CHAPTER 2

LOCAL TRANSPORT CONTEXT

2.1 Road Network

2.1.1 Borough Road Network

- 2.1.2 There is a total of 393 kilometres of public highway in the Borough including 13 kilometres of the Transport for London Road Network (TLRN). The Council is the highway authority for all but the TLRN and Crown Roads. The Borough uses the hierarchy of roads as the basis for land use planning, traffic and environmental management measures. The road hierarchy is based on the following broad categories including the new category (Strategic Road Network) added by the Traffic Management Act 2004:
 - a) Transport for London Road Network (TLRN) The TLRN comprises the Red Route Network and is the responsibility of Transport for London (TfL). The A316 Great Chertsey Road and A205 South Circular Road form all of the TLRN in the Borough.
 - b) Strategic Route Network (SRN) The SRN is the new road classification provided for within the Traffic Management Act 2004, and under this designation Transport for London have increased powers over any proposed works. The functions of strategic routes are; to provide for the longer journeys and particularly those by coaches and freight vehicles; to link London effectively with the national road system; and to reduce traffic demands on London Distributor Roads so they can provide an adequate level of service and, in turn, relieve local roads of through traffic.
 - c) London Distributor Roads London Distributor Roads are those roads other than strategic routes in which the traffic function predominates over need for local distribution and access. They provide: links to the strategic routes, and to attract and serve traffic crossing different Boroughs; access to strategic centres for short and medium distance traffic; attractive routes for bus services; and local routes for heavy goods vehicles to attract through commercial traffic away from Borough distributor and access roads.
 - d) Local Roads Local Roads comprise all other roads in the Borough, and perform local functions. Local roads are subdivided into two categories depending upon whether their primary function is to distribute local traffic or gain access to adjacent land.
 - (i) Local Distributor Roads Local Distributor Roads are those roads that distribute traffic within environmental areas as well as providing access to fronting premises. They form links between London distributor roads and local access roads and therefore have an important local traffic carrying function. They provide suitable routes for emergency vehicles and in some cases public transport.
 - (ii) Local Access Roads Local Access Roads comprise all other roads in the Borough, the purpose of which is for the movement of local traffic and to provide access to land and buildings in the immediate vicinity.
 - e) Crown Roads Crown Roads are those roads through the Royal Parks, for which the Council is not the highway authority. Commercial vehicles must have permits to use these roads, which are closed to all traffic overnight

2.1.3 Condition of the Public Highway

- 2.1.4 The condition of the footways and carriageways in the Borough is a key issue. Attracting funding for the necessary highway improvements is vital to making headway on the BV97a &b (ref to chapter 9 Performance Indicators).
- 2.1.5 Appendix L contains a list of all roads for which the London Borough of Richmond upon Thames is the Highway Authority together with the current average condition index for each road.

2.1.6 Congestion Charging

2.1.7 The introduction of congestion charging in February 2003 has had an impact on the growth in traffic levels in Outer London, which according to the Mayor's Transport Strategy is predicted to grow at 7.5 % over 10 years to 2011. This will result in the need to undertake investigations into measures to reduce the impact of the predicted increase in vehicle movements.

2.1.8 The A316 Great Chertsey Road

2.1.9 The growth of traffic along the A316 has been in line with the London-wide annual increases. However the flow has been controlled by the introduction of signalled roundabouts that have contributed to improvements in road safety although the severance effect of the A316 remains a problem locally.

2.2 Parallel Initiatives

- 2.2.1 The Council supports the principle of Parallel Initiatives and has several proposals for 2007/08 detailed in the LIP. Parallel Initiatives primarily relate to the holistic treatment of 'A' roads and busy bus routes under the Borough's control (Ref. MTS 4G.Pr18 (1).)
- 2.2.2 The nature of Parallel Initiatives is that they may include aspects of all or some of the following:
 - Addressing Bus Hotspots and congestion bottlenecks (on Busy Bus Routes and 'A' Roads)
 - Bus Priority measures such as Selective Vehicle Detection measures and bus lanes
 - Pedestrian crossings
 - Measures to improve cycling and walking
 - Improving interchange and integration between modes
 - Encouraging a balanced use of street space
 - Environmental improvements
- 2.2.3 Parallel Initiatives may also be provided for as a part of other programme areas with the principle overarching theme comprising a holistic approach- i.e. looking at all aspects.

2.3 Gritting

- 2.3.1 It is the policy of the Council to provide a Winter Service operation that involves treating the highway to prevent ice from forming and to melt ice and snow already formed. The winter gritting service season starts on 1 October and continues until the end of April, it involves:
 - i) The precautionary salting of carriageways on the main roads within the Borough to prevent ice from forming.
 - ii) The post-salting of footways and carriageways in extreme weather to melt ice and snow that has already formed to keep delays and accidents to a minimum.
 - iii) The removal of snow from the highway.
- 2.3.2 The precautionary salting of roads, covering the following criteria, will be carried out within specified times on agreed pre-determined routes:
 - i) Class "A" and Class "B" roads
 - ii) Other strategic main roads

