

Cabinet

Tuesday 14 December 2010 4.00 pm Town Hall, Peckham Road, London SE5 8UB

Appendix A

The Transport Plan and Sustainable Modes of Travel Strategy

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10. The Transport Plan and Sustainable Modes of Travel Strategy

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Appendix A in respect of the above item.

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Date: 6 December 2010

Transport Plan

Consultation draft

www.southwark.gov.uk

This transport plan forms the vision for transport in the borough.

At the heart of the plan we focus on improving people's health, job opportunities and a sense of belonging. Southwark has convenient neighbourhood shops, schools and parks and we hope to build on this, improving the public realm to bring communities and people together, making journeys convenient, accessible, safe and as short as possible.

Southwark is ideally placed to access central London but with access to the Southbank and tourism centres it is equally important that people can access the unique experiences and history that Southwark has to offer.

Supporting our businesses is also important especially in these tough economic times. We will work with the local business community to understand what transport challenges they face and how we can work together to support one another.



However emissions from motorised transport can have a negative impact on our environment; including noise, air quality and vehicle emissions. There are many exciting and new ways that we can tackle this, such as providing a car club bay within five to ten minutes walk of all residents in the borough.

Southwark is a changing and growing borough and I am determined we support the employment and population growth expected here over the next 20 years. Improvements can already be seen at the Elephant and Castle, with the removal of the southern roundabout and reclaiming the space for people. This ambitious change has set the benchmark for our other major regeneration areas, changing places to the benefit of our communities.

Section 1: Southwark's approach to strategic planning

What is the Transport Plan?

The Transport Plan sets out how we will improve travel to, within and from the borough and contribute to the wider economic, social and environmental objectives of the council. The Transport Plan sets out our long term goals and transport objectives for the borough (up to 20 years), a three year programme of investment and the targets and outcomes to show how we are delivering the Transport Plan.

The Transport Plan, incorporating Southwark's Local implementation plan (Lip), is a statutory document, prepared under Section 145 of the Greater London Authority Act 1999. Southwark's Transport Plan responds to the revised Mayor's Transport Strategy (MTS), the emerging Sub Regional Transport Plans (SRTPs), Southwark's Sustainable Community Strategy (SCS) and other relevant policies. Southwark's Transport Plan will replace the borough's first Local implementation plan (2006).

What are we trying to achieve

The policies, programmes and initiatives within this plan will help us achieve a sustainable future for the borough. They will help us manage environmental problems related to congestion, local air quality, reduce our impact on climate change and improve health, safety and accessibility.

The plan identifies how we will work towards achieving the revised MTS goals through the following borough transport objectives

1. Manage demand for travel and increase sustainable transport capacity (page 27)

Large parts of Southwark are being transformed through ambitious regeneration plans affecting areas such as Elephant and Castle, Canada Water, the Aylesbury Estate, Bermondsey Spa, Bankside and London Bridge. The viability of transformational regeneration proposals such as the Aylesbury Esate project would be greatly enhanced by better public transport. Also in these regeneration areas we have an opportunity to create new types of places which are safe and convenient for walking, cycling and using public transport. To a very large extent these areas can be planned to be car free. In the future, large areas of Southwark will be able to be transformed into quieter, cleaner, safer places not dominated by motor traffic.

Buses are very important for Southwark; we need to make the buses more reliable, convenient, safe and comfortable. To do this we need to make sure that streets are designed and maintained to allow easy access to bus stops and to give priority for buses to get through the traffic. We would also like to make sure that buses provide a convenient service for the whole borough and go where people want them to go.

2. Encourage sustainable travel choices (page 37)

With most journeys being less than five kilometres, a majority of Southwark's transport needs can be met by walking and cycling - the most sustainable modes of transport. We set out to encourage people to use the alternatives by making them as convenient as possible and make sure people are aware of all of transport options.

3. Ensure the transport system helps people to achieve their economic and social potential (page 44)

Southwark's position to central London provides good access to the employment opportunities however poor transport connectivity means that travel time can be a disincentive to working in central London. We also support local employment and retail to maximise their economic potential.

Key priorities for the borough are to ensure;

- The business areas around Bankside, London Bridge and Elephant and Castle have top class connections to the rest of the region to continue to be successful and bring prosperity to the borough.
- Southwark's shopping centres such as Camberwell, Peckham and Canada Water have fast convenient connections to be successful.
- Encourage and assist in achieving major investment in the system, such as an extension to the Bakerloo line, as well as making interchange and access easier, such as with the improvements to Denmark Hill station.

4. Improve the health and wellbeing of all, by making the borough a better place (page 46)

The way people choose to travel can play an important role in leading a physically active and healthy lifestyle. In Southwark there is ample opportunity for recreational walking, our position adjacent the Thames in addition to our many parks and green spaces provide ideal walking environments.

5. Ensure the transport network is safe and secure for all and improve perceptions of safety (page 50)

One of Southwark's top priorities is to make all of its streets safe and convenient and encourage more people to go by foot or by bicycle. To succeed in this, we need to keep traffic speeds low and fulfil the ambition to be a 20mph borough. We will make sure that pedestrians and cyclists can travel through Southwark without conflict between them or with other traffic.

6. Improve travel opportunities and maximise independence for all (page 58)

Southwark's transport policies pay particular attention to the needs of people with reduced mobility such as people with disabilities, wheelchair users and people travelling with small children. We will provide key improvements to improve access to the public realm and public transport network.

7. Ensure that the quality, efficiency and reliability of the highway network is maintained (page 62)

Ensuring our highway network is fit for purpose is one of the borough's greatest challenges and responsibilities. Southwark is committed to maintaining and improving the existing road network and making the best use of it including balancing the needs of users, managing works, traffic and congestion.

8. Reduce the impact of transport on Southwark's air quality (page 72)

To improve the borough's air quality, we will encourage the take up of sustainable travel and improve our management of the highway network and support new technologies, such as electric vehicles.

9. Reduce transport's contribution to climate change (page 77)

Southwark's carbon dioxide emissions from road transport represent 11% of the borough's total emissions. We will encourage people to reduce use of the car and take up walking and cycling. We will also continue to support the take up of lower emission vehicles and review our own fleet to help meet our carbon dioxide emission targets.

Addressing the needs of our borough and its community

To ensure that the Transport Plan has been prepared in an inclusive, reasonable and measured way the council has undertaken an Equality Impact Assessment (EqIA), Health Impact Assessment (HIA) and a Strategic Environmental Assessment (SEA).

These assessments ensure that the proposals put forward within the document do not result in discrimination or unfair treatment of equality groups and promote the health and well being of the community. These documents have been prepared in conjunction with our key stakeholders.

How the Transport Plan was put together

Southwark's Transport Plan has been heavily influenced by the goals and challenges contained within the borough's Sustainable Community Strategy, the Mayor's Transport Strategy and the Sub Regional Transport Plans for central and south London. An internal consultation with staff has taken place and their comments have helped to shape the final content of the plan.

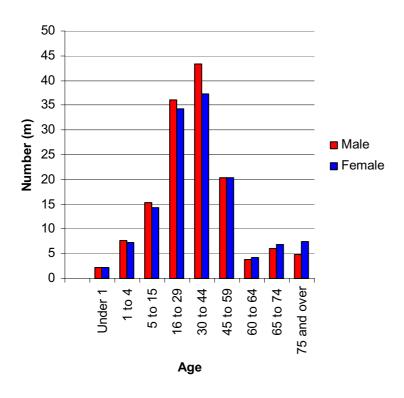
What the Transport Plan contains

- **Section 2: Southwark today** provides the context for transport and travel in Southwark.
- **Section 3: Challenges and opportunities for Southwark** details our key challenges and sets out the relevant policy context to which we must respond. This section also details our major regeneration plans and our aspirations for major transport improvement schemes.
- Section 4: Our strategy for Southwark sets out the transport objectives to deliver our transport plan.
- **Section 5: The policies** provide the response to our transport challenges and details the initiatives to deliver the transport objectives.
- **Section 6: Delivering change** presents a costed and funded **Delivery Plan**, covering the period 2011 to 2014 (extending to 2015 for the proposed Major Schemes); and
- **Section 7: Performance monitoring** identifies the targets and indicators which will be used to monitor progress against our objectives.

Section 2: Southwark today

Around 274,000 people live in Southwark, which includes a rise of well over 50,000 since 1981. New residents are mainly in their 20s and 30s, with household size getting smaller. Southwark's population profile is characterised by a high percentage of working age residents, 66% compared to 60% in London.

Figure 1, Southwark population age breakdown



Source: Office of National Statistics, 2007 population estimates

Of the borough's population, 22% are children and young people (0 to 19 years of age)¹ compared to 24% in London. The largest need for travel for this portion of the community is the need to travel for education.

Table 1, Number of schools and pupils in Southwark 2007

Total number of:	Schools	Pupils
Nursery	5	518
Primary	71	22,540
Secondary	10	8,333
Academies + CTC Specialist Schools	5	4,711

Source: The School Census January 2007

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¹ Office of National Statistics 2007

Our community

Southwark is an ethnically diverse borough, with some 35.2% of people identifying themselves as belonging to minority (non white) ethnic groups.² The African communities have been increasing as the largest ethnic minority in the borough, comprising approximately 12.2% of all residents, almost double the number of people with a Caribbean background. The south Asian and Chinese communities only make up about 11% of Southwark's population which is similar to the inner London average.

