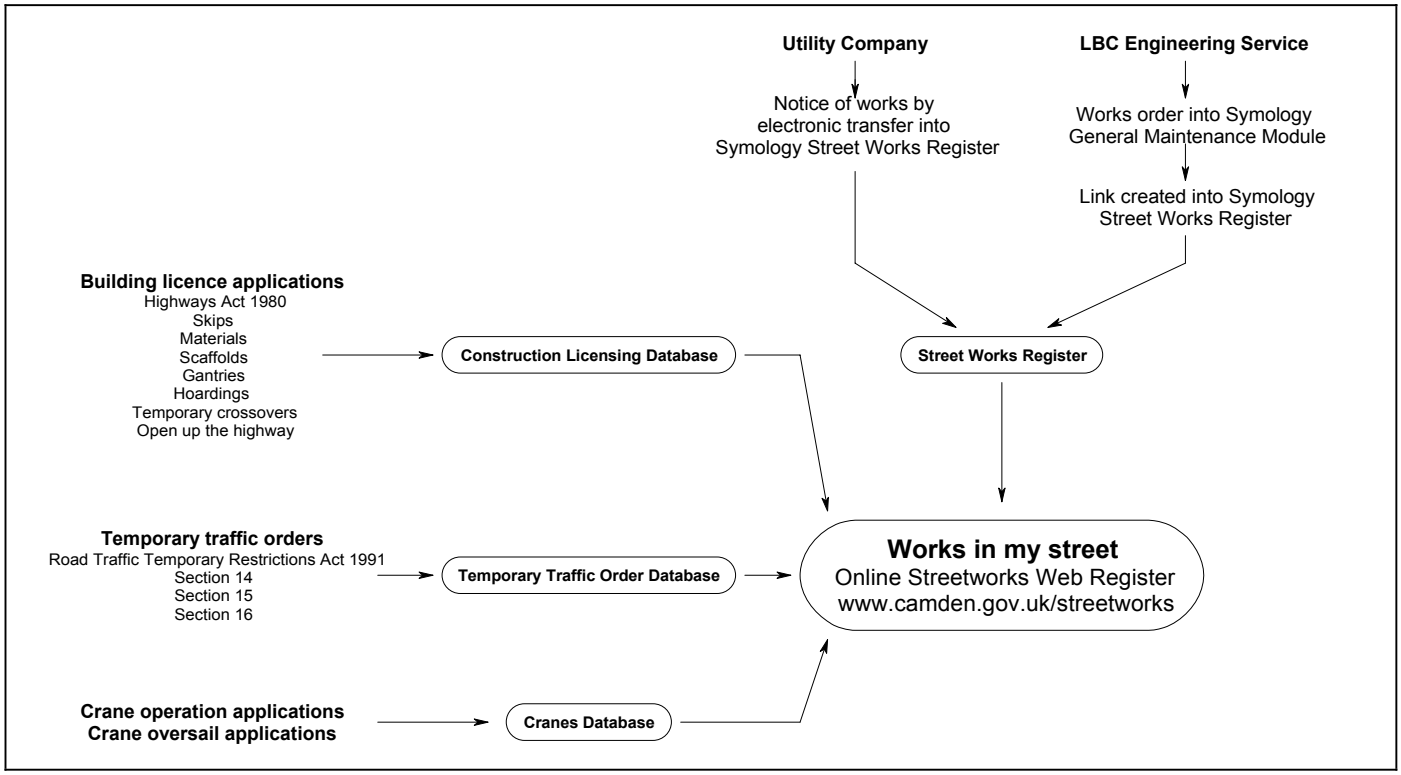
In response to the new network management duty Camden has developed new IT systems to ensure that all works affecting the boroughs roads and pavements are recorded onto databases so that this information can be easily accessed, further facilitating coordination. New technology has also been used to make this information available on the council's website (www.camden.gov.uk/streetworks) making it accessible for anyone who may find it of use as well as for those directly involved in coordination. Camden is one of the first authorities to make this information publicly available, which includes:

- All utility works, which are recorded via the Streetworks database from the notices

electronic received from utility companies (via electronic notices, EtoN).