- iii) All roads used as bus routes
- iv) Steep hazardous gradients and over bridges where known local icing conditions
- 2.3.3 The Council cannot carry out precautionary salting on all roads in the Borough due to the practical difficulties in resource terms of pre-salting all roads within the specified time limits. However it is noted that salting will occur on all bus routes where required.
- 2.3.4 Post salting of ice will only be considered on minor roads not included in the precautionary salting routes and footways in response to a specific report that a particular road or footway is in an icy condition and then only after it has been inspected by an officer from the Highway Management Group to confirm that treatment is necessary. During and after snow fall, minor roads will not be treated with salt until after the primary salting routes have been sufficiently treated to ensure that they remain open to traffic at all times. Minor roads will be treated on a hierarchical basis of importance and in response to specific requests from the Police, public etc.
- 2.3.5 Some minor roads, such as culs-de-sac and particularly narrow streets, cannot be treated by spreader vehicles and would be treated in conjunction with any footway treatment.
- 2.3.6 The target response time is one hour between a decision being taken to begin treatment and spreader vehicles leaving the depot. All priority routes should normally be completely treated within two hours of leaving the depot. These targets apply both within and outside normal working hours. It is recognised, however, that treatment times may vary in different weather/traffic conditions.
- 2.3.7 No footways, pedestrian precincts or cycleways shall be specifically designated as routes for precautionary salting. Nevertheless, there will be a certain amount of overspill of salt onto footways and cycleways when precautionary salting is being carried out on adjacent carriageways. Footways will only be treated once snow has settled or during periods of prolonged freezing conditions on a priority basis as follows:
 - i) Town Centres
 - ii) Footways outside Hospitals
 - iii) Footways outside Old Peoples Homes
 - iv) Footways outside Day Centres
 - v) Footways outside Libraries
 - vi) Footways outside Schools (during term times only)
 - vii) Footbridges
 - viii) Other footways
- 2.3.8 If any reports of icy/slippery footways are received outside of the above criteria the footway will be inspected to assess whether it should be treated or not.

2.4 Street Furniture and Materials in the Public Realm

2.4.1 The Council will seek to maintain a safe attractive and informative environment, accessible to all, through the co-ordinated design of street furniture and townscape materials. A high standard of design and vandal resistance will be required and care will be taken in the siting of furniture and townscape materials. Redundant and unsightly street furniture will be removed where opportunities occur. The retention of high quality paving and townscape materials will be sought wherever possible and new materials will be carefully selected, particularly in sensitive heritage locations. Damage resistant paving will be used in appropriate locations, and care will be taken in selecting proper maintenance treatments.

2.5 Bridges and Structures

2.5.1 There are 132 traffic bridges, structures and pedestrian bridges in the Borough, the Council owns 73 of these, 24 are owned by Network Rail, 11 are jointly owned by the Council and Network Rail, 17 are owned by TfL and 5 are privately owned.

2.5.2 Bridges in the Borough are frequently inspected and undergo regular reviews of their load bearing capability. Strengthening is only undertaken as a last resort after methods of traffic management to reduce the loading have been considered. Schemes are prioritised London–wide on the basis of degree of usage and load carrying ability.

2.6 Street Lighting

2.6.1 The Borough is responsible for maintaining all illuminated street furniture on the public highway within the Borough of which there are currently some 14,600 items. Table 2.1 displays the installation dates of street light columns. Nearly half of these light poles are ageing concrete columns that have exceeded their intended design life of 30 years. Increased resources will be needed to avoid the backlog of street columns increasing.

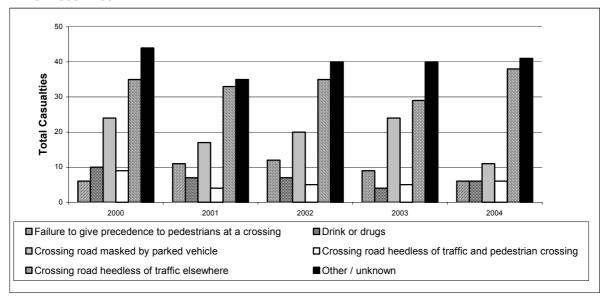
Table 2.1 - Current Street Light Column Installation dates.

Column Height (metres)	Quantity of columns	Installed before 1965	Installed in 1965-74	Installed in 1975-84	Installed in 1985-94	Installed in 1995-04	Quantity over 30 yrs old	Cost to replace £'000
Under 5	11,180	3,355	3,356	1,490	1,490	1,489	6,711	7,019.7
6	329	0	0	0	164	165	0	0
8	673	165	165	166	0	177	330	424.1
10	2,493	0	68	43	1,191	1,191	68	87.4
Totals	14,675	3,520	3,589	1,699	2,845	3,022	7,109	7,531.2

2.7 Road Safety

- 2.7.1 In London, the high numbers of pedestrians, cyclists, and powered-two-wheeler riders make it even more challenging to achieve the national road casualty reduction targets. Richmond upon Thames was in 1992 eight years ahead of the Government target as the first London Borough to achieve the 33% casualty reduction target by 2000. TfL have therefore recognised that road casualty reduction targets should be applied to each of these modes so that attention and action is focused on these groups. The Borough generally has a good overall record in casualty reduction and this needs to be sustained in order to achieve the agreed 2010 road casualty reduction targets for London, which are:
 - A 40% reduction in the total number of people killed or seriously injured
 - A 40% reduction in the total number of pedestrian killed or seriously injured
 - A 40% reduction in the total number of cyclists killed or seriously injured
 - A 40% reduction in the total number of powered two wheeler riders killed or seriously injured
 - A 50% reduction in the total number of children killed or seriously injured
 - A 10% reduction in the slight casualty rate based on distance travelled.
- 2.7.2 In terms of achieving these targets, the table of casualties in the Borough for 2003 in comparison with the 1994-98 average is indicative of how the Borough is performing. In 2003 there was an overall reduction of 8% in the total number of people seriously injured, with the greatest reduction by mode of transport being for car occupants, which declined by 21% and pedal cyclists by 16%. The number of children under 16 years who were seriously injured or killed declined by 23%. Over the same period there was a 2% increase in the number of pedestrians seriously killed or injured and those on powered two wheelers also increased by 12%. See Chart 2.1 and Table 2.2 below, which show trends over time for causes of pedestrian casualties and overall casualty figures respectively.