In 2008, Southwark had 45% or 88,200 local residents qualified to degree level. This is above the London average of 39%. There are also significant numbers of local residents qualified at NVQ Level 3+ and indeed 57% of the working age population of Southwark were qualified to this level in 2008 compared to 52% in London. At the other end of the educational spectrum, 13% of the resident population have no qualifications, slightly above the regional average of 12%.

There were around 157,900 economically active residents in Southwark in 2009, a common measure of the available labour supply of an area. The proportion of the working age population who were economically active stood at 76%, marginally above Inner London (75%) and London (75%) and below the national average (77%). There were 12,800 unemployed people in Southwark in 2009; an unemployment rate of 9% of the economically active population. This rate was above the Inner London and London averages (both 8%). However, over the previous five years Southwark has managed to reduce the gap with the London average. In line with the rest of the country unemployment is increasing as a result of recession and an increasingly competitive job market. There are barriers to employment for certain groups of workless individuals including ethnic minorities, people with health and disability needs, and women, particularly if they are lone parents.

Social deprivation

Measuring deprivation is complex and indices ranking it are based on Census and other data, using indicators such as employment, income, health, education, crime and housing.

According to the Indices of Multiple Deprivation (IMD), Southwark ranks as one of the most deprived local districts in England. The Department of Communities and Local Government collects a huge variety of data and collates these to produce IMD across a number of "domains", that consider

- Income
- Employment
- · Health, deprivation and disability
- Education, skills and training
- Barriers to housing and services
- Crime and disorder
- Living environment

Positive figures, changing definitions and demographic trends have led to Southwark moving down the league table of poverty. However the government estimates the borough is still in 18th position nationally out of 354 councils for the extent of deprivation. We have nearly three times the level of homeless households as England overall and almost double the number of adults dependent on a means tested benefit.

Health

53,500 (20%) of people living in Southwark said they had health problems. 25% of households contained at least one member with a health problem. 18,030 people had long term illness, disability or infirmity. 690 were wheelchair users and 4,460 had other walking or mobility difficulties. 4,470 had difficulties due to old age or frailty.

However, overall health of residents may be improving. In the last ten years, major health indicators such as mortality and life expectancy have improved markedly, but there are significant inequalities in these indicators for people living in different parts of Southwark.

Life expectancy for men who live in the least deprived areas of the borough is over seven years higher than for those who live in the most deprived parts. The difference for women is almost five years. The main causes of early death are cancers, cardiovascular disease (including stroke) and respiratory disorders, often caused by smoking. These conditions also cause long term illness and disability, which may be made worse by physical inactivity, overweightness and obesity. Diabetes and mental health problems also add to the burden of ill health in the borough.

A major risk factor for long term health of local children is the continuing trend of unhealthy weight. In 2010, the School Measuring Programme found that 39.8% of reception class children and 40.2% of year six children were overweight or obese. This is amongst the highest in England. Southwark also has a high rate of child obesity with 15% of children in reception year recorded as obese in 2006/07 compared with 10% nationally. Furthermore, the percentage of obese school children in Reception year (ages four to five) is estimated to be 13.2%.

Crime

Between 2004 and 2007, 29% of areas in the borough had a decrease in the number of crimes. During 2009/10 Southwark made good percentage reductions against many of our crime indicators and performed at or better than the London average in many areas. In all, the recorded number of total notifiable offences in Southwark fell by 6%, compared to a 2% reduction across London. This equates to approximately 2,000 fewer recorded offences in 2009/10 compared to the previous financial year.

2009/10 has been a challenging year for Southwark, like many other inner London boroughs, with most serious violence incidents increasing by 3%. In the same year recorded youth violence has reduced by 3%, serious youth violence increased by 13% which is 55 more recorded victims compared to the previous 12 months.

Although the actual crime rate on public transport has declined in recent years, it is perceived risk that has the most direct impact on people's choices. The perceived rate may also be affected by experiences such as vandalism and graffiti, or the need to use poorly lit or lonely passageways, which may add to a sense of unease or vulnerability. Over the last year residents have told us they find Southwark a safer place to live with 92% of residents now feeling safe in the day time. Night time safety has also seen a significant improvement; increasing from 46% in 2006 to 54% in 2008.

Housing

The number of households has risen since the last Census from 114,700 in 2001 to 122,026 in 2008³. However, owner occupancy of housing remains relatively low and is currently 31.4%. Of the remaining housing, the council owns almost 70% with the rest split between private landlords and housing associations. It is estimated that 61% of housing in the borough is purpose built, multi occupancy dwellings, including high rise blocks, medium rise blocks and mansion buildings⁴. This compares to the greater London average for owner occupied and rented households of 56.5% and 26.2%, respectively.

At present a number of major regeneration programmes based within the borough are replacing traditional high density housing estates with lower density and mixed tenure housing types. It is therefore expected that the housing split within the borough will change significantly over the coming years, with increasing use of housing associations to deliver social housing rather than the council.

Open spaces

There are over one hundred and thirty parks and open spaces in Southwark making up around 20% of the borough. Southwark's parks are well visited and have many activities and facilities such as dog walking, fishing, sports such as cricket, football, tennis and basket ball, bowling greens, cafes and children's playgrounds.

³ Office for National Statistics, Neighbourhood statistics 2008.

⁴ Office for National Statistics, 2002

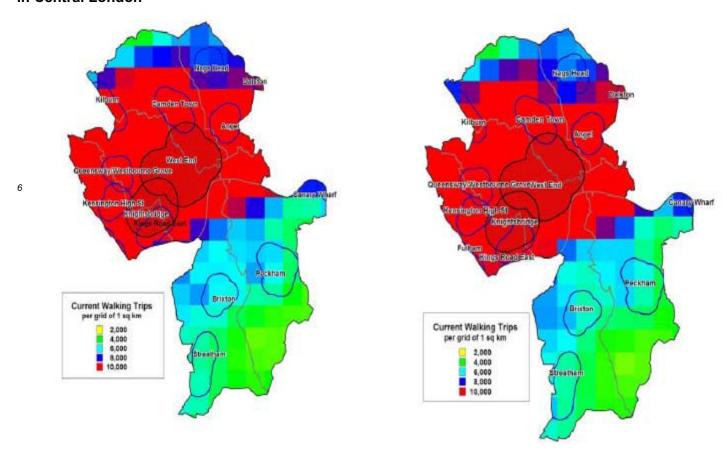
Section 3: Challenges and opportunities

Travel in Southwark

Nearly all trips to and within the borough will have a walking element and for most walking is something that is done everyday, whether it be walking to the train or bus stop, walking to school or work or to local shops.

Currently 12% of Southwark residents walk to work⁵. The business centre in the north of the borough experiences a high proportion of commuter walking as well as walking as part of the journey. The following figure shows the higher levels of walking origins and destinations are centred in the north of the borough.

Figure 2, Current walking trips by origin (shown on the left) and destination (shown on the right) in Central London



The rise in the number of people cycling in London has already been significant, with a 117% increase on London's major roads since 2000. 40% of households in London have access to a bike, but as one in five of these are unused⁷ there is the potential for more people to cycle. With approximately 50% of people living within 10km of work, Southwark is an ideal location for people to cycle to work.

⁵ ONS Census Data 2001

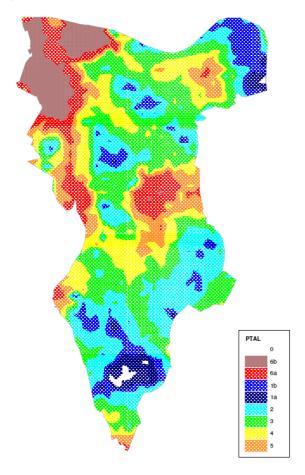
⁶ This analysis is based upon trips made by London residents, from the London Travel Demand Survey 2005/08 dataset. Trips that were already walked or cycled and trips that could not reasonably be walked or cycled, based upon characteristics of the trip and traveller, were excluded from the analysis. These included trips made by young children, elderly and disabled people, trips which involved carrying luggage, travelling at night, or were over long distances and would be significantly slower.

⁷ Cycling revolution London 2010, Mayor of London

Public transport

The coverage and accessibility of public transport varies significantly across the borough and this is shown on the following map, which details the relative Public Transport Accessibility Levels (PTALs)⁸ for Southwark. The lower levels of accessibility are centred on Aylesbury estate, the wider area of Rotherhithe and the green spaces in Dulwich.

Figure 3, Public transport accessibility levels



Travelling by bus accounts for 28% of all journeys made by Southwark residents, which is the second highest level in London for reliance on bus services.

There are 60 bus services (including eleven 24hour services), and 15 night bus services that run through Southwark. These are run on behalf of TfL by eleven different companies, on 42km of bus lanes and serve 650 bus stops.

