Contents

1. Introduction

The purpose of the Long Term Transport Strategy

1.1.   The Long Term Transport Strategy (LTTS) has been developed to provide a strategic direction for investment in transport throughout the borough over the period of 2015 to 2035.

1.2.   This will enable Brent Borough Council to make further improvements to the transport networks that will enhance mobility and accessibility for all.

1.3.   The LTTS will be used to inform the development of other transport strategies for the borough and will provide a basis for future Local Implementation Plan (LIP) annual spending submissions. This is the main mechanism via which funding from Transport for London is granted for schemes and initiatives to improve transport infrastructure and travel behaviour. It is therefore important the submission accurately reflects the long term needs of the borough.

Policy context of the LTTS

1.4.   The LTTS has been developed to reflect both the objectives set out in the Borough Plan and the Mayor's Transport Strategy (MTS) and the needs of the borough as highlighted by public consultation and stakeholder engagement.

1.5.   The Borough Plan has been developed by Brent Borough Council following extensive consultation with Brent residents and businesses and provides objectives focussed on making Brent a better place to live, work and visit.

1.6.   The MTS provides a long term strategic view of transport for London in the wider context and therefore must be considered when developing policy on a borough level. However, it is acknowledged that the priorities reflected within the MTS may change following the development of a new strategy over the coming years. Any changes that materially affect the LTTS will be incorporated following the first review of the LTTS five years after adoption.

1.7.   The LTTS is also supported by and reflected within a variety of other borough strategies, including:

- The Cycling Strategy

- The Walking Strategy

- The Freight Strategy

- Brent Place Making Guide

- Parking Policy

- Strategic Infrastructure Plan

- Speed Limit Strategy

- Travel Planning Strategy

- Air Quality Strategy

- Promotion of Independent Travel for Adult Social Care Service Users

1.8. The LTTS will be supported by future LIP annual spending submissions and will provide a policy basis for transport input to proposed development within the borough.

Development of the LTTS

1.9. The LTTS has been developed following public consultation from August to October 2014. This consultation resulted in a high level of feedback from both members of the public and stakeholders and this has been utilised to inform all areas of the LTTS.

1.10. Responses to this consultation were monitored to ensure the diverse nature of Brent was fully represented within the results.

1.11. The LTTS has been further developed with input from partner organisations and key stakeholder groups to ensure it is fully reflective of all the needs of the borough over the next 20 years.

1.12. This LTTS will be reviewed on a regular basis to ensure it stays current to the needs of the borough. The first full review will take place in 2020, and every five years following that. Though given the long life span of the LTTS five yearly reviews appear appropriate it is possible that under some circumstances reviews prior to these dates will be required.

Monitoring and Implementation

1.13. The LTTS contains targets aimed at helping the borough measure the success of the strategy in achieving its objectives. These targets are SMART, meaning they are

- Specific

- Measurable

- Achievable

- Realistic

- Time-related

1.14. These targets will be subject to a full monitoring regime. Some targets will be shared with other strategies and therefore will accumulate economies of scale on monitoring activities.

1.15. It is envisaged that monitoring data will be collated annually to give an indication of how much progress has been made towards achieving the objectives. This will then be used to inform the five year reviews.

1.16. Due to the long-term nature of the LTTS and its primary purpose as a guidance document for future policy formulation and funding allocation, it does not contain a detailed action plan of measures to be implemented independently. It is not the purpose of this document to provide details of specific schemes. This detail will be contained in the annual LIP submission and other strategies that will be formulated to reflect the objectives of the LTTS and other relevant borough and regional policies.

1.17. Therefore the main implementation mechanism associated with the LTTS will be incorporation of its objectives into policy development and scheme design, in particular as part of the yearly LIP submissions and the action plans of other strategies.

1.18. The LTTS will also feed into and influence the Strategic Infrastructure Plan and the Highways Asset Management Plan with regard to where and how future Community Infrastructure Levy and section 106 funds may be allocated.

1.19. It is expected that future transport strategy and policy development throughout the borough will make reference to this document and contribute to achieving the objectives it contains. It is also expected that future transport policy development will be formulated with reference to relevant policies from other service areas within Brent Borough Council. This will ensure through partnership working that future policies reflect the needs of all residents, visitors and businesses within the borough.

1.20. As part of the development of further transport strategies stemming from this LTTS inclusivity and accessibility for all members of the community will be taken forward at every opportunity.

1.21. When designing future schemes current best practice regarding shared space and public realm design will be used to capture the potential for these schemes to be inclusive of all members of the community. This will also be taken forward in future iterations of the Brent Placemaking Guide

2. Priorities and Objectives

2.1. The following priorities and objectives have been formulated following analysis of the results of the public and stakeholder consultation which took place from August to October 2014. They also take into account the objectives of the Mayors Transport Strategy, the Borough Plan, the Regeneration Strategy and the need to improve air quality and the health of Brent residents.

Priorities

2.2. The results of the consultation suggest that there are certain key areas that are of concern to Brent residents. These include accessibility within the borough, air quality and road safety. These have been taken forward and added to established regional and local policy priorities in order to formulate five priority areas that will provide a focus for further work. These are:

- Road safety

- Air Quality

- Health

- Congestion

- Growth and regeneration

2.3. The consultation results highlight the support for improved air quality, with 89% of respondents agreeing with a policy statement to "Improve air quality where possible." Free-text comments also supported this, with samples being:

"An absolute commitment to improve air quality is needed"

"A low emission strategy is essential"

2.4. Air quality and its impacts on health is also a key concern regionally and nationally with increasing policy emphasis placed on the introduction of low-emission measures that reduce the production of NO2 and PM.

2.5. A priority of reducing congestion has been formulated as a mechanism for capturing the responses to a number of questions and free-text responses that all require reduced car use and more sustainable travel to be achieved. These include:

- 84% support for promoting walking and cycling

- 81% support improving Brent's town centres

- 92% support for making local streets more attractive

- 89% support for improving air quality

2.6. Responses to the consultation identified health as an important issue going forward in terms of quality of life for residents. This is now reflected in the LIP prioritisation matrix and will be taken forward in the development of other transport strategy documents. We will work with health providers and other service areas within the council to achieve delivery of improved public health outcomes including mental well being for residents of Brent.

2.7. High levels of congestion reduce the quality of life of Brent residents and have a negative effect on economic growth. They also suppress the uptake of active travel modes by degrading the environment for cyclists and pedestrians. Therefore, given the large number of policy areas influenced by congestion and the potentially significant benefits gained by reducing it, congestion has been included as a priority within the LTTS.

2.8. As the level of growth expected within Brent over the next 20 years is significant, both in terms of population and jobs, it is important that the LTTS fully incorporates the need to provide for this. Failure to provide adequate focus on growth areas and the need for increased transport facilities, both conventional and innovative, to cater for increases in demand will result in a reduction in quality of life for Brent residents. The emphasis on growth reflected in the Borough Plan, the Regeneration Strategy and more widely the proposed Mayors Infrastructure Plan and Mayors Transport Strategy mean that growth must be considered a priority within the LTTS.

2.9. The need to reduce accidents on Brent's roads was supported by 92% of respondents to the questionnaire, suggesting it is an important issue for local residents. Road safety, accident reduction and perceived personal safety is also a key priority in the Borough Plan and the Mayors Transport Strategy and has been a focus for LIP submissions for several years with particular focus given to vulnerable road users. Due to these factors, it is included as a priority within the LTTS.

Objectives

2.10. These objectives have been formulated to reflect the Priorities in a measurable context. They will provide the focus for the LTTS and will inform the targets set out later in this document. This will enable the borough to measure progress against the objectives and therefore progress against the key policy areas reflected in the priorities.