Chart 2.1 – Pedestrian casualties by reason of casualty for the 12 months to September for 2000 - 2004



Source: LRSUACCSTATS System DEC-2004.

Table 2.2 - Casualties in the London Borough of Richmond upon Thames for 2003 compared with the 1994-98 average and 2002

	Casualty numbers			Percentage change in 2003 over	
	1994-98 average	2002	2003	2002	1994-98 average
Fatal and serious					
Pedestrians	32.2	25	33	32	2
Pedal Cyclists	21.4	13	18	38	-16
Powered two-wheeler	24.2	30	27	-10	12
Car occupants	48.0	36	38	6	-21
Bus or coach occupants	4.6	3	5	67	9
Other vehicle occupants	5.0	2	3	50	-40
Total	135.4	109	124	14	-8
Children (under 16 years)	14.2	11	11	0	-23
All severities					
Pedestrians	135.4	117	106	-9	-22
Pedal Cyclists	133.8	78	101	29	-25
Powered two-wheeler	135.8	157	187	19	38
Car occupants	385.4	302	284	-6	-26
Bus or coach occupants	37.0	29	29	0	-22
Other vehicle occupants	23.4	20	20	0	-15
Total	850.8	703	727	3	-15

Source: Transport for London Street Management report

2.8 20 mph Zones and Limits

- 2.8.1 The Council has introduced a number of 20 mph speed limit zones in the following areas:
 - In the vicinity of schools as part of school safety zones and safer routes to school schemes;
 - In residential areas as part of area traffic schemes with associated traffic calming measures to ensure low speeds; and
 - On limited sections of classified roads where the highway dimensions are substandard and there is a history of speed related problems.
- 2.8.2 The Council has also identified the areas of East Sheen to the south of the A205, Cross Roads in Twickenham, and Counties Estate in Twickenham, primarily because of the number of accidents and secondly because there are schools located within each potential zone, providing links to the safer routes to school programme (now more commonly referred to as the implementation phase of School Travel plans).
- 2.8.3 Existing 20 mph zones and limits within the Borough are located on the following roads and Wards.
 - Ashfield Close (Petersham)
 - Bute Avenue (Petersham)
 - Court Way (Twickenham)
 - Cedar Heights (Petersham)
 - Craneford Close (Twickenham)
 - Craneford Way (Twickenham)
 - Cumberland Road (Kew)
 - Dickens Close (Petersham)
 - Heatham Park (Twickenham)
 - Heathfield North (Twickenham)
 - Heathfield South (Twickenham)
 - Leybourne Park (Kew)

- Meadow Close (Petersham)
- Park Road (from Chestnut Ave) and Queens Road- (Teddington)
- Petersham Road (Petersham)
- River Lane (Petersham)
- Rutland Drive (Petersham)
- Sandy Lane (Petersham)
- Sudbrook Lane (Petersham)
- Tree Close (Petersham)
- Hampton Court Road (Hampton)
- Thames Street (Hampton)
- Upper Sunbury Road (Hampton)
- Hospital Bridge Road (Heathfield/West Twickenham)

2.9 Road Safety Education and Programmes

- 2.9.1 The Council is committed to working towards achieving the 2010 road casualty reduction targets for London and to help achieve these targets has introduced a number of road safety education initiatives and programmes, these include:
 - Cycling proficiency
 - Safer routes to school
 - Safe access to public transport
 - · Pedestrian skills training
 - Independent traveller training
 - Young driver training
 - Vulnerable road users
 - Speed management
 - Safety education, training and publicity
 - School crossing patrols

2.10 Walking

2.10.1 Walking plays an important part in urban life and is a part of almost all journeys, whether as the complete journey or as a link between other modes of transportation making up longer trips. There is great potential for increasing walking as a proportion of all journeys.

London Borough of Richmond-upon-Thames

While there are parts of the Borough where the condition of the footways, the signing and the street furniture could be improved, there is a generally good basic walking infrastructure within the Borough. The majority of the Borough's signal-controlled junctions now have pedestrian phases and the majority of the Borough's 305 public rights of way are adequately accessible. There are also a number of long distance recreational walking routes that are signed and promoted.

- 2.10.2 The existing signalised junction of Richmond Road with St Margaret's Road in Twickenham was modernised during 2005/06 to include a green man pedestrian phase. This scheme was funded from TfL's walking allocation and was greatly supported by local residents. This was one of the only signalised junctions in the Borough not to have pedestrian facilities. This scheme has assisted pedestrians to access local shops, bus stops and other local amenities, in addition to cyclists through the introduction of a contraflow cycle lane in Rosslyn Road.
- 2.10.3 The Borough has the following number of pedestrian facilities, those with facilities for disabled people are shown as a percentage in brackets (2005 figures): -

Zebra Crossing 91 out of 93 (98%)
Pelican/Toucan/Puffin 69 out of 69 (100%)
ATS with ped phase 28 out of 31 (90%)

- 2.10.4 There are three strategic walking routes within the Borough and they include sections of the London outer Orbital Path, the Capital Ring and the Thames Path.
- 2.10.5 As part of the ongoing improvements to the walking environment in the Borough the Council has undertaken a pilot audit of the Street scene in Twickenham town centre. The audit forms part of the Borough-wide review of the street scene and is a recommendation for action of the Council Walking Strategy. The audit looks at a number of issues that include:
 - Disabled access
 - Carriageway crossings
 - Safety and security including lighting
 - Footway width, surface quality and detail
 - Street scene improvements, including removal of clutter and defunct signage, potential tree planting and the identification of potential public space improvement schemes.