Buses in Southwark are generally reliable, and rarely suffer significant delays. In 2007/08, there was an average 86.1% chance of waiting fewer than ten minutes for a bus and 0.9% chance of waiting between 20 and 30 minutes. The average excess waiting time (EWT) for high frequency routes was 1.0 minutes in the fourth quarter of 2009/10. This was a fall of 0.1 minutes on 2008/2009 for the same period.

⁸ PTALs are a method of assessment utilised by TfL and the majority of London boroughs to produce a consistent Londonwide public transport access mapping facility. PTALs assess the level of service, walk and wait times to produce indices of accessibility to the public transport network.

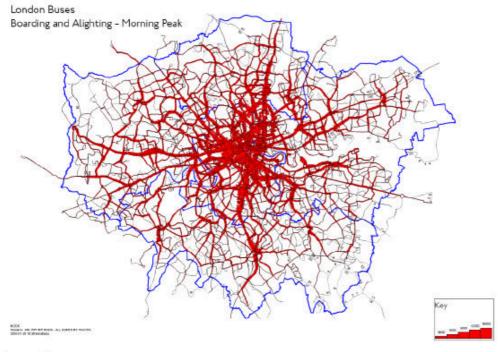
^{9 2007/08} report for Southwark, second guarter

Excess wait time (EWT) is the waiting time experienced by passengers over and above what might be expected of a service that is always on time and high frequency services are defined as those with five or more buses per hour.

For low frequency services (four or fewer buses per hour), 73.2% were found to be on time. This is 1.6% lower than the same period in the previous year. 17.8% of low frequency buses ran between five and 15 minutes late.

The following figure shows demand across London in terms of passenger flow during the morning peak on the bus network. This shows the concentration of radial services into central London which reflects the higher level of activity in those areas.

Figure 4, Bus boarding and alighting in AM peak



Source: TfL

Supporting the bus network, the borough hosts three different underground lines; the Northern, Bakerloo and Jubilee services. The underground network is concentrated in the north of the borough where there are nine underground stations; London Bridge, Borough, Elephant and Castle, Kennington, Surrey Quays, Rotherhithe, Southwark, Bermondsey and Canada Water

The Jubilee line is capable of carrying 39,000 passengers per hour. The line carries over 405,000 passengers each weekday and requires 47 trains to meet demand for both AM and PM peaks. The Southwark section of the Jubilee line (westbound) experiences significant crowding during the morning peak period. The line is classed as 'crowded' between Canada water and Bermondsey, rising to 'very crowed' beyond Bermondsey.

The Northern line carries over 660,000 passengers each weekday and requires 91 trains to meet demand for both AM and PM peaks. The Mayor plans to increase the 2006 capacity of the Northern line by 20% by 2012. Similar to the Jubilee line the Southwark section of the Northern line (northbound) experiences severe crowding during the morning peak.

The Bakerloo line carries 302,869 passengers each weekday and the Mayor plans to increase the 2006 capacity of the Bakerloo line by 38% by 2020. The Southwark section of the Bakerloo line (northbound) is classed as 'uncrowded' during the AM peak.

Figure 5, Southwark rail network



The borough also supports eleven surface rail stations: London Bridge, Elephant and Castle, South Bermondsey, Queens Road Peckham, Peckham Rye, Denmark Hill, Nunhead, East Dulwich, North Dulwich, West Dulwich and Sydenham Hill. Whilst the number of stations may give the impression of a comprehensive network, there are two major gaps in the network within Southwark. One is centred on the Burgess Park area (from Camberwell to Bermondsey) and the other is centred on the area between Peckham Rye Park and Dulwich Park.

The extension to the East London Line/London Overground between Clapham Junction and Dalston Junction via Surrey Quays will complete the orbital railway providing a variety of new travel opportunities for Southwark residents and visitors alike.

Difficulty in travel by rail in Southwark is characterised by the following elements:

- London Bridge and Waterloo stations are located on the edge of the Central Business District, with the majority of passengers needing to interchange between other services on arrival. This in turn leads to significant congestion around the stations.
- The capacities of the routes on the approach to London, particularly into London Bridge Station, are limited by physical constraints. This capacity constraint leads to peak time crowding on services into London termini as well as those services travelling through the borough. This can make it difficult and unpleasant for people wishing to use these services.
- The complex nature of the network means that the frequency of services is constrained and hourly timetables are not feasible.
- Lack of step free access at some stations and interchanges.

Interchanges facilitate transition between modes and/or different journey legs on one mode and have an impact on the convenience and reliability of public transport journeys. Peckham Rye is identified as a strategic interchange and as having the potential to relieve interchange capacity pressures at London's rail termini and reduce travel times.

Historically, there have been fewer river crossings in the east of London than in the west due to the width of the river and the extent of shipping activity east of Tower Bridge. The lack of crossing points has been reflected by the limited interaction between the residential and employment populations on either side of the river.

As the economy of east London has changed developments such as Canary Wharf, the exhibition centre at Custom House and the concert arena on the Greenwich peninsula have increased demand for travel across the river. Opportunities for travelling to these new destinations from some areas south of the river such as North Bexley and parts of Greenwich are restricted. This growth, coupled with fare changes and frequency improvements, has meant that the river service has experienced a surge in demand with passenger numbers more than doubling between 2007 and 2008. In 2009, pay as you go technology was introduced on certain river services, including 10% off single tickets with Oyster pay as you go.

Motorised travel

There are approximately 415km of roads in Southwark, 23km of which form part of the Transport for London Road Network. These roads are not managed or maintained directly by Southwark Council but fall under the control of Transport for London (TfL).

The 2001 census indicated that 51.9% of households (around 54,913 households) in Southwark do not have access to a car. This is similar to the inner London average, but is significantly higher than the Greater London average of 37.5%. Nevertheless the number of vehicles which Southwark residents have access to continues to rise, and in 2001 was recorded as 62,733, an increase of 165% since 1981.

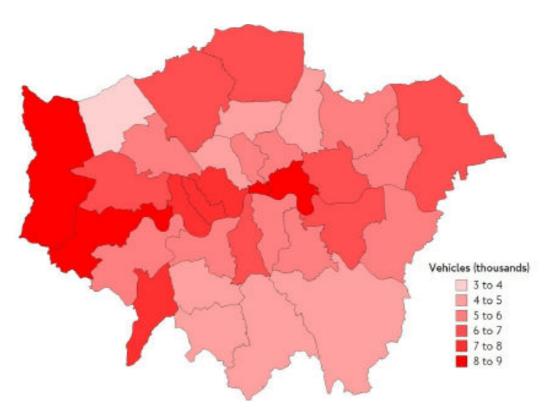
The overall picture for Southwark is one of gradually falling levels of motor vehicle traffic entering and exiting the borough since the early 1990s¹⁰, even before the effects of the economic downturn in 2008 are taken into account. Traffic is estimated to have fallen further since 2008 due to the effects of the

¹⁰ Road Network Performance and Research Traffic Note 3, October 2009 (Transport for London)

recession¹¹. Nonetheless, many parts of the road network in Southwark suffer from significant congestion, with particular issues on the approaches to the Rotherhithe Tunnel and Tower Bridge as well as on Peckham High Street and Old Kent Road.

Southwark supports significant volumes of traffic as shown on the following figure.

Figure 6, Mean annual average daily traffic flows, borough level analysis for 2007



London's projected growth will add extra pressures on the highway network and the limited capacity in central London.

Contrary to the general traffic trend, in recent years there have been increases in the number of goods vehicles on our streets. The main driver for further growth in freight traffic is the significant population increase which is forecast over the next ten years and the associated increase in demand for goods and essential materials, particularly the construction industry, for example. Increased population and employment brings with it the requirement for additional food and services to support this activity.

Road freight currently makes up 89% of London's freight by tonnage and is expected to grow to meet the demand from London and the rest of the country. The number of vans (Light Goods Vehicles, LGVs) is forecast to grow by 30% between 2008 and 2031 with some growth in Heavy Goods Vehicles (HGV) activity.

Department for Transport

¹¹ Department for Transport

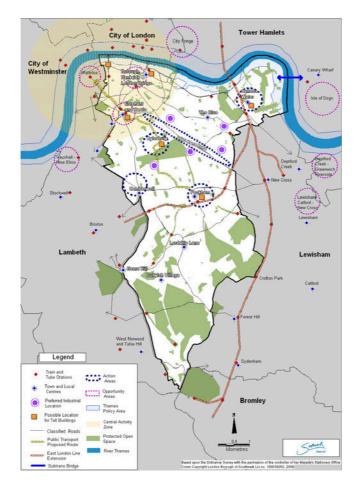
¹² Road Network Performance and Research Traffic Note 3, October 2009 (Transport for London)

How Southwark is changing

Southwark is fast becoming one of London's most dynamic boroughs with 40% of the borough currently under regeneration. The challenge we face is supporting people and providing the infrastructure to support this change.

The council's policies require large developments where lots of people will live, work or visit to be in locations close to rail, underground and bus stations or where there is good access by public transport. The areas where most growth is planned are shown in the following figure.

Figure 7, Key diagram



Source: Local Development Framework core strategy

As detailed previously, the Southwark landscape is in a state of change with much of the borough subject to regeneration initiatives. It is imperative that we consider the needs of those who live, work, visit or study in Southwark currently and those that will do so in the future.