2.11. As this document forms the basis of future LIP submissions by providing an over-arching strategy containing long-term goals, they will also by default provide objectives for future LIP formulation. This is reflected in the fact that the LIP submission is considered to be the iterative and live action plan for implementation of the LTTS.

2.12. The objectives of this strategy will also be incorporated into other transport strategies developed by Brent. These include the documents outlined in paragraph 1.6.

Objective 1: Increase the uptake of sustainable modes, in particular active modes.

2.13. Increasing the uptake of cycling and walking will actively contribute to a reduction in congestion and air pollution and improve the health of Brent residents. Use of public transport or car clubs instead of the private car also contributes to reduced congestion and is important in enabling access to services. Uptake of all these modes can be influenced by effective travel planning measures and infrastructure.

Objective 2: Reduce conventional vehicular trips on the network, particularly at peak time

2.14. This is not about reducing the total number of trips on the network as mobility is highly important for local economic growth and for those residents who struggle to travel by other means, and require motorised travel to facilitate independent travel. However, trips can be re-timed to avoid peak hours or take place in less polluting vehicles.

Objective 3: Support growth areas and town centres to enable acceptable development

2.15. Brent is expected to see high levels of growth over the next 20 to 30 years, focussing on the growth areas. Adequate transport investment will be required to ensure this development takes place on a sustainable basis, is accessible for all users and does not place undue pressure on the transport networks.

Objective 4: Reduce KSI incidents and slight accidents on Brent's roads

2.16. Over the last 10 years roads in Brent have become safer, however there is still considerable amounts of work to do in further reducing accidents to create safe and accessible streets for all users.

Objective 5: Reduce the exposure of Brent residents to particulate matter (PM) and nitrogen dioxide (NO_2) generated by the transport network

2.17. It has become apparent that particulate matter and nitrogen dioxide generated by a variety of sources has a significant adverse impact on the health of those who are regularly exposed. A proportion of these

pollutants are generated by transport. Reduction in exposure of Brent residents could result in significant health benefits.

3. Increase use of Sustainable modes, in particular active modes

3.1.   Brent is expecting high levels of growth over the next 20 years, with another 66,000 people expected to move in and another 21,500 houses to be built. This growth will put more pressure on the road network, so if it is to be accommodated without affecting the quality of life of Brent residents, more journeys must take place by sustainable modes. These include walking, cycling and public transport. They can also be considered to include use of car clubs and, in particular, car clubs that make use of low emission or ultra-low emission vehicles.

3.2.   It is also acknowledged within the Borough Plan and by Public Health that use of sustainable travel modes can have a hugely beneficial impact on health. Cycling and walking have been shown to contribute to increased 'Years of Healthy Life' as the exercise gained improves fitness and reduces the risk of heart disease and other common causes of death and illness.

3.3.   Walking and cycling are also low cost and easily accessible for many people, making them particularly important for young people and people on low incomes who may find it difficult to access a car.

3.4.   Modal shift from use of private cars towards sustainable modes also contributes to reduced congestion and therefore the ability to provide a higher quality environment on local streets enabling greater mobility through improved accessibility and increased perceived personal safety for all. Fewer cars result in reduced emissions of particulate matter and NO_2 contributing to better air quality and better health.

3.5.   The LTTS therefore seeks to provide a framework by which the use of sustainable modes can be promoted and increased.

Cycling

3.6.   Cycling within London has grown considerably over recent years and provision for cyclists has become more important. Cycling has been prioritised within the MTS as a zero-emission, congestion reducing mode that has benefits for both society and the individual.

3.7.   Cycling is considered particularly beneficial in terms of health and wellbeing, with those who cycle regularly reporting less stress, less ill-health and improved cardio-vascular fitness levels. Regular cyclists are half as likely as the average person to suffer from heart disease, 27% less likely to have a stroke, and will live, on average, more than two years longer.

3.8.   Cycling is a relatively cheap mode of travel once a bike has been obtained, making it accessible to a large section of the population. In particular, for those without access to a car cycling can expand the distance which an individual is able to travel and hence increase the number of services, jobs and other destinations that they can access.

3.9.   This can be very important for young people who may have limited access to other modes of transport and therefore may struggle to access education or work opportunities. To help young people take up cycling and remain safe on the roads, Brent Borough Council continues to offer free cycle training.

3.10. There are now a wide variety of cycles on the market designed to cater for the needs of a diverse population. These include hand-cycles, trikes, cycles adapted for carrying large loads and electric bikes designed to provide motorised assistance for those who need it. This increasing variety is enabling an ever greater number of people to access cycling even when a conventional cycle is unsuitable for their needs.

Cycle Strategy

3.11.   As part of the development process a data gathering exercise was carried out to assess who cycles in Brent, for what purpose and what they consider to be most important in improving the situation for cyclists in the area and encouraging uptake. The headline results of this survey are:

- The most significant barrier to cycling was considered to be road safety (94% of respondents) and the cycling environment (86% of respondents).

- 69% of respondents believed that the development of a network of quiet, on-road routes avoiding major links would be the best way to encourage cycling and reduce concerns over road safety.

3.12. It has also become apparent that uptake of cycling in the north of the borough lags behind that of the south. In the south of the borough cycling claims 2-5% modal share of journeys, where as in the north this fall to 0-1%.

3.13. The action plan contained within the Cycle Strategy will be considered to be the main method of achieving an increase in the up-take of cycling within Brent over a five year period and addressing the points raised within the survey. Following this five years review of this strategy will result in new targets being set and a new action plan being produced.

3.14. Given the important accessibility and inclusivity implications of cycling, one of the key aims of the Cycle Strategy will be to identify and remove barriers to cycling in the borough for all groups.

Targets

3.15. These targets are shared with the Cycling Strategy to ensure consistency.

3.16. The targets are set for 2021, the end of the lifespan of the first Cycle Strategy. It is expected that at this time either these targets will have been achieved and new targets will be set in line with the relevant Cycle Strategy or an assessment will be made as to why they have not been met and what needs to be done to achieve them. Base years will vary according to the data available.

- Increase mode share to 3% in 2020/2021 from 1% in 2013

- Increase the number of cycle parking spaces by 1000 by 2021

- Increase number of adults accessing cycle training by 50 adults per year up to 2021

- In crease the number if children accessing cycle training by 50 children per year up to 2021

- Increase the number of cyclists from currently underrepresented groups by 200 by 2021 as indicated by the London Travel Demand Survey

3.17. It is expected that the main method employed in achieving these targets will be the successful implementation of the Cycle Strategy and following Cycle Strategies.

3.18. However, encouraging use of sustainable transport and improving air quality are also criteria used to prioritise schemes submitted as part of the LIP. Therefore, the LIP submission is also expected to contribute to achieving these goals.

3.19. Adequate maintenance of facilities for cyclists is an important element in encouraging cycling and keeping people cycling rather than reverting to car use. It is therefore important that the Highway Asset Management Plan adequately reflects the maintenance needs of cycle infrastructure.

Walking

3.20. It has been identified that walking as a mode needs more emphasis placed upon it than has been the case previously. This was particularly important for groups such as Living Streets and WestTrans who commented that the benefits of walking are similar to those of cycling and

that most journeys begin and end on foot. Therefore, the LTTS seeks to afford walking and pedestrians a higher level of priority and to fully support further uptake of this mode.

3.21.   It is increasingly understood that while walking has similar health benefits to cycling it also has different characteristics which make it suitable for different user groups. Unlike cycling it does not require equipment to be purchased and is readily available to the majority of the population. This makes is a very accessible mode for both the younger population and the older population.