- All highway improvement schemes.
- All licenses issued for skips, scaffolds and hoardings.
- Crane operations.
- Tables and chairs consents.
- Temporary Traffic Orders (e.g. road closures including events such as street festivals).

The above information is available as text on the website, and the public can search for the above 'streetworks' by street or by Ward. The next phase, planned for the first half of 2006, will show 'streetworks' on a GIS interface, allowing the user to see all neighboring roadworks. A hit counter will be added, to provide us with a monthly usage monitor of this register on the web. The process for processing streetworks information this is displayed graphically in the figure below.



On-line fault reporting

Camden website is also being used as a conduit for the public to inform us of problems on Camden's streets using on-line fault reporting (http://www.camden.gov.uk/streetproblems). This covers not only problems on the road including road markings, but pedestrian issues such as problems with pavements, street furniture and - taking a 'whole authority' approach to our network management duty – refuse, waste and street cleaning.

Coordination with other London authorities

The Network Co-ordinator has a strategic overview of the above. To ensure the best possible coordination and liaison with other boroughs, the Network Coordinator attends the quarterly coordination meetings held by all adjoining Boroughs (Westminster, Islington, Haringey, Corporation of London, Barnet and Brent.) These Boroughs are invited to attend the quarterly coordination meetings that Camden organises.

Camden is a member of the North East London Street Works Group and a founder member of the Central London Street Works Group. Both groups discuss issues regarding the *New*

Road and Street Works Act 1991 and the *Traffic Management Act 2004* and seek to improve working practice standards within Central London. The membership of these groups is illustrated below.

North East London Street-Works Group Members		
Barking & Dagenham	Barnet	Camden
Corporation of London	Enfield	Hackney
Haringey	Islington	Newham
Tower Hamlets	Redbridge	Waltham Forest
Central London Street-Works Group Members		
Camden	Corporation of London	Islington
Kensington & Chelsea	Southwark	Transport for London
Westminster City Council		

To enable Camden to fully assess the impact of any activity on the highway we have registered an interest in strategic roads within adjacent local authorities and highway authorities (Appendix 2). This will allow the effective coordination of work between all parties and ensure the expeditious movement of traffic into, and out of, the borough is achieved.

London HAUC is one of ten regional Highway Authorities and Utilities Committees (HAUCs), which were created after the introduction of the *New Roads and Street Works Act, 1991* to provide a forum for highway authorities and utility companies to discuss and review areas of mutual concern and interest, particularly related to standard setting throughout the industry. Communications between members of London HAUC is essential and the Committee meets regularly to discuss issues and to formulate agreed working practices.

Transport for London

TfL and the London boroughs work closely to deliver the network management duty. All parties will have to ensure that their arrangements for meeting the duty are compatible. There are mechanisms for sharing the information needed to manage the whole network in London, both strategically and on a day-to-day basis. TfL has developed LondonWorks, which enables more accurate assessment of the impact of any works on the highway on London boroughs. Camden participates and contributes to this scheme. All users are able to view works on the highway through a map-based database, enabling journey planning to take into account any potential disruption of the road network. Camden is working closely with TfL to this end and recognises TfL's role in the provision of strategic operational co-ordination.

Details on the SRN and TLRN in Camden are given in Chapter 2. The Act modifies existing legislation for proposals to carry out highway works under the *Highways Act 1980* or to exercise road traffic powers under the *Road Traffic Regulation Act 1984* (referred to collectively here as 'schemes') if they 'affect' a road on the TLRN, the SRN or a 'borough road' in another borough. If roads are affected then a notice has to be given to the relevant LTA for their approval or objection. This 'notification process' involves the responsibilities identified in ***Table 3.1***.