Additional work is also being undertaken in Teddington with regard to a pedestrian audit, which will involve various streetscene improvement works being undertaken from 2007/08 subject to TfL funding. Proposals have also been included from 2007/08 for Streetscene/pedestrian audits in other locations across the Borough.

- 2.10.6 For future walking schemes, the Borough will work to develop walking routes to points of interest, for example, public transport to shops, schools to local parks etc. Consideration will be given to removal of street clutter, i.e., unnecessary signs and posts. In addition, the location of street furniture will be assessed and changes made if pedestrian routes are blocked or made difficult. Crossing facilities will be considered, indiscriminate parking removed and sight lines improved. This will assist in making pedestrian routes attractive and more easily accessible by all.
- 2.10.7 All schemes introduced within the Borough are likely to have an element of walking involved and pedestrians will be considered at all stages to ensure that the walking environment continues to be improved.
- 2.10.8 A copy of the Council Walking Strategy is contained as Appendix D. The Walking Strategy contains cross-references, where applicable, to the London Walking Plan. These cross-references show the linkages between Borough and London policies.

2.11 Cycling

2.11.1 Cycling has become increasingly popular in recent years, particularly in the Richmond area due to the parks and towpath within the Borough. People have realised the advantages of the bicycle for commuting to work or school, visiting friends, travel to leisure activities and recreation. Cycling is cheap, efficient, quicker for local journeys, environmentally friendly and healthy. There are two elements to the cycle network within the Borough, the London Cycle Network (LCN+) and the Richmond upon Thames Borough Cycle Routes (known as the Borough Cycle Network –BCN, or non-LCN+).

2.11.2 London Cycle Network (LCN+)

2.11.3 The aim of the LCN+ is to provide a network of safe, convenient, and conspicuous cycle routes linking residential areas with all the major centres of employment, retailing leisure and transport access across London. There are four LCN+ Priority Strategic Routes running through the Borough, these include:

SW3 - Heathrow to Central London

From Heathrow through Twickenham, to Richmond, and then on through Putney to Central London.

- SW6 Surbiton to Chiswick
 - From Surbiton through Kingston and Richmond to Chiswick.
- SW7 Kingston to North London

 Dispring from Kingston through Toddington and Trainlenberg to Deput
- Running from Kingston through Teddington and Twickenham to Brentford and North London.
- SW8 Hampton to Central London
 Which runs from Hampton through Teddington and Richmond Park and Barnes and then onto Hammersmith and Central London
- 2.11.4 The Borough is committed to the objectives of the London Cycle Network Plus (LCN+) and this is shown through inclusion of the 'Statement of Commitment to the LCN+'. The Statement is included in Appendix G- 'Common Statements' and contains details of relevant CRISP studies together with anticipated completion dates.

2.11.5 Borough Cycle Network (Non-LCN+)

- 2.11.6 The Borough Cycle Network (Non-LCN+) supports the routes that are being implemented as part of the London Cycle Network Plus (LCN+) initiative and helps to develop cycling in a separate capacity. The non-LCN+ network provides links between the LCN+ routes that connect major destinations in and around Richmond upon Thames.
- 2.11.7 The Thames Cycle Route is an important aspect of the Borough's cycle network. The Thames Cycle Route is part of the 10,000 miles National Cycle Network, with routes leading away from London into the countryside. The Thames Cycle Route through the Borough starts at Hampton Court Palace, passes Teddington Lock on its way to Richmond Park, then crosses over to Barnes past the Wildfowl and Wetland Trust and follows the riverside path to Putney.
- 2.11.8 The Council is keen to promote cycling along towpaths within the Borough. It is noted that a number of towpaths sections will be subject to the advertisement of the Cycle Tracks Act and will be formally advertised and consulted on with interested parties. On towpaths where cycling is currently permitted, the Borough will actively seek funding to ensure that routes can be maintained to a high standard.
- 2.11.9 By working in conjunction with members of the Borough Cycle Liaison Group, missing sections of the BCN can be identified and considered for implementation, subject to funding.
- 2.11.10 To promote cycling within the Borough, there is a rolling programme for the introduction of cycle parking facilities at station, schools, shops and other points of interest.

2.11.11 National and local cycle routes within the Borough are promoted through the publication of a Borough cycle map made available in local schools, libraries and other points of interest such as civic centres and information bureaus. The Borough will continue to update and publish this map when funding permits.

2.12 Local Area Strategies

- 2.12.1 The London Borough of Richmond upon Thames' nine local areas are:
 - Barnes
 - East Sheen and Mortlake
 - Ham and Petersham
 - Hampton and Hampton Hill
 - Kew
 - Richmond Town
 - Teddington and Hampton Wick
 - Twickenham
 - Whitton and Heathfield
- 2.12.2 The main transport concerns in these areas include:
 - Personal Safety
 - Parking
 - Access to public transport
 - The pedestrian environment
- 2.12.3 The Council has identified the following locations for priority in terms of improvements to the transport environment.