3.22.   For groups who struggle to access other modes it can have the benefit of providing a greater level of independence, improving mental health and well-being through enhanced mobility. It can also provide a way into physical activity for those who are older and may not be confident enough to take up cycling in their later years.

3.23.   Increasing the number of trips carried out by foot also reduces car travel and therefore contributes to better air quality as well as lower levels of congestion and improved road safety.

Walking Strategy

3.24.   It is expected that a full Walking Strategy will be produced and it will seek to implement the objectives of this strategy within its action plan. Through the Walking Strategy the LTTS will aim to increase walking through developing, promoting and maintaining safe, secure, convenient, efficient and attractive infrastructure for all.

Place making

3.25.   There are a number of factors that are important in encouraging or discouraging walking, however the quality of the environment is vital in persuading individuals that the streets are both safe and accessible and that therefore walking to their destination is not just practical but also pleasant.

3.26.   Place making plays an important role in this and will be instrumental in increasing the uptake of walking going forward. This should be reflected in scheme design, particularly for major schemes.

3.27.   In opportunity areas which are due to see high levels of growth or re-development it is important that place making is incorporated into the development. This will enhance the sustainability of the development and encourage greater uptake of walking. The extant Place Making Guide, or approved area specific design guides should be taken into account when designing the infrastructure for these areas.

3.28. Place making and a high quality urban realm are also important in encouraging use of the streets by more people. This in itself makes the streets feel safer due to the greater level of surveillance by other members of the public. This is important in enhancing community safety and designing out crime where possible.

Walking targets

3.29. There are two targets associated with monitoring progress against this area of the strategy. These are as follow:

- The Travel Demand Survey projects an increase in walking from 29% in 2013 to 32% in 2030. However, it is hoped that the increased investment made in walking facilities through the Walking Strategy will enable a greater increase to take place in Brent. Therefore the target set within this strategy will be to increase the mode share of walking by 5% for 2030.

- A 10% increase in the number of schools in Brent which have gold standard travel plans by 2030. These are designed to reduce the number of trips made to the school by car and encourage the uptake of walking.

3.30. The main method of achieving these targets will be the implementation of the Walking Strategy over the next five to ten years. Measures included within this strategy are expected to be aimed at improving access to walking for all members of society and thereby enabling an increase in the walking mode share.

3.31. However, it is also important that the need to accommodate pedestrians is taken into account in LIP submissions and in particular major schemes, which have the potential to vastly improve local environments. This is reflected within the prioritisation matrix for the LIP.

3.32. It is also important that footways, signage and other facilities are maintained to an acceptable standard in order to provide an environment which is fit for purpose and safe to use. The Highways Asset Management Plan will be instrumental in ensuring that this is taken forward and that facilities remain in usable condition once installed.

3.33. Brent currently has a Place Making Guide which takes account of the need to make places inviting for pedestrians to spend time in and feel safe. This guide and future iterations thereof should continue to be taken into account in scheme design and location.

Public Transport

3.34. While Brent Council does not directly fund, manage or control any public transport services, the Borough maintains a role in lobbying Transport for London (TfL) for service improvements as and where they are required. Brent seeks to work closely with TfL in developing schemes and strategies in order to ensure public transport is well catered for within the Borough and will continue to do so.

3.35. Public transport plays an important role in providing an alternative to car use and, though bus and train use are not considered active modes, they contribute to reduced congestion and lower emissions by reducing the number of car trips taking place.

3.36. Bus services in particular are also important in enabling access to services, employment and education for those who do not have access to a car. They therefore perform a vital function in reducing social exclusion and enhancing social cohesion.

3.37. Through the Bus Accessibility Programme 94% of bus stops are now accessible for people with mobility impairments, facilitating independent travel. This Programme provides improvements that allow buses to pull up to the kerb allowing a disability ramp to be extended. This has improved access to transport for groups who may otherwise struggle to move around the borough.

3.38. To further improve access to and the user experience of public transport, Brent has introduced the bus guardian scheme. This scheme places "guardians" on some bus services to protect passengers from the anti social behaviour which may be generated by some passenger groups. This has helped reduce concerns over safety on public transport.

3.39. Brent is well served by a variety of public transport networks, including:

- Four London Underground lines (Bakerloo, Jubilee, Metropolitan and Piccadilly lines)
- London Overground services on the North London line and Euston-Watford Junction line
- Chiltern Railways services from High Wycombe to London Marylebone
- Southern Railway services from East Croydon to Milton Keynes Central
- London Bus services throughout the borough

3.40. Key strengths include the Metropolitan line, which provides a fast and efficient link into Central London and is currently under capacity. The London Overground has seen considerable patronage growth since control was assumed by TfL in 2007. This has resulted in substantial investment in new trains, platform extensions and station upgrades to meet demand.

3.41. The greatest weakness of public transport in Brent is in bus services. Due to traffic congestion and a lack of dedicated infrastructure, buses are often stuck in traffic, leading to slow travel speeds and a lack of travel time reliability.

Planned improvements

3.42. Brent is strongly supportive of TfL's ongoing line upgrade programmes to increase frequency and capacity of services, along with improving step-free access at its stations and modernising rollingstock, signalling and operational infrastructure. Notwithstanding this support, Brent will continue to lobby for upgrades to the condition of rollingstock and signalling on the Bakerloo and Piccadilly lines to be prioritised and brought forward from current expected timeframes, where possible.

3.43. TfL also has an ongoing Pinch Point funding programme aimed at removing barriers to bus services by either altering routes or providing facilities to enable services to avoid congestion. There are sites identified by TfL in Brent that will be subject to improvements going forward.

3.44. It is projected that these improvements will result in greater capacity on the effected lines and will help to achieve the objectives of the MTS and therefore of this LTTS.

Future lobby work

3.45. The largest change in urban development and travel patterns in West London will be delivered by the development of Old Oak Common around the proposed High Speed 2, Crossrail and Great Western Mainline interchange. Brent is strongly supportive of TfL's proposal for inclusion of London Overground services to this area through the provision of new stations to improve interchange accessibility and support regeneration. It is noted that this development provides huge opportunity for regeneration not just of the Old Oak area but also for the locality, including potential improvements to extant transport infrastructure such as Willesden Junction station. This could improve access to and within Brent significantly.

3.46. Brent will also continue to express support for the expansion of Heathrow as the preferred option for the creation of a hub airport in the London area. It is considered that this option is likely to be the most beneficial to Brent of those proposed due to its greater potential for job creation for Brent residents. This crates potential for greater prosperity and regeneration within the borough.

3.47. In particular Brent will continue to work with TfL to find route improvements that address the concerns of residents. The availability of bus services, particularly to central London and key borough destinations,

was raised during public consultation as an important issue for many respondents.

3.48. Brent will also seek to engage with TfL to create public transport strategies for areas of the borough which are likely to see significant change as part of regeneration or growth, similar to that produced for the Wembley area.

Target

3.49. As suggested above, Brent has limited control over public transport within the borough, however provision of good services is important to achieving the objectives of this strategy. Therefore, the target included here is based on predictions generated by TfL, which themselves are based on the London Travel Demand Survey.

3.50. Public transport use as a proportion of demand is expected to remain stable at 20% up to 2030. However, if adequate interventions are made, private vehicle mode share is expected to decline from 41% in 2013 to 30% in 2030. Therefore, the LTTS will adopt this as an indicator of success in this area.

Travel Planning

3.51. Expanding from our current good work on work place and school travel plans we are looking at personal travel planning. Travel planning and in particular personalised travel planning is important in reducing car dependency, enabling independent travel and encouraging sustainable travel. Ensuring residents and businesses are aware of travel options and how they can function to their benefit can make a significant difference to travel habits and it has been shown that travel plan measures can yield good cost benefit ratios.