Scheme which is likely to affect traffic operation on:	LTA to be notified	LTA responsible for approval/objection
TLRN in own borough area TLRN in another borough's area	TfL TfL/relevant borough	TfL TfL
SRN in own borough area SRN in another borough's area	TfL TfL/relevant borough	TfL TfL/relevant borough
Other borough road, in another borough's area	TfL/relevant borough	Relevant borough

Table 3.1 The notification process: responsibilities of authorities concerned

Where there are proposals to undertake works on the SRN, distributor or arterial routes through the borough, Camden will inform its stakeholders either through pre-planning meetings or electronically via email at an early stage to allow an impact assessment to take place. Camden will inform TfL of any works that will impact their network at an early stage to ensure that disruption is kept to a minimum.

3.5. Use of Road Hierarchies

Camden's road classification to be used in relation to the network management duty is set out in Chapter 2. Camden will reassess all its public highways with regard to their status as 'traffic sensitive' roads so as to be consistent with the stated duty hierarchy. This will lead to an increase in the number of roads designated as 'traffic sensitive'. Doing this will ensure that longer notice periods will be required to undertake works, thus enabling a higher level of forward planning of proposed works. In addition, use of Camden's road hierarchy, as defined in section 2.3, enables us to analyse what impact the disruption on any given street will have on the adjacent area. If traffic is diverted from a distributor road or traffic sensitive street onto a local access road, depending on the duration and nature of the works this may alter the designation of the affected road and contingency arrangements may have to be put in place to maintain the integrity of the highway (such as building up the road to take higher traffic volumes and management of traffic flows). Assessments are done with assistance and the cooperation of the Emergency Services and Local Transport Services (London Buses).

3.6. Permitting

The Council welcomes the introduction of permitting powers and is keen to ensure that they are made operational as soon as possible. Camden is one of 5 boroughs that, along with TfL, are working on a London wide permit scheme. This will ensure that Camden is in a position to operate a permit scheme as soon as it legally is able to do so.

The benefits that a permit scheme will bring include:

- Camden will be able to actively state when works should take place by directing the days and timings of works.
- Permit scheme will ensure parity with regards to the timing of works by both Statutory Undertakers and Camden.
- Camden will be able to reject permit requests if inadequate information is provided on the request. This will ensure that all those wishing to carry out works on the Borough's roads or pavements must provide accurate information as to the location and timing of their works.
- Camden will be able to place conditions on the way in which works are carried out
- These changes will ensure that Camden is better able to coordinate works that take place in the Borough.

These changes will enable Camden to fully assess ALL proposed activities scheduled to take place and ensure that these are coordinated to minimise disruption to all users of the public highway. All permitted works will be displayed on the Council's website, which already shows 'streetworks' taking place in the borough.

3.7. Financial Matters

The Act was introduced on the premise that it would be cost neutral to local authorities fully implementing the new powers and provisions offered by the Act. However, as Parts 3 and 4 of the Act have yet to be enacted, all local authorities - Camden included – do not have the expected revenue stream associated with permitting and regulatory arrangements under these provisions (including new powers involving Fixed Penalty Notices).

Camden has already incurred significant costs in meeting the network management duty, including those associated with a reorganisation involving additional staff resources, software and hardware. It is imperative that other aspects provided within the Act are introduced as soon as possible to enable local authorities to be able to fully maximise their ability to coordinate works and conduct the level of monitoring desirable. Permitting arrangements in particular will increase local authorities' ability to effectively coordinate streetworks - as outlined in section 3.6 - and without these powers the network management duty is correspondingly compromised.

3.8. Management Information Systems and Related Matters

Camden not only uses the more obvious applications of the latest technology to improve its information flows – such as the use of hand held devices to record streetworks inspection information and parking contraventions – but uses novel ways to inform management and the public, and thereby assist the network management duty and other aspects of our public service provision.