Core strategy

The Core strategy sets out the strategy for Southwark and the visions for strengthening the diverse areas. It also sets important strategic policies on transport and issues such as affordable housing and sustainability. This is due to be adopted in early to mid 2011.

Bankside, Borough and London Bridge

Bankside, Borough and London Bridge contain major buildings and tourist attractions bringing thousands of people into the area each day. The area is the main employment and business area in Southwark, generating 63% of its wealth. The riverside area also supports key tourist destinations including the Tate Modern and the Globe theatre.

Some of the biggest changes are around London Bridge station and the northern end of Blackfriars Road where there are large areas for redevelopment and a number of high profile schemes planned such as The Shard/London Bridge Tower.

These new developments will be supported by the redevelopment of London Bridge station, which will be redeveloped as part of the Thameslink programme providing an extra 50% capacity at peak times. Presently at London Bridge pedestrian congestion extends beyond the station itself and onto surrounding streets and this will need to be managed as the station capacity increases.

Aside from major development sites, there are other areas across Borough, Bankside and London Bridge area which will benefit from more gradual change and where improvements to transport can be considered as they are identified.

Elephant and Castle

Major redevelopment is taking place at the Elephant and Castle. In order to support this, the council is seeking to secure an improved underground station as part of the transformation of the shopping centre. Developer contributions will be needed for this project which will be undertaken in partnership with London Underground. Technical work will be undertaken to ensure that improvements are affordable and as cost effective as possible and a phased approach will be taken to allow development to continue in the area.

Public realm improvements have commenced with the removal of the southern roundabout providing better access to the whole centre, surface level pedestrian facilities and an uplift in the local streetscape. A similar approach will be taken to the northern roundabout with developer's contributions required to facilitate this.

An Elephant and Castle opportunity area framework/supplementary planning document is being prepared to amalgamate and update SPG and SPD that currently cover most of the opportunity area. This is due to be adopted late 2011.

Aylesbury

The Aylesbury estate area will see the replacement of the existing 2,700 properties with around 4,200 homes complemented by two rebuilt schools.

At the core of the regeneration area a community spine will be created. The community spine will support a quality public transport route along Thurlow Street to Wells Way in Burgess Park. This route will be retained and safeguarded in the new development to enable it to accommodate quality, high capacity transport services, whether by bus, guided bus or tram.

The council recognises the need to increase the accessibility of public transport in the area and also access to destinations north of the river from Elephant and Castle. As the regeneration progresses, the

council with TfL will improve the frequency of the existing bus services which run through the action area's core as well as new routes to Peckham and Elephant and Castle.

The community spine will support a network of new roads, cycle paths and footpaths and a range of social and community spaces such as health centres and childcare facilities. The new layout of the area (including roads, footways, cycleways, building locations) will provide good links to the Elephant and Castle, the Walworth Road and the Old Kent Road and will also provide direct links to important destinations such as new community facilities, public transport stops and shops.

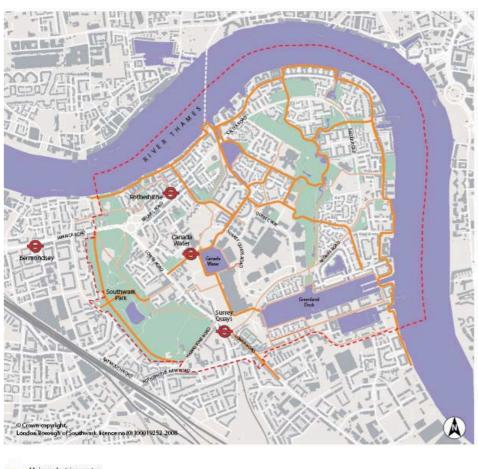
Aylesbury area action plan was adopted in January 2010 and is currently being progressed. A public realm supplementary planning document is due to be adopted late 2011.

Canada Water

The Rotherhithe peninsula was transformed during the 1980s and 1990s and the area dramatically changed with the introduction of the Jubilee line in 1998. The next phase of regeneration is now underway. The out of town style shopping and entertainment facilities supported by substantial amounts of surface car parking provide an opportunity to create a new town centre for Rotherhithe and for Southwark.

Currently access to public transport is high around the town centre, but drops off quickly, particularly towards Surrey Docks ward. The area's location on the Thames provides excellent access to the walking and cycling networks of the Thames path and river services. The area action plan sets out the council's ambition for improving local walking and cycling links.

Figure 8, Walking and cycling links in the Canada Water area



Lower Road which runs north south through the area is a strategic road linking south east London with central and east London. This road suffer congestion through out the day and in particular at peak times as people seek access to the Rotherhithe tunnel.

It is proposed to reintroduce two-way traffic movement on Lower Road to help make traffic movement more efficient and improve the environment around the gyratory

Improvements are currently being made to increase the capacity of the Jubilee line, while the East London line is being connected into London's Overground network.

The Canada Water area action plan is due to be adopted in September 2011.

Camberwell

Camberwell will be subject to change over the coming years including the redevelopment of the Maudsley Hospital, the rebuilding of the Salvation Army facilities, the expansion of Kings College Hospital, the growing popularity of the Camberwell College of the Arts, major improvements to Denmark Hill Station, and the redevelopment of the local leisure facilities.

The town centre sits on a strategic crossroad providing both key north/south and east/west links. The area supports a large number of bus services and interchange between services. Pedestrian access is poor due to the volume of traffic accessing the town centre.

Peckham and Nunhead

Peckham is a thriving town centre that meets the needs of a diverse population, with successful local businesses and exciting new spaces. The regeneration will focus on a core area around the town centre where major development is proposed and a wider area where improvements will be of a smaller scale.

The area has very good rail links to central London but these services tend to be very crowded in peak times. Car ownership levels tend to be low within the area and the local bus services are well used.

The area currently supports a number of one way systems which direct traffic around the town centre, which is very crowded as pedestrians, loading vehicles, cars and buses all have to share a very narrow street. This can make it unpleasant to be in the town centre and disrupts bus services. The council is currently developing a transport model to review the current one way systems and to facilitate improved delivery, loading and bus services to the town centre area.

Transforming transport provision

The council and it's partners should be providing the transport services to meet the growing need identified above. The council seeks major improvement to transport capacity detailed below, however due to their complexity these projects have a long life and some of those detailed will extend beyond that of the plan.

Bakerloo line

The Bakerloo line has an important role in London's transport geography, serving the strategic northwest southeast corridor and for Southwark providing an important element of the regeneration of Elephant & Castle.

The council supports the Mayor's aspiration to extend the Bakerloo line to the south. This extension could serve areas with poor transport accessibility such as the Aylesbury Estate and north Peckham and free up National Rail capacity at London Bridge for other service improvements.

The council enthusiastically supports bringing a tube service to the key regeneration areas of Walworth, Camberwell and Peckham and in doing so creating new travel opportunities to both the southeast and northwest.

Cross River Tram

The council has been a long term supporter of the Cross River Tram and was dismayed that funding for the further development of the tram has been withdrawn. The tram represented a significant future transport improvement within the borough providing easy access to public transport in areas with potential for major regeneration but which are also currently bereft of public transport opportunities.

The tram was intended to be a street running tram operating through the centre of London providing a core route between Euston and Waterloo with branches to Camden & Kings Cross in the north and Brixton and Peckham in the south.

Thames Bridge

The council supports the long term aspiration to build a new river crossing for pedestrians and cyclists, connecting Rotherhithe with Canary Wharf. The proposed bridge would offer a relatively direct route between the residential centre of Rotherhithe with the employment centre of Canary Wharf. Demand has been predicted to be 1,083 pedestrian and 585 cyclist trips per morning peak. This equates to 888,060 pedestrian and 280,215 cyclist trips per annum.

Policy context and issues

This section sets out the local, regional and national policy framework for the Transport Plan. It will also detail the borough policies and how the Transport Plan links to the wider objectives of the council.

Policy in Southwark

Southwark 2016: Sustainable Communities Strategy (2006)

The Sustainable Community Strategy (SCS) was produced by the Southwark Alliance. The alliance membership includes representatives from Southwark Council, Borough Police, JobcentrePlus, Head Teachers' Executive, and Chief Executive of Southwark PCT. This is the primary document for the council and the ambitions contained within it should be reflected in all council policies and plans.

Table 2, Sustainable Community Strategy priorities and indicators

SCS objectives	SCS priorities	Indicators
Improving	Achieve economic wellbeing	Reduction in rates of childhood obesity
individual life chances	Achieve their educational potential	Reduction in deaths from specific diseases
	Be healthy Stay safe	Reduction in deaths and serious injuries from road accidents
	Enjoy cultural and leisure opportunities	Increased use of leisure facilities & parks
	Value diversity and be active citizens	Increased take up sports physical & activity
Making the borough a better place for people	Localities of mixed communities Sustainable use of resources More and better homes A vibrant economy A liveable public realm	Increase the satisfaction of residents with Southwark as a place to live and reduce the differences between areas Reduction in CO ₂ emissions year on year Measurable improvement in air quality Reduction in projected traffic Improvement in public transport links into and across the borough by 2016 Improvement in the quality rating for streets and estates Roll out of 20mph zones across the borough
Delivering quality public services	Accessible and integrated Customer focused Efficient and modern	Increase in public satisfaction with services for the borough and for each community council area

Southwark Local Area Agreement, 2008/11

Three year action plan based on the SCS, provides the mechanism for central government and the local authority and its partners to agree key targets and priorities. The following table shows the transport related national indicators. The top three are included in the LAA and have specific targets.