Local Area	Priority Location for Transport Improvements
Barnes	Barnes Station
East Sheen and Mortlake	North Sheen Station
	Mortlake Station
Ham and Hampton Hill	Hampton Station
	Fulwell Station
Kew	Kew Gardens Station
Richmond Town	Richmond Town Centre
	Richmond Station
Teddington and Hampton Wick	Teddington Town Centre
Twickenham	Twickenham Town Centre
	A316/Chudleigh Road Junction
	Strawberry Hill Station
Whitton and Heathfield	Whitton Station
	Whitton High Street

12.12.4 It is noted that a programme of Station Access improvements are proposed as a part of the measures being taken forward by Sweltrac. More detail on Sweltrac and the programme of proposals is available in Chapter 3, Appendix G, and RUTLIP form 7 in Appendix A.

2.13 Travel Plans

2.13.1 School Travel plans (incorporating Safer Routes to School)

2.13.2 Safer Routes to School projects are about working together as a community to make the journey to and from school safer and healthier for everybody, yet at the same time helping to tackle wider issues such as social exclusion and accessibility.

- 2.13.3 The School Travel Plan Officers have been very successful in securing 48 School Travel Plans out of a total of 82 schools, which is among the top results in London. The general focus of school selection has been on the development and geographical expansion of Safer Routes to School projects. Schools are selected according to need and in accordance with information supplied by schools and data collated by the School Travel Plan Officer through an annual Travel to School Survey. At the time of writing, the schools that have an approved travel plan include:
 - Archdeacon Cambridge
 - Collis Primary
 - Clarendon
 - Hampton Wick Infant & Nursery
 - Kew Riverside
 - Lowther
 - Marshgate Primary
 - Orleans Infant
 - Orleans Park
 - Queens C of E Primary
 - Russell School
 - Sacred Heart
 - Harrodian School
 - Carlisle Infant School
 - Hampton Hill Junior School
 - Hampton Infant School and Nursery
 - Nelson Primary School
 - Stanley Infant School
 - Chase Bridge Primary School
 - Hampton Community College
 - St Mary Magdalen's Catholic Primary School
 - St Edmund's Catholic Primary School
 - St Elizabeth's Catholic Primary School

- St John Baptist Junior
- St Mary's & St Peter's C of E Primary
- St Mary's C of E Primary
- St Osmunds
- St Stephen's C of E Junior
- Sheen Mount
- Teddington School
- Trafalgar Infant
- Waldegrave School for Girls
- · Whitton School and Sports College
- The Mall school
- Newland House School
- St James Independent School
- Darell Primary School
- Hampton Junior School
- Meadlands Primary School
- Stanley Junior School
- Barnes Primary School
- The Vineyard School
- Strathmore School
- Bishop Perrin Church of England Primary School
- St James's Roman Catholic Primary School
- Hampton Court House
- 2.13.4 The results of the most recent School Travel Plan Survey in 2004 have shown a significant decrease of 4% (from 42% to 38%) in the numbers of children being driven to school in the Borough.

2.13.5 Work Travel Plans

- 2.13.6 Promotion of Work Travel Plans is an initiative focussing on business travel planning issues within the Borough. To facilitate travel plans within the Borough, the Council has introduced and progressed its own Travel Plan since 1996, which has introduced a series of measures to provide a wider travel choice to Council Staff, including the leasing of an electric car. Council travel plan measures that have been implemented to date include, physical measures such as secure cycle parking for staff who cycle to work, office showers, and pool bicycles and a pool car to be used by staff for work related trips. It is proposed to revise the existing Council Travel Plan by the end of 2006.
- 2.13.7 Work Travel Plans are aimed specifically at the assessment and management of transport issues within a business organisation. A Work Travel Plan deals with the transport requirements of a commercial organisation, whilst also catering for its business and economic demands. The Council have recently launched the Richmond Travel Plan Network to promote travel plan issues in the Borough. Table 2.3 on the following page provides an indication of the ways in which people travel to work each day and this is a useful tool in considering where to target measures to encourage less car use. Chart 2.2 compares the Borough with London, and England and Wales.

- 2.13.8 In order to progress work travel plans within the Borough the Council has introduced a range of measures aimed either at cycling, walking, public transport, car sharing or reducing the need to travel for work, these include:
 - Setting up a car sharing initiative
 - Providing cycle facilities, e.g. showers, secure cycle parking.
 - Providing information to staff on rail, tube and bus services, in conjunction with the travel information services and leaflets provided by TfL.
 - Low interest or interest free public transport season ticket loans.
 - Offering attractive flexible-working practices.
 - · Car park management
 - Home working
 - Tele-working
 - Pool vehicles
 - Using alternative fuels for fleet vehicles.
 - Cycling mileage allowance (50p/mile)

2.14 Travel Awareness

- 2.14.1 The Council supports a number of key initiatives such as Bike Week and the Walk to School programme. The Council have participated in Bike Week for a number of years. The last 3 years have featured a public road show held in Richmond or Twickenham Town Centre, where free cycle information such as the Borough cycle maps and other guides produced by TfL and the Cyclists Touring Club (CTC) have been distributed.
- 2.14.2 The Borough has also promoted the Walk to School message for many years and for the last eight years has been working in partnership with other South West London Boroughs in order to minimise costs, maximise publicity and consequently, involve many thousands of children and parents/carers.
- 2.14.3 The Borough is also an active participant and supporter of the London-wide Good Going campaign and takes part in a number of organised events each year to promote sustainable travel such as cycling, walking and using public transport. The two main events are Good Going Week and the Good Going Walk to Work Campaign.