Up-to-date traffic order data relating to parking has not only been consolidated onto a database but parking bay information has been expressed in GIS form, which from Spring 2006 will be available to the public. This graphical information not only will include the location and type of bays, but also the times for which parking bays are controlled, enabling users to make informed decisions about travelling arrangements. Camden has complex parking arrangements designed to meet local needs and a wide variety of bay types and parking products to meet the needs of different types of users (see the IPEP for details).

Highway and traffic management information in GIS form - such as the location of bus lanes, one ways and permanent road closures – is available to Council officers via the intranet. In addition, GIS asset inventories are available to officers on lighting and gullies and consideration is being given to extend this to other street features such as street signs, lines (white, yellow), road markings, benches, bins, telephones, road studs, crossovers, entry treatments and tables, zebra crossings, traffic lights and central islands and reservations.

Public on-line reporting of problems has already been referred to. Also available to officers are 360 degree photographs taken at regular intervals on all street in the borough, which may be selected from a GIS map base. Use of these photographs can reduce and avoid the need for on-site visits when matters arise relating to particular locations and provide handy points of reference when dealing with public inquiries. The photographic records are subject to on-going updates so the latest treatments and street conditions are visible from the desk top.

Chapter Four: Monitoring

4.1. Key Variables to Monitor

Monitoring and evaluation of the network management duty needs to cover traffic outcomes and the organisational structures set up to meet the duty. The table below identifies possible monitoring tools and processes that could be used. When setting up processes for monitoring outcomes it is essential to ensure that the process is delivering something measurable.

There are a number of factors that can affect the performance of the network, not all of which can be directly controlled by the traffic authority. In particular, in London most public transport provision is the responsibility of TfL, which manages London Buses and the Underground – relevant modes for Camden – as well as the DLR and Croydon Tramlink. Camden works in partnership with TfL and others to improve access to public transport, and with London Buses to improve bus priority measures.

Monitoring the impact of works on traffic flows
Traffic counts
Journey times and variability in journey times
Journey speed data (ITIS Data)
Impact surveys before and during works
Monitoring the impact of network management duty systems
Annual review
Monitor and evaluate organisational structures and decision making processes
Introduction of ISO 9000/Quality Assurance
Best practice review

Chapter 9 of the LIP deals comprehensively with performance measures and monitoring of Camden's transport plans.

4.2. Mode Shift and Traffic Counts

The Council's main approach to dealing with congestion is to encourage mode shift. To monitor changes in traffic levels, the Council undertakes regular traffic counts across four screenlines: screenline C monitors east-west flows, while the others monitor north-south flows (A: - in Central London, B – just north of Euston Road and D – in the north of the borough). Further details of traffic counts are given in Chapter 2 of the LIP, including a map of the screenlines and survey locations. The counts cover 6 hours: 2 hours each in the morning and evening peaks and 2 hours midday. The counts have been conducted since 1994, with two screenlines surveyed each year. (It is planned that all screenlines will be surveyed each year in future).

Figure 4.1 gives details for *motorised* traffic flows and shows a downward trend in traffic volumes for all screenlines over this period. The observed traffic reduction is largely associated with an increase in CPZ coverage (see Camden's *Interim Parking and Enforcement Plan*) although Camden's land-use policies (e.g. car-free housing, encouragement of developments where public transport accessibility is high), improvements to public transport services and other programmes (e.g. travel awareness) have contributed to this trend.

The average reduction in motorised traffic across the screenlines from 1994-6 to 2003-5 is 25%, mostly associated with a reduction of car traffic of 36%. Over the same period the

number of buses has increased by 23%. The traffic counts also include data on cycle movements, which increased by 11% over this period.

The introduction of congestion charging in February 2003 has further contributed to traffic reduction, but as ***Figure 4.1*** shows, by no means accounts for the majority of that observed over this period. Rather, it has been an additional factor to the smooth downward trend.