Table 3, Local area agreement transport related indicators

Priority	Indicator
Cleaner, greener,	(186*) Per capita CO ₂ emissions in the local area
safer	(198*) Children travelling to school mode of travel usually used (% of car use)
Improved parks and open spaces	(197) Improved local biodiversity, proportion of local sites where positive conservation management has been or is being implemented
	(47) People killed and seriously injured in road traffic accidents
	(175) Access to services and facilities by public transport, walking and cycling
	(56) Obesity in primary school age children in year six
	(55) Obesity in primary school age children in reception
	(48) Children killed and seriously injured in road traffic accidents
	(167) Congestion, average journey time per mile during the morning peak
	(168) Principal roads where maintenance should be considered
	(169) Non principal classified roads where maintenance should be considered
	(176) Working age people with access to employment by public transport (and other specified modes)
	(177) Local bus and light rail passenger journeys originating in the authority area
	(178) Bus services running on time
	(188) Planning to adapt to climate change
	(194) Air quality, % reduction in NO_x and primary PM_{10} emissions through local authority's estate and operations

Local Development Framework, core strategy

Southwark is made up of lots of different communities, identities and localities. The Local Development Framework (LDF) is a spatial plan that sets unique visions with strategies, policies and delivery plans to develop and protect these areas and to further strengthen them as the successful places that we want them to be. The Core Strategy is the main document that sets out the strategy for Southwark. There are many area plans and more detailed technical documents that are also prepared or being prepared as part of the LDF. These documents are used along with the London Plan to make planning decisions.

The Core Strategy sets out a strategy and strategic policy, the Southwark Plan contains detailed technical policy and the Transport Supplementary Planning Document sets out very detailed guidance for consideration in planning applications. The transport strategy and evidence are fully integrated into the Local Development Framework providing the detail that has supported preparation of these documents and approaches. We also review these annually to make sure that they are working effectively to regenerate and protect Southwark.

Most new development will happen in the growth areas, particularly in the core action areas and the opportunity areas as shown in figure 4. These are:

- The Southwark part of the central activities zone
- Elephant and Castle opportunity area
- Bankside, Borough and London Bridge opportunity area
- Peckham action area
- Canada Water action area
- Aylesbury action area (an area action plan has been prepared)
- West Camberwell housing regeneration area
- Old Kent Road regeneration area

The main areas for growth will have additional guidance to encourage regeneration and change.

The main technical areas with additional supplementary planning documents are transport, housing and planning contributions/section 106.

More information can be found at www.southwark.gov.uk/localdevelopmentframework

Legislation, National and regional policy

The council is directed by legislation as well as national and regional policies. There follows a short summary of relevant policies, with a more comprehensive list contained within appendix A.

Tomorrow's Roads - Safer for Everyone (DfT, 2000)

This document has been pivotal in creating a structured and achievable delivery of road safety in the UK. It sets out the government's framework for achieving safer roads; the core of which was the establishment of targets to be achieved nationwide by 2010 including a reduction by 40% of those killed and seriously injured (50% for children) by 2010 from the 1994 to 1998 baseline average. Following the first round of reviews evaluating the effectiveness of the policy, the Road Safety Act was introduced in 2006, covering a number of elements to support the delivery of wider road safety.

The targets are mostly being met, with the exception of cyclists and powered two wheelers.

London Plan

The Mayor's draft replacement *London Plan* (2009) sets out an integrated economic, environmental, transport and social framework for the development of the capital over the next 20 to 25 years. The new London Plan sets out to

 Meet the needs of a growing population with policy on new homes, including affordable housing, housing design and quality, and social infrastructure, which will promote diverse, happy and safe local communities.

- Support an increase in London's development and employment with policy on: outer London, inner and central London; finding the best locations for development and regeneration, and protecting town centres; encouraging a connected economy; and improving job opportunities for everyone, so that London maintains its success and competitiveness.
- Improve the environment and tackle climate change by: reducing CO₂ emissions and heat loss from new developments; increasing renewable energy; managing flood risk, ensuring water supply and quality; improving sewerage systems; improving London's recycling performance and waste management; and protecting our open spaces making London a green and more pleasant place to live and visit.
- Ensure that London's transport is easy, safe and convenient for everyone and encourage cycling, walking and electric vehicles.

Mayor's Transport Strategy 2010

In May 2010 the Mayor published his Transport Strategy (MTS). It sets out the vision for transport in the Capital over the next 20 years. It prepares for London's predicted growth of 1.3 million more people and 0.75 million more jobs by 2031 and supports sustainable growth across central, inner and outer London.

The six MTS goals are:

Supporting economic development and population growth
Enhancing the quality of life of all Londoners
Improving the safety and security of all Londoners
Improving transport opportunities for all Londoners
Reducing transport's contribution to climate change, and improving its resilience
Supporting delivery of the London 2012 Olympic and Paralympic Games and its legacy

The MTS high profile outputs are:

Cycle superhighway schemes
Cycle parking
Electric vehicle charging points
Better streets
Cleaner local authority fleets
Street trees

Section 4: Our strategy for Southwark

Transport is about people and supporting our community. It is a topic which many people feel passionately about, just ask the average commuter about their journey to work, or how the winter weather affects their trip and the importance of the need to travel becomes apparent.

We have recognised this important role and seek to make travel within the borough as convenient, pleasant, and as safe as it can be. The transport network is supported by a number of stakeholders, including public transport operators, the police, neighbouring authorities and TfL.

TfL, as the Mayor of London's transport body, set the context for how travel and transport in London is developed and for managing the busier roads.

By considering the transport aims derived from Southwark policies alongside national transport and regional policy, a set of transport objectives for Southwark has been developed. Our transport objectives have been informed by, and are consistent with the wider policy context at national, London, sub regional and local level. In developing this plan we have considered a number of policies which are detailed above as well as those contained in appendix A.

Our nine transport objectives are

- Manage demand for travel and increase sustainable transport capacity
- Encourage sustainable travel choices
- Ensure the transport system helps people to achieve their economic and social potential
- Improve the health and wellbeing of all by making the borough a better place
- Ensure the transport network is safe and secure for all and improve perceptions of safety
- Improve travel opportunities and maximise independence for all
- Ensure that the quality, efficiency and reliability of the highway network is maintained
- Reduce the impact of transport on Southwark's air quality
- Reduce transport's contribution to climate change

Table 4, Southwark transport objectives

			Σ	MTS				SCS		
Southwark transport objectives	Support economic development and population growth	Enhance the quality of life for all Londoners	Improve the safety and security of all Londoners	Improve transport opportunities for all Londoners	Reduce transport's contribution to climate change, and improve its	Support delivery of the London 2012 Olympic and Paralympic Games and its legacy	Improving individual life chances	Making the borough a better	Delivering quality public services	
Manage demand for travel and increase sustainable transport capacity	>	>		>	>	>		>		
Encourage sustainable travel choices		>		>	>		>	>		
Ensure the transport system helps people to achieve their economic and social potential	>			>				>	>	
Improve the health and wellbeing of all by making the borough a better place		>		>			>			
Ensure the transport network is safe and secure for all and improve perceptions of safety			>				>	>	>	
Improve travel opportunities and maximise independence for all		>		>				>	>	
Ensure that the quality, efficiency and reliability of the highway network is maintained		>	>	>		>			>	
Reduce the impact of transport on Southwark's air quality		>			>		>	>		
Reduce transport's contribution to climate change		>			>		>			

Targets

As part of the Transport Plan we have prepared a performance monitoring plan, including targets for five mandatory indicators; mode share, bus service reliability, asset condition, road traffic casualties and CO₂ emissions. In addition we are proposing a number of local indicators with associated targets to reflect our key transport priorities.

In setting our targets we have sought to make them both ambitious and realistic, given the indicative levels of funding available. Trajectories have been set for each target with annual milestones set so that an assessment of progress can be made on a regular basis.

Section 5: The policies

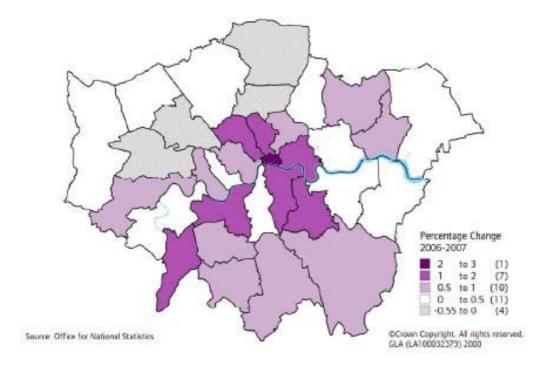
This chapter details the specific transport issues and challenges in Southwark and sets out a series of actions that the borough proposes to take forward over the life of this plan. These actions will help to achieve the council's vision as set out in Southwark 2016 and the objectives as set out in the MTS.