Table 2.3 - Travel to Work

	LBRuT	Outer London	Greater London	England & Wales
All people aged 16-74 in employment	89,408	2,065,353	3,319,134	23,627,754
People who work mainly at or from home	11.0	8.5	8.6	9.2
Underground; metro; light-rail; Tram	8.3	13.4	18.8	3.0
Train	18.8	13.3	12.2	4.1
Bus; Mini Bus or coach	7.1	9.2	11.1	7.4
Motorcycle; Scooter; moped	1.7	1.3	1.4	1.1
Driving a car or van	38.8	41.7	33.5	55.2
Passenger in a car or van	2.0	3.2	2.5	6.3
Taxi or minicab	0.3	0.6	0.7	0.5
Bicycle	3.9	1.6	2.3	2.8
On foot	7.7	6.9	8.4	10.0
Other	0.5	0.4	0.4	0.5
Public transport users in				
households#: With car or van##	24,179	79.1	552,018	74.6
Public transport users in households#: Without car or van##	6,247	20.4	185,981	25.1

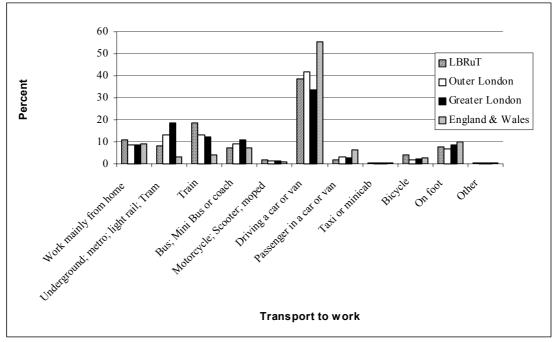


Chart 2.2 - Different modes of transport for travel to work

Source: Key Statistics for wards, Table KS15

2.15 Accessibility

- 2.15.1 The Council has an obligation to fulfil the requirements of the Disability Discrimination Act. Minor improvements are often carried out as part of the highway maintenance programme to improve safety and access on the highway network. In addition, the Council maintains a list of requests for improvements from people with disabilities for dropped kerbs at junctions, handrails for steps and ramps, disabled persons parking bays and upgraded surfacing.
- 2.15.2 Access to a choice of transport should be made as easy as possible for all users, residents and visitors including those with disabilities. Station users must feel safe not only at the stations but also on their routes to the stations.
- 2.15.3 A major change has been made at Twickenham railway station where the whole forecourt area has been transformed, including the removal of the old access road and replacing the space with a plaza of attractive paving, seating and covered cycle parking. The inside of the station has seen some improvements, including better access for people with disabilities through the provision of a new stair lift.
- 2.15.4 It is important to ensure that the street environment within the Borough is suitable for all users through the removal of unnecessary barriers. The Borough is fortunate to have many open spaces, parklands, cycling routes and the River Thames towpath. The Council is working to providing access through improvements to surfacing and interpretation in order to provide a network of fully accessible green routes for walkers and cyclists that connect all these sites.
- 2.15.5 Accessibility Schemes that are used within the Borough include:
 - The Taxicard Scheme
 - Orange/Blue Badge Scheme
 - Freedom Passes
 - Low floor accessible buses

2.16 Public Transport

2.16.1 Public transport services in the Borough are operated by a number of agencies, including, London Underground; private bus operators contracted to London Buses (part of Transport for London); SilverLink; and, South West Train rail operators. The Council has no direct control over the operators but maintains strong liaison with them through its formal Public Transport Liaison meeting, in conjunction with the South and West London Transport Conference (Sweltrac) and also the London Bus Priority Network (LBPN). It is noted that the Council is also a part of NORP, which is a group of Boroughs with stations on the North London Line. NORP is likely to become a formal TfL sponsored partnership in the near future and will look to undertake improvements to Station Access in a similar way to Sweltrac. Further comment on Sweltrac and NORP is provided further in the next few pages of this Chapter.

2.16.2 Rail Network

- 2.16.3 The Borough has 14 railway stations served by a complex railway network with fairly intensive radial, and to a lesser extent orbital, services. The Borough is served predominantly by the National Rail network and in parts by London Underground District Line services. The Council has also supported a number of improvements to the rail services in the Borough including; the recent designation of the lines with four or more trains an hour as the over-ground network ('on'), station upgrades, and security enhancements (e.g. CCTV). The Council would prefer to see that four carriage trains are only used during times of very light usage.
- 2.16.4 The Borough is served by the London Underground branch of the District Line and by SilverLink National Line at Richmond and Kew Gardens. The South West Trains National Rail network serves all 14 Rail Stations within the Borough. All Stations within the Borough are:
 - Richmond
 - Barnes
 - Barnes Bridge
 - Mortlake
 - North Sheen
 - Kew Gardens
 - St Margarets

- Twickenham
- Strawberry Hill
- Whitton
- Fulwell
- Hampton
- Hampton Wick
- Teddington

2.17 Sweltrac

- 2.17.1 Sweltrac (The South and West London Transport Conference) of which the London Borough of Richmond upon Thames is the lead Borough has had a major role in the development of the Overground Network ('on'), formerly known as the South London Metro. This has resulted in better train information for passengers, improved accessibility at a number of stations and increased frequencies on certain parts of the network. The development of 'on' will continue to be a key priority for Sweltrac and the partnership will continue to seek higher frequency services, particularly in the evening. Sweltrac will continue to work with its members to improve safe and easy access to stations and to improve interchanges between rail and bus services.
- 2.17.2 Appendix G contains an overview of the work that Sweltrac does. As lead Borough, Richmond is committed to the success of Sweltrac and looks forward to the implementation of an ongoing programme of works.