Public transport trends and systemic effects

Detailed public transport data is not available for Camden, although TfL's *London Travel Report 2005* gives the latest travel data for London as a whole. From 1994/5 to 2004/5 bus passenger journeys increased by 55% and average bus occupancy increased by 22%. Assuming the same bus occupancy figure applies to Camden, and taking into account the increase in number of buses observed from Camden's traffic counts, bus use in Camden should have increased by about 53% - similar to the London-wide figure. Certainly the percentage of people moved on the highway by buses will have increased over time; i.e. mode shift has occurred.

Over the same period Underground journeys increased by 28% - further evidence that mode shift will have occurred in Camden given the high number of Underground stations in the borough.

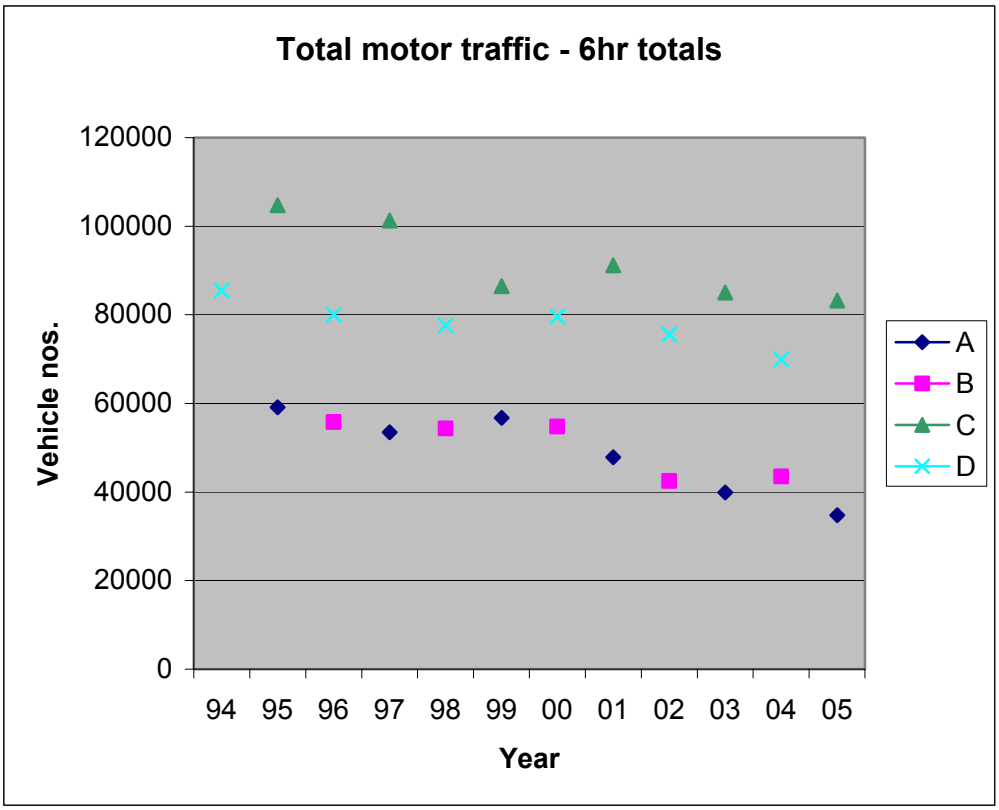


Figure 4.1 Motor traffic flows (6 hour counts) across Camden's screenlines

Trip making in very large cities is extraordinarily complex and several alternative options often exist for travellers. As conditions for competing modes change, new 'equilibria' will be formed between transport systems as people shift between modes. This will invariably involve complicated inter-modal cascading. Since this involves systemic effects across different transport networks, the success of a holistic mode shift approach cannot be measured by looking at localised outcomes. ***This has implications for monitoring the network management duty: in circumstances where roads are extremely congested***

the most important measure of successful network management is average motor traffic reduction.