Objective 1: Manage demand for travel and increase sustainable transport capacity

Strategic policy 1, Supporting sustainable population and employment growth

Between 2006 and 2007 Southwark and Camden accounted for nearly 22% of London's total population growth. The population in Southwark is predicted to continue to grow; the government has projected the population to rise to 305,600 by 2016 and 329,300 by 2026.

Figure 9, Percentage increase between 2006 and 2007, London boroughs



The borough's local development framework (LDF) core strategy states that 24,450 new homes will be provided between 2011 and 2026. Southwark was identified in the London Plan as having the fifth highest target for new homes of all London boroughs (20,050 homes by 2021).

The core strategy proposes to increase the number of people working in Southwark by around 15% from 165,800 to 190,800 between 2009 and 2026. This employment growth will be mainly within the Borough and Bankside area.

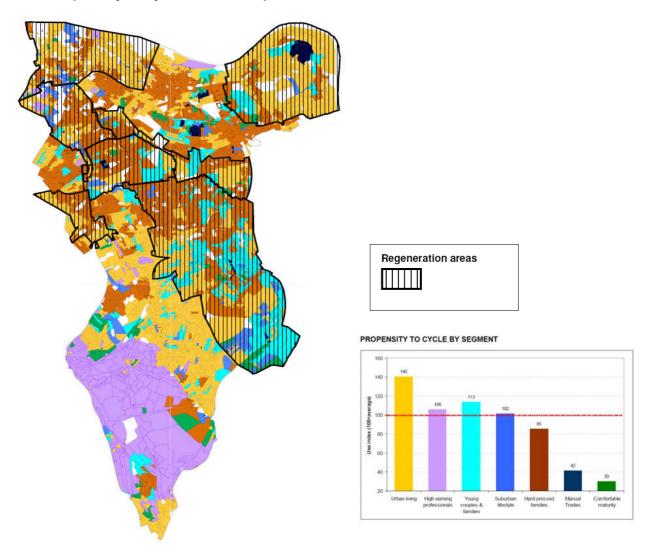
With continued growth in the number of residents and employment, it is evident that the transport network will continue to face pressures, which are currently among the most intense in London.

There are almost double the number of people per hectare than the average for London as a whole (84.86 for Southwark compared with 45.62 for London). With most journeys being less than five kilometres, the housing density coupled with the borough's central/inner London location make the use

of active travel and public transport more practical than London as a whole. The council will seek to address this challenge by encouraging more people to travel actively. The impact of increasing the mode share of walking and cycling in alleviating pressure on other modes should not be understated.

The following figure shows the MOSAIC mapping, which details people's propensity to cycle, alongside the areas for intensification identified in the council's local development framework. As can be seen, in general these areas overlap, particularly in the Borough and Bankside and Canada Water areas.

Figure 10, Propensity to cycle and development areas



One of the key objectives of the borough's land use policies is to reduce the need to travel and to reduce people's journey distance. A variety of tools are used to enable this, such as supporting development at/near transport nodes, providing mixed use development, promoting accessibility within development sites and actively managing demand for travel.

Strategic policy 2, Managing the demand for travel and the use of road space

Southwark supports the vision that current levels of motor vehicular traffic should not be increased and is pursuing strategies to reduce the overall levels by reducing the number and length of journeys people make.

Southwark Council is pursuing overall traffic reduction through a number of strategies including managing the demand for travel. Examples of initiatives are

- Supporting development in areas with high public transport accessibility as well as car free development
- Management of parking, including controlled parking zones (CPZs)
- Management of off street car parks
- Introduction of car clubs

The council's land use policies determine that the location of development, throughout the borough, must be appropriate to the size and trip generating characteristics of the development. The borough also supports mixed use development, locating homes near retail and community uses thereby reducing the need to travel.

Major developments generating a significant number of trips should be located near transport nodes. Whilst development should be provided in locations with high levels of public transport accessibility there should also be sufficient capacity to meet the transport requirements of the development. In addition, parking provision should reflect levels of public transport accessibility.

Elephant and Castle

The redevelopment proposed for the whole Elephant and castle opportunity area will have an impact on the Bakerloo line and Northern line underground services, both on the trains and on the ticket halls, as well as bus services. There may be opportunities to improve access to the rail station and to provide additional capacity for the Northern line ticket hall by integrating this within a transformed shopping centre.

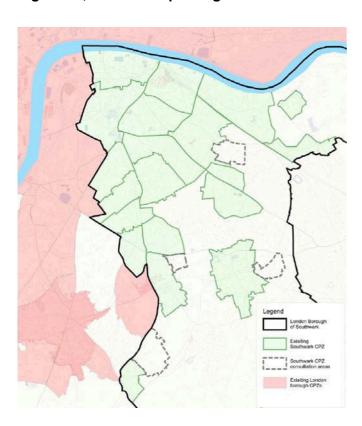
Smarter travel initiatives will be introduced to help manage demand as development proceeds to ensure that public transport capacity is not exceeded. This will enable a funding package to be put together for infrastructure improvements.

Maximum standards for car parking within new developments are set within the sustainable transport SPD. Development should limit the car parking provided and should justify the amount sought. In areas of good access to public transport (PTAL value five to six), that are located in a controlled parking zone and have good access by walking, cycling and public transport to services and facilities, the council seeks car free development.

In 2001 residents in the borough had access to over to 63,000 cars or vans. With many households owning more than one vehicle, parking is an important aspect of their daily routine. Whether or not residents in Southwark own or have access to a car, the number of vehicles on many of our streets has increased to a point where it is no longer possible to meet all demands. There is simply not sufficient space on the roads in many parts of the borough.

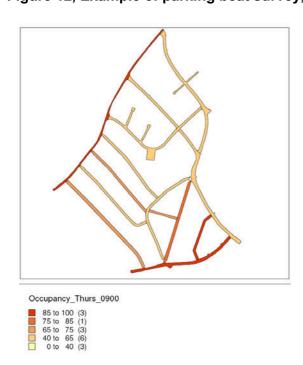
Parking controls are required in order to allocate space fairly, but are also significant in releasing suppressed demand for sustainable modes, such as walking, cycling and public transport. It is important to recognise that the majority of households in Southwark do not have access to a car and the needs of this majority must also be considered in the allocation of street space.

Figure 11, Controlled parking zones



When considering parking controls we must also allow for variation according to differing characteristics in different types of location; between residential and commercial areas for example. The identification of potential CPZs is supported by parking stress surveys. These manual 'beat' surveys show occupancy compared to capacity, length of vehicle stay and parking demand type for each street. This information gives the council an understanding of the local usage and pressures on street parking.

Figure 12, Example of parking beat survey, North Dulwich



When we are reviewing zones and identify areas of minimal parking stress we will ask the community if they would support removal of parking spaces and the introduction of cycle parking, car club bays or street trees.

Cars spend a majority of time not in use and parked. A car club can provide further travel opportunities more efficiently whilst alleviating pressure on parking on our streets.

A car club offers a car on a pay as you go basis without the disbenefits of car ownership such as tax, insurance, parking permits, servicing or repairs. They offer the convenience of being able to use a clean, modern and reliable vehicle for those trips that cannot be done using public transport, cycling or walking. Research among members shows they reduce car use by an average 36%¹³ and that almost a fifth of members either sell a car immediately before or after joining.

There are currently 100 on street publicly accessible car club bays across Southwark, placed in areas where they are easily accessible for residents and businesses. The greatest concentration of bays can be found in the north of Southwark, showing a possible relationship between low levels of household car ownership/high levels of public transport provision. It is the council's ambition to ensure that there is a car club bay within five to ten minutes walk of each of household in the borough.

Figure 13, Locations of car club bays



¹³ TfL research (February 2007) 'Attitudes to car clubs'

As well as on street parking provision, Southwark currently has four public car parks (three in Peckham and one in Walworth). These provide opportunities for all day commuter parking as well as serving the needs of visitors to the adjacent retail areas. The role and future of these car parks has been reviewed and a number of these sites will be taken out of operation in the future.

The principal private car parks also offer long stay parking as well as shorter term visitor parking. Private parking on gap sites and under railway viaducts within the congestion charge zone appears to have reduced significantly in recent years and what remains is not intensively occupied. The sites are generally small and poorly maintained, with some sites restricted to contract parking.

Table 5, Principal off street car parks¹⁴

Location	Hours of operation	Number of spaces available	Designated disabled car parking spaces
Choumert Grove	Mon to Sat	120 spaces	6
Copeland Road	Mon to Sat	60 spaces	2
Peckham town centre	Mon to Sat	360 spaces	None
Stead Street	Mon to Fri	120 spaces	11

Strategic policy 3, Provide the facilities to support sustainable travel

The council actively seeks to manage the demand for travel and promote sustainable travel, however we recognise that the appropriate infrastructure needs to be in place. This may include appropriate signage, lighting, cycle parking, and places for people to rest. When considering or undertaking works consideration should be given to the council's road and road user hierarchies.