2.18 NORP

2.18.1 The North Orbital Rail Partnership (NORP) is a new partnership comprising the 18 Boroughs, which contain the Silverlink line operating across west, north and east London. The purpose of the partnership is to manage and fund improvements to the Stations along

the route to enhance the existing service and safety. The NORP common statement is provided in Appendix G.

2.19 Bus Network

- 2.19.1 The Council (as the lead Borough for the South West Sector) is actively involved in the London Bus Priority Network to create high quality bus corridors across London.
- 2.19.2 The bus network coverage in the Borough is extensive; there are around 30 bus services that provide services to most parts of the Borough. The major bus interchanges are located at the Richmond, Twickenham and Teddington town centres. In addition, a bus garage is located at Fulwell.
- 2.19.3 The Council has a programme of work addressing Bus Stop Accessibility issues on a route-by-route basis. It also has a programme of work addressing and minimising Bus Priority hotspots and there is a preliminary programme of work looking to introduce new Bus Lanes in various locations across the Borough. The Borough is committed to introducing 24-hour bus stop clearways where practicable.
- 2.19.4 The Borough is also supportive of red surface treatment for bus lanes with the exception of locations that are within visually sensitive or high character locations. It would like to see all appropriate bus lanes coloured red within the next 20 months.
- 2.19.5 The Council is committed to assessing Bus Priority needs across the Borough and for 2007/08 is proposing to implement 3 new Bus Lanes with feasibility studies in other locations.
- 2.19.6 The Council is also supportive of the use of Parallel Initiatives on 'A' Roads and busy bus routes. A number of schemes are proposed implement such initiatives in several locations across the Borough.
- 2.19.7 Appendix G- 'Common Statements' contains a statement relating to the LBPN Lead Borough and a statement of commitment and support for the LBPN partnership.
- 2.19.8 The Borough supports the intention of Mayor's Transport Strategy 4F.Pr2, which looks to achieve effective enforcement of Bus Priority. The Borough actively uses CCTV to reduce the illegal use of bus lanes across the Borough. The Borough's Parking Enforcement Plan (Chapter 7) also reiterates the Borough approach to meeting the requirements of this policy.

2.20 Powered Two-Wheelers

2.20.1 Although the Borough has a good overall record in casualty reduction, the number of casualties attributed to powered two-wheelers has increased and remains an area of concern. Most of the accidents for this mode of transport involved making a left, a right, or a "U" turn, which contributed to over 70% of casualties in recent years. Changing lanes or overtaking is also an area of concern. Refer to Chart 2.3 below for a breakdown of the accidents by cause. Following an experimental period, the Council now permits powered two-wheelers to use two bus lanes in the Borough.

90 80 70 60 Casualties 50 40 30 20 10 n 2000 2001 2002 2003 2004 ■ Slippery road conditions □ Disobeyed traffic signal ■ Making a U-turn / right or left turn ■ Driving too close to another vehicle ■ Changing lane or overtaking ■ Going to fast Other

Chart 2.3 – Powered Two-Wheeler casualties for the LB of Richmond upon Thames by cause of accident

Source: LRSUACCSTATS System DEC-2004.

2.21 Freight

- 2.21.1 There is an increasing concern in the Borough regarding the use of large vehicles and the associated noise, fumes, vibration and intrusion of such vehicles on the environment. The Council actively supports controls to minimise the adverse effects of lorries on the environment and believes that action should be on a London-wide basis. Most activities across London require the collection and delivery of goods. Balancing the needs of customers and operators is critical to a successful approach to the issue of freight.
- 2.21.2 Freight vehicles make up a considerable share of the traffic on London's roads and are responsible for a disproportionate amount of air pollutants and noise besides adding to traffic congestion particularly in town centres. It is recognised that freight transport in London will continue to be predominantly road based for the foreseeable future. The London Lorry Control Scheme (LLCS) is an environmental measure that restricts the movement of heavy goods vehicles during night-time periods and at weekends. The opportunities to improve the current arrangements need to be explored and developed. Notwithstanding this, the Borough support the following roads being exempt from the LLCS provisions: A316, A205 and the A308.

2.22 Environment

2.22.1 Air quality in the Borough currently exceeds the limits values set for nitrogen dioxide and fine particles in air and is predicted to fail to meet the target in the National Air Quality Strategy, the whole Borough has consequently been designated an Air Quality Management Area. The Mayor's Air Quality Strategy sets out policies and actions for London, and Richmond upon Thames's Air Quality Action Plan (AQAP) sets out our own programme. The Council AQAP has been endorsed by Cabinet but it may be subject to changes in the future and any updates will be made available to Transport for London as a part of the Borough annual LIP updates. The main new proposal is for a London-wide Low Emission Zone. A copy of the AQAP is provided in Appendix J.