Hence, it makes little sense to consider traffic flows on individual corridors in isolation, as traffic will shift between corridors to accommodate the given level of flows. Likewise, the treatment of 'congestion bottlenecks', with the intent of improving flows on a particular corridor, is likely to shift blockages to other locations on the network and therefore not necessarily improve network management as a whole. Improvements to junctions and corridors may still be worthwhile, however, in terms of improvements to local environment amenity, land uses and the needs of different road user groups (see section 5.8 of the LIP concerning the Local Plans/Corridor Approach).

The most up-to-date and comprehensive highway model for London is TfL's SALT model. The calibration of this model (and similar models) is such that it cannot reliably estimate flows on all corridors. Differences in modelled and actual outcomes are not typically resolvable within the error margin of this model, so it is best to look at aggregate outcomes (e.g. as used by TfL for estimating the impact of congestion charging), rather than changes to corridor flows.

Camden's traffic reduction target

The Mayor of London has set traffic reduction targets from 2001 traffic levels for achievement by 2011. The targets are –15% for Central London (which for Camden is interpreted as the Central London Area in the UDP) and –2% for Inner London. The Council has adopted the figure of –15% for the whole of Camden (Section 9.25 of the LIP).

4.3. Camden's Lane Rental Pilot and Journey Time Monitoring

Camden undertook a Lane Rental Pilot scheme between April 2002 and March 2004 covering the whole borough through a Government Local Public Service Agreement. Journey times on two routes in Camden were monitored and compared with control data collected in the neighbouring borough of Islington. The pilot explored whether coordination of street works and charging utilities for occupation of the highway could reduce congestion. The results showed ('Section 74a Report'- see references) that Camden achieved (and exceeded) its target of a reduction of 10% in journey times.

Camden's report on the pilot scheme noted several other benefits of the pilot:

- Improved standard of reinstatements – core samples indicated that the number of failures halved over the duration of the pilot.
- The increased level of monitoring led to improved site safety, amongst other benefits.
- Utilities had an incentive to expedite their works.
- Increased coordination was possible as the accuracy of utility information could be verified.

It may be possible to use ITIS data (see below) to monitor journey times as a performance measure with regards to the network management duty, especially when permitting arrangements and new Section 74 criteria are in place.

4.4. Journey Speed & Journey Reliability

For road safety reasons the Council wishes to moderate *vehicle speeds* in the borough. Camden achieved virtually all its road safety targets for 2010 by 2005 (see Camden's *Road Safety Plan*). New tighter targets are soon to be set for London. Camden's programme of speed management is discussed in section 5.11 of the LIP and the Council wishes to extend its coverage of 20 mph zones (Figure 5.3 of the LIP). Most of these zones are located on 'Local' roads within the road hierarchy (***Table 2.3*** here) although some 'District' roads have traffic calming (Figure 5.3 of the LIP).

Journey speeds are distinct from the speed of individual vehicles and relate to average speed of journeys made on particular links, taking account of delays at traffic lights and general traffic conditions. Quicker progression of traffic, and thus reduction in congestion, is possible through features such as 'linked lights'. (TfL is responsible for traffic lights in London, not the boroughs.) Link journey speeds are available through ITIS data (see below) and AM and PM peak data for Camden is illustrated in Figures 5.1 and 5.2 of the LIP. The wide variability of link journey speeds along a corridor or on adjacent roads makes this data hard to interpret in network management terms. Furthermore, while higher link journey speeds over time may indicate that motorised traffic congestion is reduced, depending on local conditions they may conflict with the Council's road safety objectives and the needs of certain roads users such as pedestrians and cyclists. However, a reduction in variability of link journey speeds is beneficial. The *London Travel Report 2005* shows that average bus waiting time has fallen from 6.5 minutes in 1994/5 to 5.6 minutes in 2004/5 for high frequency services. This improvement is largely related to a reduction in 'excess' waiting time of 1.8 to 1.1 minutes over this period. Excess waiting time is higher the greater the variation in the headway between bus services – the more 'unreliable' the bus service is. Journey time (or speed) reliability would be a useful measure of link performance, and Camden will explore whether data on this variable is available from TfL or the DfT. A procedure would be required to produce an aggregate network performance measure from this data.