3.52. Currently we have a high number of schools with travel plans. These plans indicate how the school will progress to increasing the number of pupils and staff travelling by active modes rather than by private vehicle. Our future transport strategies, such as cycling and walking will provide further detail on how we are encouraging the uptake of these modes.

3.53. In the past Travel Planning has been mostly associated with new development, however, personalised travel planning is capable of implementation at any stage and can be a useful tool in encouraging behaviour change and identifying travel choices that are right for individuals.

3.54. In recent years technology has advanced and products have become available that enable travel planning to achieve more than would previously have been possible. These take the form of Personalised

Mobility Services aimed at providing seamless, mobile and user-focussed services to customers on a retail basis that enable trips by modes other than the private car.

3.55. This market is supported by a growing younger population, particularly in urban areas, who no longer aspire purely to own and use a car. Younger generations are seeking other services and new alternatives to expensive personal transport and there is growing private sector interest in catering to this market, which is estimated to be worth £9bn annually.

3.56. Provision of Personalised Mobility Services relies on the availability of data, much of which is now gathered by international players including Google. This information is then used to develop, promote and retail services to customers. Much of this data is available in formats which can be utilised at low cost.

3.57. Pilot "Living Lab" projects have already been developed with transport providers, data providers and businesses working together to create a new approach to providing sustainable transport.

3.58. Though this area is yet to be developed to full potential by any sector, due to the long term nature of the LTTS these issues must be included here as they are likely to be of increasing importance going forward. In future this technology has the potential to be the main method by which sustainable transport modes are accessed and therefore could be hugely influential in encouraging take up of specific modes, such as walking and cycling.

Travel Planning Strategy

3.59. As much of the potential for this technology and partnership working with innovative companies is yet to be explored, the LTTS does not seek to set numeric targets at this time for the inclusion of measures into transport planning in Brent. However, it is important that the potential of this emerging method of transport provision is fully explored by Brent in order to enable both efficient use of funds and future-proofing of services.

3.60. Brent will therefore develop a Travel Planning Strategy that will seek to outline the potential of these developments and how they may best be utilised to benefit Brent residents going forward.

3.61. In particular, it is considered that personalised travel planning may provide opportunities to explore the particular needs of individual service users and establish how mobility may best be provided for specific groups, including those with limited mobility, on low incomes or suffering from lack of access to services for other reasons.

4. Reduce conventional vehicular trips on the network, particularly at peak times

4.1.   The MTS places an emphasis on the need to reduce trips by conventional cars into and out of London in order to improve air quality and road safety. This is supported by the Office for Low Emission Vehicles, a government department focussed on removing the barriers to low and ultra-low emission vehicle use.

4.2.   The LTTS acknowledges that in order to support economic growth, both locally and regionally, mobility needs to be enabled rather than constrained. This strategy therefore does not aim to reduce the total number of trips on the network over a 24 hour period, but to enable many of these trips to take place either in cleaner vehicles or at different times of the day. This will contribute to two main effects:

- Spreading of demand for trips over a longer time period thereby reducing congestion at peak times. This will work in conjunction with increased use of sustainable modes to enable the road network in Brent to flow more freely and therefore avoid buses becoming caught in congestion.
- Transferring many trips which need to be carried out by car into electric or other low-emission vehicles which do not emit N02 or carbon dioxide. They also contribute far less than conventional vehicles to the production of particulate matter. This will result in improved air quality throughout the borough.

4.3.   Achieving this will require demand management measures as well as measures to improve the uptake of alternative vehicles.

Freight

4.4.   The success of London and the local economy is dependent on the movement of goods as well as people. Also logistics is a major employer with approximately 5% of the London workforce employed directly by organisations whose main activity involves freight transport and logistics.

4.5.   Brent has a number of industrial estates that both rely on and generate freight movements. London wide, LGVs and HGVs formed 13% and 4% respectively of all vehicle kilometres travelled on London roads in 2012. This has a significant impact on the network in terms of congestion, road safety and air quality.

4.6.   HGVs only form part of the delivery and servicing fleet that operates within the area. Vehicles delivering to private residences and construction traffic also contribute significantly to the number of vehicle movements on the network.

4.7.   TfL's document Delivering a Road Freight Legacy sets out aspirations to improve the safety and efficiency of freight activity within London, and focusses on working with freight operators to re-time deliveries outside of peak times and to provide efficient loading facilities.

4.8.   Due to the high percentage of vehicle kilometres attributable to freight, it is important that the LTTS also aspires to reduce the amount of peak time freight trips and to encourage where possible the use of alternative vehicles. This supports the Delivering a Road Freight Legacy document and the London Plan.

4.9.   Out of hours deliveries and changing driver behaviour to enable deliveries to be made over-night without disturbing local residents could be instrumental in achieving this as it moves trips out of peak time traffic and thereby reduces the impact of freight on the most congested times of day. This has been successfully trialled in Paris, where out of hours deliveries were encouraged through working with operators and retailers to inform them of the benefits of receiving goods out of normal business hours.

Freight Strategy

4.10.   Brent is currently working with WestTrans and the other boroughs that form the WestTrans group to formulate a Delivery and Servicing Strategy for the six north-west London boroughs. This strategy will seek to outline an approach and develop schemes to reduce the impact of freight on air quality, road safety and congestion.

4.11.   Brent will develop the Brent-specific element of this strategy in coordination with WestTrans. This approach is taken to reflect the fact that freight cannot effectively be controlled on a borough-wide basis, but that a larger geographical area is required in order for policies to have full effect.

4.12.   The Servicing and Delivery Strategy will be the main vessel through which research into the best way of encouraging freight movements to occur either after business hours (whilst showing due consideration to the need to keep disturbances to local residents to a minimum) or in a more sustainable form of vehicle will be carried out. It will also seek to address the serious road safety issues generated by freight movement, particularly construction traffic, and the disproportionate impact this has on cyclists and pedestrians.

4.13.   The Delivery and Servicing Strategy is due to be adopted by Brent Cabinet in January 2016. As it will contain specific targets these will be incorporated into the yearly reporting on the LTTS to enable assessment of progress to be made. There is therefore no numeric target included here.

Car clubs and ULEVs

4.14. Car clubs have been proven to be effective in reducing the number of vehicles privately owned by car club members. This in itself is beneficial as it reduces the dominance of the private car in the street scene and will in the future make space available for other user groups.

4.15. However, if car clubs use low emission or ultra-low emission vehicles the benefits can be dramatically increased due the positive effects on air quality throughout the borough. Electronic vehicle car clubs are therefore highly beneficial and provide a way of both reducing conventional vehicle ownership and use and increasing the up take of ULEV vehicles.

4.16. At the present time access to ULEVs on a private basis is restricted due to the comparatively high cost of the vehicles and the lack of easily available charging infrastructure. ULEV car clubs can help overcome these boundaries by providing both the vehicle and charging points at an affordable price. This has the added benefit of increasing the exposure of ULEVs to the public and hence expanding the potential market for private owners.

Car club expansion

4.17. Due to the advantages that car clubs can generate in terms of reduced car ownership and opportunities to introduce more ULEVs, car club expansion will be encouraged within Brent.

4.18. In order to ensure this is done to the benefit of all residents and can be accommodated in terms of highway usage and infrastructure required, Brent Borough Council will draw up a Car Club Management Plan that will aim to both provide encouragement for car clubs in Brent, but also to provide a framework by which space on the highway can be equitably allocated between both competing car club operators and private vehicle owners. This plan will consider how many bays will be appropriate and how many should be expected to contain charging infrastructure for ULEV/LEV use.