2.22.2 The Borough has also carried out some direct measurement of ambient noise levels, largely determined by road traffic and have also adopted actions to help reduce road traffic noise.

2.23 Parking

- 2.23.1 Road space is a limited resource. Designing for the parking needs of the Borough whilst ensuring the provision of safe access to streets for emergency vehicles, and for pedestrian movement and crossing points is the basis of the Parking and Enforcement Plan (PEP). The PEP in Chapter 7 has been designed to balance the needs of all stakeholders including the Council position on the following:
 - Station Parking
 - Park and Ride
 - Car Parks
- 2.23.2 The current parking provision in the Borough is as follows:
 - 19 CPZ's
 - 27 Off Street Car parks
 - 150 Pay & Display Machines
 - 240 On street Disabled persons' parking bays
 - 4,667 Blue Badges on issue to Borough residents

2.24 Water

- 2.24.1 The Thames River is a unique resource and the preservation of its special character is essential to London as a whole. The character of the Thames within the Borough varies according to the individual reaches. The contrast between the reaches and between opposite banks within the reaches has a major contribution to the character of the River which can contrast from built-up to semi-rural areas, from urban townscape to suburban gardens, from formal vistas to woodland, within quite short distances. Development within this area must always take account of the character and context of each individual reach, as development appropriate for one reach may be unsuitable for another.
- 2.24.2 In a transport context the Thames River acts as a barrier and effectively divides the Borough into two. As a result, there is a need for additional and/or enhanced pedestrian and cycling crossings. There may also be opportunities for enhanced use of the river for transport purposes.

2.25 National / international Links

2.25.1 The close proximity of major international airports at Heathrow and Gatwick provide an important national and international link to the Borough, with relatively easy access for visitors to the area. However, an increase in capacity at Heathrow for more aircraft and passengers will have the potential for an increase in aircraft noise and an increase in road traffic congestion within the Borough. Aircraft noise affects residents of the Borough differently, depending on their proximity to either the landing paths in the north, or the takeoff routes over the south.

2.26 Community Transport Scheme

2.26.1 Richmond and Kingston Accessible Transport (RAKAT) is a local non-profit making Community Transport Scheme developed through the Sweltrac partnership and funded by Richmond and Kingston Councils, the PCT, local Trusts and Charities. It has 15 vehicles on the road, 10 of which are fully accessible. By April 2005 four out of the 15 vehicles in RAKAT's minibus fleet were over 8 years old. At this age they become expensive to operate as maintenance and repair costs consume much of the running cost budget and draw money away from activity needed to maximise co-ordination between voluntary organisations.

2.27 Strategic Partnerships

- 2.27.1 Besides the partnership with Transport for London (TfL), the Borough has also developed close working relationships with various TfL operational arms including:
 - Street Management (for the TfL Road Network (TLRN) and traffic operations and signals)
 - London Buses
 - London Underground
 - Borough Partnerships
 - The Public Carriage Office

Aside from TfL, other agencies include:

- Strategic Rail Authority
- Network Rail
- Southwest Trains
- Silverlink
- 2.27.2 Appendix G- Common Statements, contains an overview of Sweltrac as well as common statements from some of the Borough's other transport partners. The Borough works closely with a number of Partners regarding transport related matters and these are listed below:
 - South and West London Transport Conference (Sweltrac) for which Richmond upon Thames is the lead Borough
 - London Bus Priority Network (LBPN) (for which Richmond upon Thames is the lead Borough for the South West Sector)
 - London Cycle Network Plus (LCN+) (for which Richmond lead the SW Sector)
 - London Bridge Engineering Group (LoBEG)
 - London Technical Advisors' Group (LoTAG)
 - Strategic Walking Group
 - PAN London Road Safety Forum

It should be noted that this list is not exhaustive and the Borough works closely with many other agencies and partners on transport related matters.

2.28 Equality and Inclusion

- 2.28.1 This topic is covered further in Chapter 4- Equality Impact Assessment but briefly, this section details some of the actions that are taken on behalf of the Equality and Inclusion Groups in the Borough.
 - Mobility Difficulties- drop kerbs and ramps for wheelchair access; ongoing programme of making bus stops accessible; safety audits; consultation
 - Visually and Hearing Impaired- DDA compliant design (where practicable)- measures
 may include the use of tactile paving, rotating cones at traffic signals, and care taken
 in the location of street furniture; safety audits; and, consultation.
 - Women- Use of Safer Travel at Night (STAN) initiatives.
 - Lesbian, Gay, Bisexual and Transgender- Use of Safer Travel at Night (STAN) initiatives.
 - Elderly- Street Design measures, such as strategic positioning of street furniture such
 as benches; ongoing programme of implementing accessible bus stops; implementing
 drop kerbs and ramps for wheelchair users; safety audits; consultation; and, Safer
 Travel at Night (STAN) initiatives.

 Children- Road Safety Education programme; Cycling Education programme; and, School Travel Plan measures.

2.29 Events Management

- 2.29.1 Paragraphs 1.5 and 1.5.1 in Chapter 1 identify the importance of the Borough as a tourist destination. This popularity creates the need for traffic management and as a result, traffic management orders have been prepared to help manage specific events or for a number of events such as those at Twickenham Rugby Stadium. Traffic Management Orders for the following events are included within Appendix I: Traffic Management Orders
 - Marble Hill Concerts
 - Kew Gardens Summer Swing
 - Twickenham Stadium
 - Oxford-Cambridge boat race
 - Hampton Court Boat Race