Although 46.41% of Southwark residents actually work within 5km of their home only 15% of Southwark residents walk or cycle to work, this is a distance which is extremely suitable for walking or cycling. Given the wider benefits of active travel, as well as the current pressures on both the private and public transport systems, when we consider schemes for housing we will seek the infrastructure to support the use of active travel, whilst restricting the use of the private car.

In recent years there has been a growing recognition of the importance of walking for quick, convenient journeys. The majority of journeys that we make are within our local area, to the shops, to schools etc. and walking often represents a beneficial option for these journeys.

The council supports improvements to the walking environment through creating an accessible environment, providing the right infrastructure and making sure people have the right information and confidence to make journeys on foot. This includes providing dropped kerbs, pedestrian crossing facilities, locating crossing points where people are most likely to use them and providing seating for people to rest.

¹⁴ This table does not provide details of the small private car parks within the borough (on gap sites and under railway viaducts) as well as and council operated car parks serving public open spaces

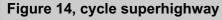
Walking provides the perfect pace for experiencing the sights and atmosphere of Southwark and we encourage our visitors to walk. Many visitors are attracted to the borough's cultural and heritage sites such as Shakespeare's Globe, the Design Museum, Borough Market, Southwark Cathedral and the Tate Modern.

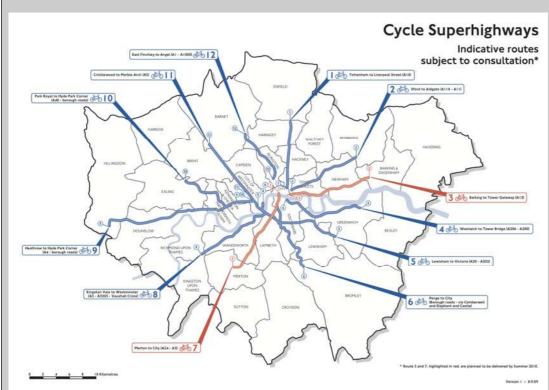
One initiative hoped to increase the number of journeys undertaken on foot is 'Legible London'. Legible London is a new pedestrian wayfinding system to help people walk around the Capital. TfL are piloting the system in Bankside and the Southbank. It is hoped that the scheme will help people change between transport modes in the area more easily, including bus, tube, train and river services.

Legible London primarily serves those that are new to the area, therefore the council will consider providing this system at key destinations including Camberwell town centre (which supports King's College Hospital and the Maudsley Hospitals) and key tourist destinations and routes, such as the Thames Path. When providing additional wayfinding, street signage and street furniture we consider the full life and maintenance costs.

The number of people cycling to work has grown in recent years and this growth is predicted to continue. The Mayor has set a target to increase mode share to 5% across London by 2026 from 2000 levels. On the 2006 to 2009 average Southwark has a 3% cycling mode share and has been tasked by the Mayor of London with locally increasing cycling mode share to 6%, reflecting the greater density and propensity for cycling in inner London.

The Mayor of London has introduced the cycle superhighways; a network of routes from outer London through inner London to central London aimed at encouraging commuter cyclists. The first route (route seven) passes through Southwark and alongside new infrastructure we have undertaken a series of complementary measures to promote wider use of the route. Three further routes are proposed to be introduced in the borough and are shown in the following figure.





The cycle hire scheme was implemented in July 2010 and offers the public bicycle hire for short journeys in, and around central London. At present the scheme is contained within zone 1 with 400 docking stations provided and located approximately every 300m. The borough has a number of cycle hire docking stations and given the low levels of car ownership and the borough's desire to increase cycling we would support the further extension of the scheme to zone two and beyond and, in particular, to encompass the areas of Walworth, Camberwell and Peckham.

Most trips that are currently cycled are work related (50%) or shopping and leisure related (34%). When considering the trips that can potentially be cycled, shopping and leisure trips rank the highest at 39% followed by work trips at 31% and education and other trips at 30%. It is therefore necessary that cycle parking at these key destinations be provided. Cycle parking needs to be thought about in the areas designated as major town centres; district town centres and local centres. If we wish to encourage cycling for shorter (<5km) distances, good quality, secure parking will be important at the district and local level.

The current cycle parking standards for non residential use are contained within the borough's LDF. This includes the requirement for all new developments in the borough should also include cycle parking provision for at least 10% of visitors, which will normally be on street and available for anyone to use, not just their visitors. The LDF cycling parking requirements are detailed in the following table

Table 6, Cycle parking standards

Land use	Cycle parking standard (min)
Shops, financial and professional services, restaurants and cafes, drinking establishments, hot food takeaways and business (A and B1)	1 space per 250m ² , min 2 spaces
General industry (B2)	1 space per 500m ² , min 2 spaces
Storage or distribution (B8)	1 space per 500m ² , min 2 spaces

Around 28.5% of households in Southwark have at least one bicycle and more households store their bicycle inside their property than anywhere else¹⁵. However, many bicycles are stored in external locations such as bicycle racks or railings.

Bicycle security is a real issue for new or existing cyclists. Many Southwark Council estates lack any decent cycle storage and in the light of our new approach to enforcing fire regulations many residents will no longer be able to secure their bicycles to their balconies or on common walkways. Increasing cycle parking on the estates is a priority if we are to remove some of the obstacles to cycling.

The council supports the introduction of cycle parking in housing estates and has had success in introducing this parking through the community led cleaner greener, safer programme.

As part of the Mayor's cycle superhighway, the council is providing cycle parking within housing estates, which are within a 1.5km corridor either side of route 7. This incorporates 99 estates, which are being surveyed so that demand for new cycle parking can be assessed before it is provided. Existing unused structures such as pram sheds and garages will be adapted, where possible, so that they can be used as cycle parks. Where these are not available other solutions such as cycle lockers and sheds will be installed. The cycle parking is provided on a first come first served basis, this provides improvements to those most enthusiastic.

Those estates who do take up the offer of additional cycle parking will also receive 'Dr Bike' cycle maintenance sessions and will be encouraged to take up the free cycle training the council offers.

The provision of secure, convenient and available cycle parking is important to increase and maintain cycling's popularity. Cycle parking should be located in areas with good lighting and high activity (for observation) and be close to user destination. Along with providing adequate cycle parking, it is essential that the area surrounding the parking facilities is safe and secure.

The safety of cycle parking can have a big impact on how many people choose to cycle. Cycle theft and criminal damage discourages people from taking up cycling and dissuades many victims from continuing to cycle. A study by the Transport Research Laboratory (Davies, Emmerson and Gardner 1998) found that one in four cyclists stopped cycling after being a victim of cycle theft.

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¹⁵ Southwark Housing Requirement Study 2008

While Southwark has seen a significant reduction in cycle theft (24% since 2004¹⁶) we will continue to improve the safety and security of cycle parking in the borough. It is vital that the growth in the number of cyclists is matched by a radical change in cycle security to ensure increased cycling levels do not result in more cycle theft and criminal damage.

Strategic policy 4, Improving interchange

Many journeys are likely to involve two or more modes of transport, such as walking to the bus stop then taking the bus to another destination and taking the train.

Transport interchange points can be busy and congested. People often rush to get to their bus or train and interchange points are often located in places where there are also high numbers of vehicles competing for space. This is particularly intensified at peak times when there are higher volumes of traffic and more people about.

The council wants to ensure that all transport interchanges are convenient and recognises the importance of a safe and reliable public transport network. For example, cycle parking is improved at train/tube stations to help promote cycling for longer multi modal journeys and to increase the numbers of cyclists.

Consultation questions

Southwark aims to manage the demand for travel and encourage sustainable travel

- Should we prioritise resident parking above short stay parking for shops and local businesses?
- Should we focus cycle improvements on the main roads where most people cycle, or develop quieter cycle routes?

¹⁶ British Crime Survey (BCS) comparator crime data

Objective 2: Encourage sustainable travel choices

How we choose to travel is a personal decision and the council seeks to equip people with the necessary information and tools to consider travelling sustainably for part of or all of their journey. This may be cycling to the station to go to work, catching the bus to the shops or walking to school. There are many benefits to travelling sustainably, from improved health through increased physical activity, to the wider community benefits associated with reduced car dependency, traffic congestion and related pollution levels.

We promote sustainable travel through a variety of methods including the development and implementation of travel plans, promotional campaigns and educational events. We give people the skills to walk, cycle and travel in Southwark with improved confidence by providing independent travel, pedestrian and cycle training.

Strategic policy 5, Understanding the need to travel

The first step to encouraging sustainable travel is understanding the need to travel. Travel plans have become an essential tool for the delivery of travel behaviour change. They are increasingly important in helping us to understand why and how people travel and in identifying tools that can help broaden travel choice. There are four main types of travel plans within Southwark, those prepared for schools, workplaces, residential developments and geographical areas.

The council assists all schools in producing travel plans through working in partnership with the school community. School travel plans help identify local issues and highlight any barriers to walking and cycling to school, paving the way for the production of an agreed action plan. The travel plan process helps the council meets its statutory duty to assess and provide for the travel needs of children and young people and to promote sustainable travel.