Charging infrastructure

4.19. Charging infrastructure in Brent is currently insufficient to enable proper expansion of electronic vehicle use. This infrastructure will be required in future years and options for providing this will require further investigation as part of the Car Club Management Plan.

Target

4.20. Increase the number of car club vehicles available to Brent residents by 20% by 2035.

4.21.   This target may appear conservative, however experience has shown that the re-allocation of parking bays to car club vehicles can be controversial and often difficult to achieve. This target has therefore been set with a view to re-assessing following the five year reviews of the LTTS. If the target appears to be under-ambitious following review it may be reset to stretch achievement.

Parking

4.22.   Parking is an important part of the transport infrastructure for many Brent residents and can have a significant impact on quality of life. However, it is also true that enabling large-scale free parking for residential vehicles can discourage use of sustainable modes, particularly pubic transport which can find it difficult to compete with the convenience of the private car.

4.23.   The local economy is also influenced by parking provision, particularly at service and retail hubs and employment locations. Again, a balance needs to be achieved between providing sufficient parking to support the growth of the local economy and the need to encourage residents and visitors to access these areas by means other than the private car.

4.24.   Parking provision going forward therefore needs to aim to achieve a balance between competing needs. It is known that parking controls, particularly at destinations, can play a significant role in influencing travel choice and therefore in encouraging trips to be carried out by sustainable modes.

4.25.   Permit sacrifice schemes can go some way to reducing demand for residential parking in areas covered by Controlled Parking Zones, as they provide incentive to reduce household car ownership on a voluntary basis.

4.26.   Less on-street parking enables highway space to potentially be re-allocated to other user groups via the provision of cycle paths, improved footways or better public realm. This in turn encourages use by pedestrians and cyclists.

Parking Strategy

4.27.   A Parking Strategy will be developed by Parking Services during the 2015/16 period. This Strategy will seek to analyse the current situation regarding parking in Brent and identify problems and opportunities for improvement.

4.28.   The Strategy will seek to achieve a balance between the needs of residents to park, access to local employment and local retail and service providers, and the need to reduce trips by conventional cars throughout the borough.

5. Support growth areas and town centres to enable acceptable development

Expected growth in Brent

5.1.   London is expected to grow by a significant amount in terms of employment, jobs and population over the next 25 years. Brent will therefore also see considerable growth over this period.

5.2.   Increased growth has the potential to place greater pressure o the transport network and could lead to reduced utility for residents if it is not adequately supported by transport investment.

Population

5.3.   Over the next 20 years, the borough is expected to grow by 66,000 people to reach 396,000 residents. This represents growth of 20% over the existing population.

5.4.   This will result in increased trips on the networks and increased demand for services.

Jobs

5.5.   Brent had a total of 111,000 employee and self-employed jobs in 2011. This is projected to grow steadily to 137,000 by 2036, a growth of 23.5% since 2011.

5.6.   The addition of more jobs within the borough will help reduce unemployment and enable local economic growth. However, it is important that employment locations are fully accessible by all modes and enable equal opportunity for all residents.

Housing

5.7.   Brent's Local Development Framework includes a Core Strategy which states that 21,210 houses will be delivered across Brent by 2026. Of these 89% will be developed within the five growth areas across the borough.

5.8.   It is highly important that these growth areas see sufficient investment to enable sustainable growth in terms of access by modes other than the private car. Increased car use would contribute to congestion on the network and reduced air quality for all residents.

Growth areas

5.9.   Brent currently has five identified growth areas around the borough, providing a focus for increased employment, housing and population. These growth areas have been identified for their ability to concentrate

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[1]Greater London Authority, 2013, *GLA Employment Projections by borough*, Greater London Authority: London [Accessed from http://data.london.gov.uk/dataset/gla-employment-projections]

sustainable development close to transport hubs, in order to help mitigate potential impacts.

5.10. The areas identified can be seen on the map below.

Map inserted by design and present in PDF document

Wembley

5.11. Wembley is the largest Growth Area within Brent, delivering a total of 11,500 new homes by 2026. This represents over half of all the new houses expected borough-wide. Given the scale of this development, a more bespoke transport strategy for the area is being developed to meet the needs of regeneration and economic growth, though this will largely focus on connections to existing rail stations at Wembley Park, Wembley Stadium and Wembley Central.

Burnt Oak / Colindale

5.12. The Core Strategy identifies 2,500 additional homes to be built in this area by 2026. This Growth Area actually forms part of a wider area of growth, the majority of which falls within Barnet.

5.13. Brent officers in partnership with Barnet and the GLA have commissioned architects to develop a public realm and placemaking plan which will contain transport elements for this area going forward. The transport elements will consist of improved connectivity and junction improvements as well as developing a framework for this area which can be used to assess transport aspects of planning applications as they are received.

Alperton

5.14. An anticipated additional 1,600 homes will be built in the Alperton Growth Area. To support this a series of transport improvements are being developed for Alperton which build on the assets of the area including a 1.6 km stretch of the Grand Union Canal, good public transport and the unique Ealing Road town centre.

5.15. A public realm improvement planned for Alperton underground station will provide a gateway into Alperton from the south as well as improved bus stopping facilities and improved public realm in the current space occupied by the station forecourt. This project is being worked on jointly with TfL and will come forward over the life tie of the LTTS

5.16. Additional measures are being developed along Ealing Road including removal of road humps and street clutter, and provision of improved cycle facilities as part of the wider strategic corridor study recommendations. Delivery of these measures is subject to funding through developer contributions (including Section 106 and Community Infrastructure Levy), LIP and grant funds.

South Kilburn

5.17. The Core Strategy identifies 2,400 new homes within South Kilburn. This area will experience substantial transformation as the council facilitates a shift from the housing estates of the 1960s and 1970s to a compact district set around a traditional street pattern with a substantial increase in the proportion of owner occupied households. This will also impact on the demand for travel within the area.

5.18. The transport strategy for this area will develop improvements to facilitate better access from South Kilburn into the transport network. This will include improved connectivity to local centres, such as Queen's Park and Kilburn, along with easier access to transport into central London and other town centres in the borough.

Church End

5.19. The smallest of Brent's growth areas, it is expected that 800 new homes will be delivered as part of the Core Strategy. Church End is to the south-east of Wembley, south of the North Circular Road.

5.20. Delivery of this growth area will require improved access to public transport interchanges, including making safer, more convenient connections to local town centres.

Supporting Growth

Town Centres

5.21. Town centres provide access to services, jobs and social activities which are vital to Brent residents. Therefore, providing enhanced access to these areas by sustainable modes is important in enabling residents of new developments to have adequate access to the facilities they need.

5.22. Town centres in Brent are categorised in a hierarchy according to their functions and roles which take account of size, extent of catchment area, and the range of shops and facilities provided. This can be seen in the table below.

Centre hierarchy in Brent *will be designed*

Major Town Centres	District Centres	Local Centres
Wembley	Burnt Oak	Kenton
Kilburn	Harlesden	Queen's Park
	Cricklewood	Kensal Rise
	Colindale	Sudbury
	Willesden Green	
	Ealing Road	
	Wembley Park	
	Kingsbury	
	Preston Road	
	Neasden	

5.23. Of Brent's two major centres, Wembley has its own Area Action Plan related to its status as the borough's primary growth area. This Action Plan will be the primary means by which increased access will be delivered going forward. This will include access by all modes, but will place an emphasis on sustainable modes.

5.24. Though a number of other areas, including Kilburn, have seen improvements in the recent past with relation to transport, these will need to continue if access to these areas is to be considered adequate to support the levels of development outlined above.

5.25. Brent will therefore provide increased weighting in the LIP for schemes which provide support for town centres, particularly for those that improve access by, and the environment for, walking, cycling and public transport. Where achievable, town centres will also form the basis for major scheme generation and submission of Major Scheme bids to TfL via the LIP.