4.5. ITIS Data Monitoring

The DfT has contracted Integrated Transport Information Services Holdings plc to supply journey speed data for a 3-year period (2004-2006) and historic data (2001 – 2003) for use by highways authorities including TfL. The 'ITIS data' is derived from minute-by-minute GPS tracking system of anonymous 'probe' vehicles signed up to the system (which in 2003 was composed of 48% cars, 33% LGVs, 16% HGVs and 3% buses). In London about 75,000 observations per hour (between 0700 and 1900) is available for 5,600 km of roads.

TfL's Road Network Performance & Research team can provide Camden with processed ITIS data from January 2004 to April 2005, and the DfT can supply 15-minute time band data on a link-by-link basis. Any speeds calculated at an area wide level are flow weighted using vehicle count data from the DfT National Road Traffic Census Counts. ITIS data can be used to calculate link journey speeds for a specified time of day compared to the equivalent free flow traffic speed, comparison of which can be used to generate a flow rate congestion delay measured in terms of minutes per km (Chart 3.2.2 of *London Travel Report 2005* shows this for the whole of London).

Camden will explore whether ITIS data can be productively used to monitor network performance in the terms discussed above.

4.6. Monitoring the Management of the Duty

As discussed in Section 3.2, Camden has set up a Traffic Management Act Steering Group to ensure that all aspects of the Act are appropriately dealt with. Section 3.2 also sets out how Camden monitors its management of the Duty through the *Network Management Duty Action Plan*.

At present the Government has not indicated what performance indicators, if any, will be used to monitor how well LTA's are meeting their network management duties. As well as the monitoring arrangements already discussed in this chapter, Camden has access to a vast amount of data on both its own works and the street works of utilities. Monitoring reports on duration of works and accuracy of information will therefore be easy to collate in response to any Government requests or any initiatives that Camden may wish to introduce.

Appendix 1 Fulfilment of General Requirements Relating to the Network Management Duty

Section of Act	Duty	Comments
16(1)(a)	securing the expeditious movement of traffic on the authority's road network	This is done on a day-to-day basis as described in Chapter 3 using mode shift as the main approach, as described in Chapter 2.
16(1)(b)	facilitating the expeditious movement of traffic on road networks for which another authority is the traffic authority	This is achieved through the notification process (section 3.4, ***Table 3.1***) and meetings with other authorities (section 3.4).
16(2)(a)	[actions contributing to securing] the more efficient use of [the] road network	This is achieved through the Council's mode shift approach, the use of bus and cycle lanes and the Council's enforcement practices (relating to parking, bus lane and moving traffic contraventions). Details are given in Camden's *Local Implementation Plan* and the (Interim) *Park and Enforcement Plan*.
16(2)(b)	[actions contributing to securing] the avoidance, elimination or reduction of road congestion or other disruption to the movement of traffic	This is done on a day-to-day basis as described in Chapter 3 using mode shift as the main approach, as described in Chapter 2.
16(2)	the exercise of any power to regulate or co-ordinate the uses made of any road (or part of a road) in the road network	Details are given in Camden's *Local Implementation Plan* and (Interim) *Park and Enforcement Plan*. Camden will review the roads designated as 'traffic sensitive' (section 3.5).
17(1)	arrangements [considered] appropriate for planning and carrying out the action to be taken in performing the network management duty	The management of the duty is described in section 3.2. New staffing arrangements and software are referred to in section 3.7.
17(2)	the appointment of a person .. the "traffic manager"	This was done at an early stage (section 3.2).
17(4)(a)	identify things (including future occurrences) which are causing, or which have the potential to cause, road congestion or other disruption to the movement of traffic on [the] road network	The management of planned and unplanned events are described in section 3.3.
17(4)(b)	consider any possible action that could be taken in response to (or in anticipation of) anything so identified	Ditto. In addition to day-to-day highway management (Chapter 3) also relevant are the Council's mode shift approach, partnership working arrangements with others, its participation in the promotion and development of new major transport infrastructure and Camden's UDP. Such matters are referred to in Chapter 2, with further details given in Camden's *Local Implementation Plan.*
17(5)(a)	determine specific policies or objectives in relation to different roads or classes of road in [the] road network	The Council's road classification for network management duty purposes is described in section 2.4. Further details are given in Camden's *Local Implementation Plan* and the (Interim) *Park and Enforcement Plan*. Also of relevance are Camden's *Road Safety Plan*, *Walking Plan* and *Cycling Plan*.