5.26. The Park Royal Opportunity Area Planning Framework also provides scope through the regeneration to further improve links to Harlesden in association with accessibility improvements at Old Oak Common. These opportunities to improve sustainable access will be taken forward as and when possible.

Strategic links

5.27. Brent has a relatively limited high-order road network (Transport for London Road Network, Strategic Road Network), which plays an important role for freight and traffic which can not be transferred to public transport. While all of Brent's growth areas are located alongside the Strategic Road Network (SRN), it is envisaged that most passenger movements, particularly commuting, will occur by public transport.

5.28. By minimising unnecessary private vehicle traffic, Brent will maintain the greatest potential road capacity for freight, cyclists and pedestrians, whilst also improving traffic flow across the borough. This is particularly the case with radial routes into Central London, such as the A5 (Edgware Road), A4088 (Dudding Hill Lane / Blackbird Hill) and A404 (Harrow Road). On orbital routes such as the A406 (North Circular Road, A4006 (Kingsbury Road) and A4127 (Sudbury Court Drive), it may be more necessary to provide greater capacity for private vehicle trips which are not able to be completed on public transport

Sustainability and Travel planning

5.29. Levels of growth make it imperative that trips to and from development areas are carried out by sustainable modes to control impacts on the network. Growth areas have been selected to ensure new development is co-located with high quality public transport and to minimise the need for residents to own a private vehicle.

5.30. However, it is also important that new residents are provided with high-quality information regarding the travel choices available to them. New residents moving into the area are potentially more open to behaviour change and the development of a sustainable transport culture than existing residents, who have already formed habits regarding transport.

5.31. Therefore, it is important that new developments are associated with high-quality, robust travel plans that are adequately monitored. Travel plans should be target-driven and contain measures that can be considered strong enough to truly influence the behaviour of new residents.

5.32. To ensure travel plans are implemented, Brent will continue to work with WestTrans to monitor travel plans to assess their success.

Targets

5.33. Travel Plan compliance to increase by 30% by 2035. We will work with WestTrans to continuously assess the compliance of development with travel plans and seek to increase compliance as development within the growth areas come forward.

5.34. Implementation of this target will rely on working closely with both Planning and WestTrans to provide feedback to developers regarding proposed or existing plans and to ensure targets set within them are achieved.

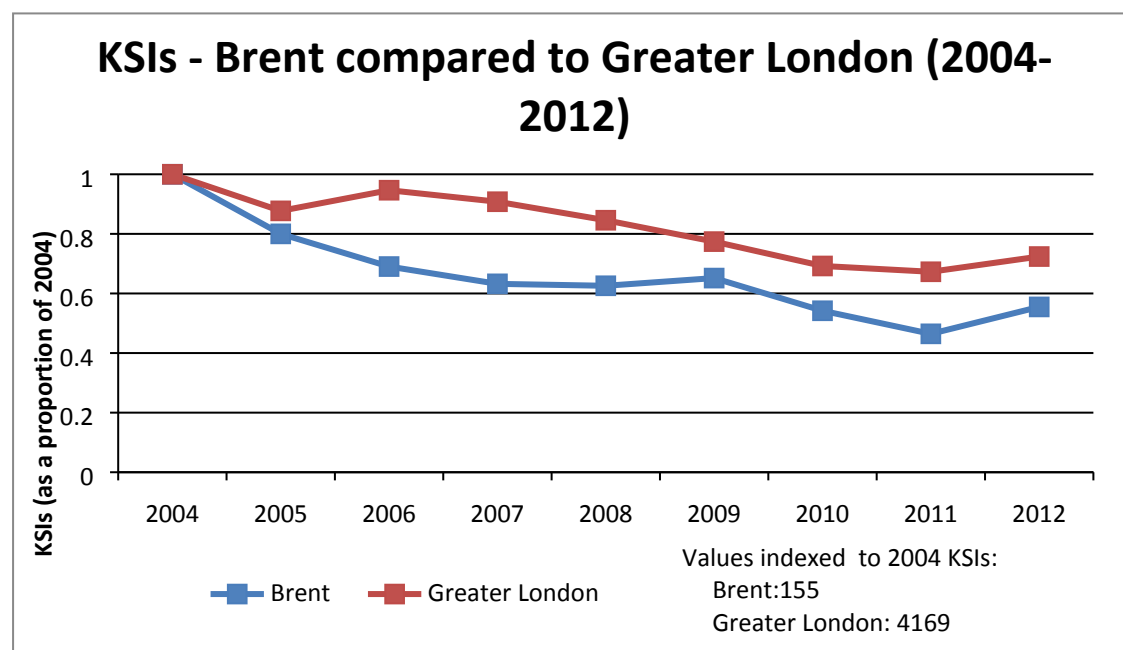# 6. Reduce Killed and Seriously Injured (KSI) incidents and slight accidents on Brent's roads

Impacts of Road Safety

6.1.   Reduction of road casualties is central to the Mayors Transport Strategy and therefore to the Local Implementation Plan. Guidance from Transport for London suggests that going forward the LIP will continue to focus on road safety and that schemes aimed at reducing road casualties should be given some emphasis, though not to the exclusion of other objectives. Given the close relationship between the LTTS and the LIP it is important that this focus is shared.

6.2.   Improving road safety is essential in encouraging behaviour change to achieve greater levels of active travel and an associated reduction in car usage by addressing concerns over personal injury. As outlined earlier in this document, road safety is the primary reason given by non-cyclists for avoiding taking up cycling. It is therefore of great importance that road safety in the borough is improved in order to enable sustainable transport objectives to be met.

6.3.   Road traffic collisions also have significant social and economic costs. The total cost of a fatal accident to the economy is estimated at over £1m, accounting for all aspects including lost revenue that would have been generated by the individual. Accidents can therefore have a significant negative impact on economic growth.

6.4.   Residents of areas which see serious accidents can also suffer from reduced confidence in the safety of their environment, which discourages use of the street scene and can lead to feelings of social isolation. As noted elsewhere in this document, a high-quality environment is important in encouraging active travel, particularly walking.

6.5.   Poor road safety is an equality issue for the borough as different groups within the community can be affected disproportionately. It is known that amongst children, the Black, Asian and Mixed Ethnicity (BAME) population, are more likely than white children to be injured or killed in a road traffic collision2. It is also known that areas of deprivation tend to suffer from worse road safety records than other areas.

6.6.   Providing equality of opportunity is a key aspect of both the MTS and the Borough Plan and this is not supported by disparities in the way communities are impacted by road safety. This therefore needs to be addressed within the LTTS.
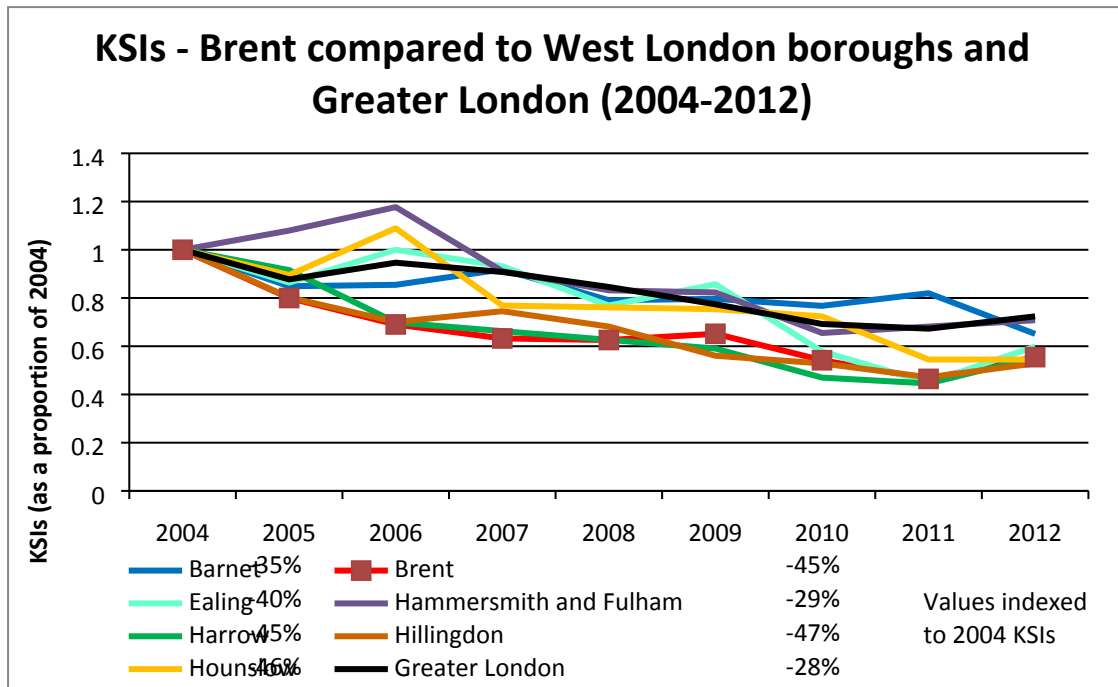
Brent's current road safety record

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[2] Transport for London, 2014, *Understanding the travel needs of London's diverse communities: A summary of existing research*, Greater London Authority: London

6.7.   Significant progress has been made in the area of road safety by Brent,
       particularly in relation to accidents resulting in KSIs. Between 2004 and
       2012, Brent saw a 45% reduction in KSIs from road traffic collisions3,
       which placed the borough 7th of the 33 London boroughs. By
       comparison, London wide KSIs reduced by 28% over the same period.

KSIs - Brent compared to Greater London (2004-2012)

KSIs (as a proportion of 2004)

Values indexed to 2004 KSIs:
   Brent:155
   Greater London: 4169

Brent ■   Greater London ■

6.8.   Within the West London sub-region, all boroughs have reduced KSIs by a
       greater proportion than Greater London, with Brent ranked 4th of 7
       boroughs for KSI reductions between 2004 and 2012.

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3 Greater London Authority, 2014, *Casualties by Severity (2004-2013)*, Originally published by the
Department for Transport, London: HMSO, [Available online:
http://data.london.gov.uk/dataset/road-casualties-severity-borough]

KSIs - Brent compared to West London boroughs and Greater London (2004-2012)

Chart legend and values indexed to 2004 KSIs:

Barnet	-35%	
Brent	-45%	
Ealing	-40%	
Hammersmith and Fulham	-29%	Values indexed to 2004 KSIs
Harrow	-45%	
Hillingdon	-47%	
Hounslow	-46%	
Greater London	-28%	

6.9.   Brent expects progress on KSI reductions to continue across the borough into the future, as it remains a key focus of the Local Implementation Plan (LIP), the Borough Plan, and the Mayor's Transport Strategy (MTS). However,

Further improvement

6.10.   While Brent and all of Greater London have seen considerable reductions in KSIs accidents, reductions in total casualties have not been as dramatic. If all accident data is included a 21% decrease in total casualties in Brent has been achieved over the same 2004 to 2012 timeframe. This is against a 17% drop across London as a whole.

6.11.   Though this shows that our roads are getting safer against all accident types, it suggests that success has been heavily focussed on KSI accidents and that more work is required to reduce crashes of all severities. It should be noted that all incidents impact the environment and the quality of life of Brent residents and therefore it is also desirable to reduce slight incidents.

6.12.   Addressing slight accidents can be particularly important for pedestrians and cyclists, who may be seriously impacted by incidents that do not result in injury or damage but could potentially have done so. These incidents reduce confidence in the safety of the network and can lead to adverse behaviour change, reverting to car use having been a pedestrian or cyclist.

6.13.   It has been noted that in recent years progress has plateaued in comparison with previous years. Though it is not clear at the present time precisely what has caused progress to slow, if the targets set out below

are to be achieved this will need to be addressed via future LIP development and submission.

Targets and monitoring

6.14.   These targets have been set as part of the extant LIP and extend to 2020. These have been included in order to provide consistency between the two documents, however it should be noted that they end five years prior to the LTTS. Therefore at the last five-year revision of the LTTS assessment will need to be made regarding how this is taken forward. If the targets have been fully met it is suggested that a five-year stretch-target is produced. If they are not this opportunity should be taken to assess why and to alter the approach if necessary.

6.15.   The targets are as follows:

- Brent is aiming to reduce annual KSIs to below 60 by 2020. This represents a 30% decrease from the current level of 84, and over a 60% reduction from 2004.
- Brent's aim is to reduce total casualties to 540 by 2020. This is a 44% reduction from the current level of 957, and a 55% reduction from 2004.

6.16.   These targets are ambitious, however as progress in previous years has been rapid it is hoped that with adequate focus they can be achieved.

Implementation

LIP road safety focus and matrix

6.17.   As has been stated the LTTS has a close relationship with the LIP and it is expected that schemes included within the LIP will form the action plan of implementation of this document. Given the road safety emphasis of the LIP it is likely that most schemes aimed primarily at reducing collisions will come forward through this mechanism.

6.18.   Future LIP submission should therefore consider the further work identified above and seek to include schemes that work towards achieving this.

6.19.   The prioritisation matrix that forms part of the LIP has been formulated to enable schemes that will achieve the most benefit against the objectives of the MTS, the Borough Plan and the LTTS to receive funding. This is particularly focused on investment in relatively small-scale local safety schemes to meet specific localised safety issues, such as pedestrian crossings, cycling facilities, traffic calming or local speed compliance.

6.20.   Major schemes can also be submitted as part of the LIP and will be fuly reflective of the targets set out here.

6.21.   Accident statistics are monitored regularly by officers at Brent and the Greater London Authority, and reported each year as part of the LIP

process. This will ensure Brent remains aware of progress made and to be made in order to meet targets.

Freight Strategy

6.22. It is acknowledged by Transport for London as part of the forthcoming Servicing and Delivery Strategy that freight represents a particular safety concern, particularly for vulnerable road users. HGVs are involved in a disproportionately large number of cyclist fatalities in London and ways of addressing this are being sought.

6.23. Brent is currently working with WestTrans to develop a Delivery and Servicing Strategy that will be implemented in the six north-west London boroughs. It is expected that his strategy will address road safety concerns specific to freight in Brent.

Highways Asset Management Plan

6.24. The Highways Asset Management Plan is designed to ensure all Council highway assets are maintained in the most efficient manner to benefit the borough. This includes highway network assets which play a key role in road safety, for example traffic lights, pedestrian crossings and cycle facilities.

6.25. It is important to ensure that emphasis is placed on maintenance of these assets to enable them to provide meaningful facilities for those using them. In particular, cycle and pedestrian facilities should be maintained to an adequate, safe standard.

20 mile per hour zones

6.26. 20 mile per hour zones have been shown to improve road safety by reducing traffic speed. This reduces both the quantity of accidents and the severity of those that occur. However, it must also be acknowledged that there are some roads within Brent that may not be suitable for implementation of a 20mph limit, such as those leading directly off the strategic network. In order to fully inform the development of both 20mph limits and other speed limits Brent Borough Council will develop a Speed Limit Policy.