Section of Act	Duty	Comments
17(5)(b)(i)	[monitor the effectiveness of] the authority's organisation and decision-making processes	This is primarily achieved through the *Traffic Management Act Action Plan* and Camden's Network Management Steering Group meetings (section 3.2).
17(5)(b)(ii)	[monitor the effectiveness of] the implementation of their decisions	Ditto. In addition, Camden monitors the effectiveness of new transport infrastructure and project work as described in Camden's *Local Implementation Plan* and in the progress reviews of these given in its bidding document to TfL, the annual *Borough Spending Plan*.
17(5)(c)	performance …[of the] road network	This is dealt with in Chapter 4.
17(6)	review the effectiveness of the arrangements … in place	This is dealt with in Chapter 4 and through the *Traffic Management Duty Action Plan* and Camden's Network Management Steering Group meetings (section 3.2).
19	The [Secretary of State] may direct a local traffic authority to provide it, within a specified period, with specified information connected with any aspect of the performance of their duties under sections 16 and 17.	This is dealt with in Chapter 4 and also in other terms in Camden's *Local Implementation Plan*. With regard to the management of the network, the Network Management Steering Group Meetings (Section 3.2) are minuted and progress monitored through the *Traffic Management Duty Action Plan*. Comments above on monitoring - with regard to Section 17(5)(b)(ii) - are relevant.

Appendix 2 Streets in Which Camden Has Registered an Interest

Authority	Street Name	Street Name
Barnet	Cricklewood Lane	Hendon Way
	Finchley Road	North End Road
	Golders Green Road	
Brent	Brondesbury Road	Maida Vale
	Carlton Vale	Shoot Up Hill
	Cricklewood Broadway	Victoria Road
	Dudden Hill Lane	Willesden High Road
	Kilburn High Road	Willesden Lane
	Kilburn Park Road	
Corporation of London	Aldersgate	Newgate Street
	Holborn	Queen Vctoria Street
	Holborn Viaduct	St Andrew Street
	Ludgate Circus	St Pauls Churchyard
	Ludgate Hill	Farringdon Street
Haringey	Hampstead Lane	North Hill
	Highgate Hill	Southwood Lane
	Hornsey Lane	
Islington	Brecknock Road	Rosebery Avenue
	Caledonian Road	St John's Grove
	Copenhagen Street	St John's Street
	Junction Road	Tufnell Park Road
	Liverpoool Road	Wharfdale Road
Westminster	Aldwych	Northumberland Avenue
	Avenue Road	Oxford Street
	Chancery Lane	Park Crescent
	Charing Cross Road	Piccadilly Circus
	Cleveland Street	Portland Place
	Fleet Street	Prince Albert Road
	Great Cavendish Street	Rathbone Street
	Great Portland Street	Regent Street
	Haymarket	Shaftesbury Avenue
	Kingsway	Shelton Street
	Lancaster Place	St John's Wood Road
	Long Acre	Strand
	Lower Regent Street	Trafalgar Square
	Margaret Street	Waterloo Bridge
	Mortimer Street	

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If you would like the Network Management Plan in large print or braille, audiotape or in another language, please contact 020 7974 5960.

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