7. **Reduce the exposure of Brent residents to Particulate Matter (PM) and NO$_2$ generated by the transport network**

5.36. Air quality improvement measures have previously been focussed on the reduction of carbon and CO$_2$ production. However, in recent years it has become apparent that particulate matter and NO$_2$ pose the most significant risks to the health of those exposed to them on a regular basis.

5.37. Evidence shows that fine and ultra fine particulate matter present in air pollution increases the risk of cardiovascular morbidity and mortality. Conventional vehicles are responsible for 41% to 60% of air pollutants in the UK, which have an impact on cardiovascular and respiratory diseases.

5.38. It has been shown that NO$_2$ acts as an irritant, exacerbating respiratory conditions and contributing to premature deaths, particularly in vulnerable members of the population such as those with asthma. NO$_2$ is generated as part of the combustion process that takes place in conventional cars.

5.39. Particulate matter can enter the body through the lining of the lungs and creates inflammation. In particular, particulate matter has been shown to contribute to conditions that have an inflammatory element, such as heart attack and stroke. It is uncertain precisely how many deaths are brought forward by the presence of particulate matter, however, it is estimated to be a significant number.

5.40. Though not all particulate matter is generated by transport, diesel engines do produce significant amounts as does friction on the road surface and other moving parts.

5.41. Reducing the exposure of Brent residents to both of these substances will directly contribute to improved health and longer life. Though it is not achievable through this strategy to reduce exposure from the transport network to 0 due to the nature of transport and the built environment, there are some measures that are achievable that will both reduce overall levels of air pollution and lessen the exposure of individuals.

Reducing exposure

5.42. There are two main ways in which the exposure of Brent residents to this type of pollution can be controlled and reduced. These are reduction in the overall production of the pollutants and avoidance of the pollutants that are still produced.

Reduction

5.43. All the objectives of this LTTS will contribute to improved air quality through reduced vehicle trips on the network. In particular increased use of sustainable modes and reduced peak-time freight movements combined with greater use of LEVs and ULEVs will contribute to improved air quality. However, there are some specific measures that relate more closely to air quality.

5.44. The Transport Emissions Road Map (TERM) produced by Transport for London in 2014 identifies a number of measures that may be implemented in the boroughs to reduce the production of pollutants. Among these is the introduction of Low Emission Neighbourhoods which identify particular areas as zones in which heavily polluting vehicles are limited or controlled.

5.45. Though the introduction of these would be supported by the LTTS it should be noted that the terms on which they are implemented should be considered carefully to avoid inequitable impacts on residents.

5.46. It must also be considered that the current Transport for London bus fleet runs on diesel, which produces high levels of particulates. There are no current plans for this fleet to be changed for one running on alternative fuels, so this restriction must be considered when introducing restrictions.

5.47. However, due to the large number of bus routes running through Brent and in particular certain strategic corridors Brent will continue to lobby TfL for changes to the local bus fleet to reduce dependency on diesel.

5.48. The TERM also identifies the possible introduction of an Ultra Low Emission Zone covering greater London which would operate on similar terms to the current Low Emission Zone but would enforce tighter emission standards on vehicles entering greater London.

5.49. Though it is uncertain as yet how this will come forward on a London wide basis, the LTTS would support the introduction of a borough-wide low emission zone. This would give Brent Borough Council control over implementation and therefore the ability to mitigate any potential negative impacts on local residents. Further research would be required to take this forward should the opportunity to gain funding arise.

Avoidance

5.50. It has been shown that for particulate matter distance from the source of pollution makes a significant difference to the level of exposure suffered. Therefore, increasing the distance and introducing barriers could help to reduce the exposure of residents to this type of pollution.

5.51. In some areas this may not be achievable due to the constrained nature of the network. However in new schemes and in particular schemes that incorporate a strong element of place making, enabling a greater distance between the road surface and shop fronts and footways would be of benefit to the health of local workers and visitors.

5.52. In some areas is may also be possible to introduce barriers such as plating, that constrains the particulate matter and reduces the amount that reaches the footway and frontages.

Air Quality Strategy

5.53. Regulatory Services are currently working to produce an Air Quality Strategy that will focus on providing measures to reduce the production of particulate matter and nitrogen dioxide by local transport.

5.54. It is noted that ensuring that the LTTS and Air Quality Strategy work together to achieve their common goals will be an ongoing process. To this end it is expected that the objectives and targets of the Air Quality Strategy will be taken into account in the daughter documents of the LTTS, as outlined earlier in this document. As stated in the introduction, these documents will form the implementation plan for the LTTS, therefore they are the most appropriate vehicle by which to ensure the Air Quality Strategy is taken forward by the LTTS.

5.55. Due to this, the LTTS will not set out specific air quality targets, but will utilise those set and monitored by the Air Quality Strategy to gauge success against its objectives.

8. Targets

The base years for these targets vary according to the data available. For those for which data is available this is 2013/2014 however for others it will be 2015 as data needs to be gathered so a base line can be set. These targets will be reported annually to assess progress towards achieving the objectives to which they relate.

Objective	Category	Target	Base year	Target date
Increase the uptake of sustainable modes, in particular active modes	Cycling	Increase mode share to 3% from 1%	2013	2021
		Increase the number of cyclists from currently underrepresented groups by 200 as indicated by the London Travel Demand Survey	2014	2021
		Increase the number of cycle parking spaces by 1000 by 2021	2014	2021
		Increase number of adults accessing cycle training by 50 adults per year	2015	2021
		In crease the number if children accessing cycle training by 50 children per year up to 2021	2015	2021
	walking	10% decrease in the number of schools with gold standard travel plans	2015	2025
		5% increase in pedestrian mode share	2013	2030
	Public transport	30% mode share for private vehicles	2013	2030
	Travel planning	Production of a Personalised Mobility and Technology Strategy	NA	2018
Reduce conventional vehicular trips on the network, particularly at peak times	Freight	Will be contained within the Servicing and Delivery Strategy	NA	NA
	Car clubs	20% increase in car club vehicles available to residents	2015	2030
	Parking	Will be contained within the Parking Strategy	NA	NA
Support Growth Areas and Town	Travel	Increase compliance with travel plans by 30%	2015	2025

Centres to enable acceptable development	planning			
Reduce KSI incidents and slight accidents on Brent's Roads	KSI	Reduce KSIs to below 60	NA	2020
	All accidents	Reduce all accidents to below 240		2020
Reduce the exposure of Brent residents to particulate matter and NO2 generated by the transport network	NO_2 and PM	Will be contained within the Air Quality Strategy	NA	NA

9. **Monitoring**

Reporting

9.1. The targets outlined in chapter 8 will be monitored and reported to cabinet on a yearly basis. The targets identified as being included in other strategy documents will be monitored by the relevant teams and included in the report.

9.2. The report will set out progress against the objectives and identify areas where either further work is needed or a different approach might be required to achieve the objectives.

9.3. Every five years the LTTS will be reviewed in its entirety and examine long term trends and enable inclusion of documents and issues that have come on-line since the LTTS was first produced. This will also provide an opportunity to examine the achievability of targets and review them if necessary.

Funding

9.4. The Long Term Transport Strategy will be funded through a variety of sources. These will include the annual LIP submission and other Transport for London funding streams as and when they are established and become available to Local Authorities. However it is acknowledged that if the objectives are to be achieved other funding sources will be required.

9.5. Funding will therefore also be sought via bidding processes both nationally and internationally, with applications for European funding being made when appropriate.

9.6. Opportunities to take advantage of funding to establish pilot and highly innovative schemes will also be sought in order to enable Brent residents to benefit from advances in technology and infrastructure design.

9.7. Opportunities to co-fund schemes and projects with other service areas within the council will also be sought in order to enable best use of the funding available. This concept will also be applied to partnership working with the private sector, in particular in the development of new schemes that may benefit from sponsorship.