The first step is an assessment of the travel habits of children, their parents and school staff. This is primarily based on an annual 'hands up' survey conducted in each class. Of the 111 schools in the borough 89 have completed such a survey within the last five years. The table below compiles the results of all these surveys to give a picture of travel to school across Southwark over the last five years.

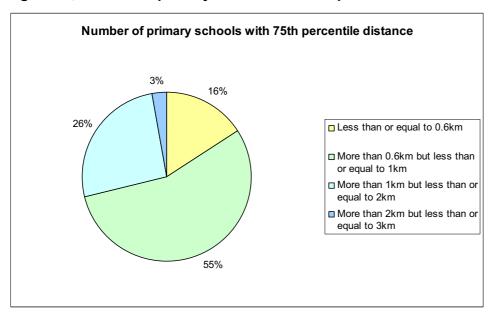
Table 7, School modal split¹⁷

	Mode (%)					
Year	Car	Car share	Public transport	Walking	Cycling	Other
2005/06	21	3	22	50	3	1
2006/07	17	2	20	60	1	0
2007/08	18	3	26	49	3	2
2008/09	17	3	29	45	3	3
2009/10	15	3	28	47	3	4

This data shows that the number of children being driven to school has fallen steadily, while more children are using public transport. Other modes, such as walking and cycling, remain relatively stable.

There is likely to be a link between how children travel and how far they have to go. From data provided by each school it is possible to work how far most students live from the school they attend. The graphic below uses the 75th percentile distance (the distance up to which three quarters of students travel) to show how primary schools are grouped, according to the distance travelled by their students.

Figure 15, Number of primary schools with 75th percentile distance



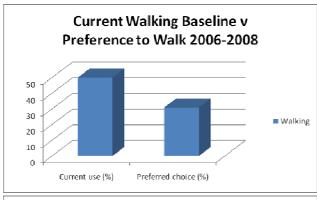
For many primary schools (71%), three quarters of their students live less than a kilometre away. This should make walking a clear option in most cases. The picture is very different for secondary schools, where there are no schools that fall into this category and where most students live significantly further away. For secondary schools, public transport and cycling, rather than walking, become the most viable alternatives to car travel.

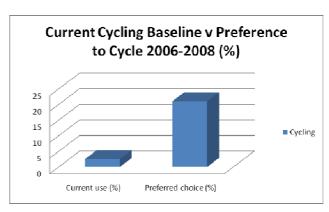
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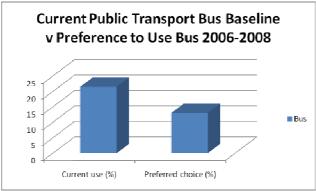
¹⁷ 'hands up' survey

The 'hands up' survey also records student's preferred mode of travel. This graphics below show the findings relating to walking, cycling and bus use.

Figure 16, Walking and cycling levels versus preference for travel







The discrepancy between actual and preferred mode in relation to cycling indicates that there are still practical barriers to getting more children to cycle, most likely including parent's concerns about safety. The same comparison for walking and bus use shows the opposite; students would prefer to use these modes less. Developing a better understanding of attitudes to sustainable modes and what it would take to 'trigger' a greater shift toward these underpins the council's work.

There are two travel planning groups established in the borough; one in Bankside (led by the Better Bankside business improvement district) and the other in Camberwell.

The Bankside travel planning group was the first group established in the borough and has gone on to produce 'The Bankside Master Travel Plan'. This master travel plan is made up of small and medium enterprises within the Bankside area. This enables businesses with a smaller workforce to take part, when on their own it wouldn't be deemed that they had a big enough impact to warrant a travel plan. The master travel plan provides an overarching framework for businesses to encourage staff to use sustainable modes of transport. The added benefit of a master travel plan is that it encourages and enables businesses to work with neighbouring organisations.

Established in December 2006, the Camberwell Travel Planning Group includes representatives from the major local employers include Kings College Hospital, The Maudsley Hospital, Camberwell College of Arts and The Institute of Psychiatry.

One initiative of the Camberwell Travel Planning Group encourages hospital staff to walk, rather than drive, to local shops. Staff can present a card at the point of purchase which earns them discounts. The more they walk, the greater the discounts. This is the first scheme of its kind in Southwark.

200 club

Workplaces in Southwark produce 53% of Southwark's CO₂. Southwark Council accounts for approximately 2% of borough wide emissions and aims to lead the way to reduce them.

The council has set up the 200 club to help the biggest emitters in the borough reduce their energy use and provide an opportunity to share best practice and showcase activities. Transport represents 11% of the borough's CO₂ emissions and the next phase of this work would be to work with these organisations to help them reduce their CO₂ emissions from transport, which could potentially be done through the workplace travel plan process.

Workplace travel plans promote the use of sustainable modes of travel to and from the workplace and during the course of daily business. Workplace travel plans are often secured as part of the development planning process in order to ensure that full consideration is given to promoting sustainable travel.

The council seeks to lead by example with its own travel plan. The staff travel plan was last updated in 2007 and since then significant change has occurred with the majority of "back office" staff now being located in a new office on Tooley Street, London Bridge. Consequently the commuting habits of those staff previously located in different parts of the borough may have changed. There are plans for a new survey for the staff travel plan to be carried out and a new staff travel plan with updated targets will follow this.

While travel plans for workplaces and schools are now widely recognised as effective tools in cutting traffic, until recently little attention has been given to tackling the origins of journeys from people's homes. London will experience strong demand for new housing over the next 15 to 20 years, with the population projected to grow by nearly one million people. Residential travel plans play a major role in helping deliver a high quality, accessible and compact city.

Putting words into action, Low Carbon Zone

The low carbon zone has been created in an area of Peckham with a focus on making homes more energy efficient as well as promoting sustainable forms of transport.

A survey was distributed to all households in the zone in spring 2010, with the aim of gaining an understanding of current transport usage and attitudes to transport. There was a 12% response rate to the survey (136 out of 1,165). Travel by foot and by bus dominated almost all of the different journeys made by people in the area. Walking was the most popular mode of transport with 72% saying that they made lots of journeys in their local area on foot. Car usage was only significant for journeys to the supermarket, visits to friends and family and going to church, with 40% of the households in the LCZ owning a car.

From the results of the survey it has been concluded that sustainable transport is extremely well embedded into the area. Levels of car ownership were shown to be slightly higher for those residents of street properties than those living on estates. The journeys that people need to make as part of their daily routine can all be made on foot and amenities are close at hand.

In response to these findings the council will be introducing a car club bay to the area and improving walking links to bus services on Peckham Hill Street and towards the retail centre of Peckham town centre.

Strategic policy 6, Supporting sustainable travel choices

The council seeks to expand the range of travel choices available for people to consider, rather than to tell people how they should travel. Providing relatively minor, low cost interventions such as better information on travel options, can make a real difference when people make travel decisions.

The council uses events and campaigns to promote active travel in Southwark. These events can be specific to the borough or part of a regional / national campaign such as 'mobility week' and 'bike week'

Travel awareness events typically involve officers going out into the borough and promoting a particular initiative, such as Bike week. This can be done in a variety of ways, for example, Dr Bike, which is a free bike check. Anyone can bring their bike along to be checked for safety by a qualified person and advice is given on any mechanical problems which cannot be quickly fixed on the spot. At these types of events officers engage with the community in order to promote and gain feedback on local barriers to active travel. The events happen all year round, some are planned in advance and others are in response to a need or opportunity, such as participating in the green fair. Careful planning is required to ensure that travel awareness events are inclusive and not self selecting.

These travel awareness events help the council to understand and address local issues and barriers to active travel.

Strategic policy 7, Ensuring people have the skills

It is important that people are given the skills and confidence to travel sustainably and independently. Engagement with the community, be it children, adults or the elderly, is important to help them better understand how to travel around the borough safely and with confidence.

This is particularly important for children; pedestrian and cyclist training in schools is now more common and will help to form good life long habits.

Pedestrian training is carried out at schools within the borough, specifically targeted at children in year three. Officers go into the schools and engage with the local children, discussing issues such as how to safely use the roads, including crossing roads and finding suitable routes. In 2009 we visited 46 schools and trained 3,314 children.

Table 8, Number of people receiving pedestrian training

Year (calendar)	2007	2008	2009
No. of participants	3,139	3,152	3,314

In order to try and encourage school children to cycle to and from school, Southwark offer free cycle training in schools to all primary school children (focused on year five and six pupils). The aim is to prepare and enable them to travel safely to secondary school and beyond. Southwark also offer cyclist training to secondary schools, although the uptake of this is low and this is an area for improvement as surveys show that the level of cycling falls away following the transition to secondary school.

Table 9, School cyclist training

Financial year	Children trained
2007/08	568
2008/09	540
2009/10	650

Since 2007, Southwark have increased funding and the amount of training delivered, but cycling, as a percentage modal split of those travelling to school, has remained static. This raises the question of whether we need to do more to allay parent's fears of perceived danger and vulnerability before they allow their children to cycle to school.

Cyclist training is offered free to anyone who lives, works, studies or visits the borough and this is advertised on Southwark's website, at all travel awareness events and recently through a targeted postcard distribution around the borough. The following table shows the increasing level of adults (over 14) who have received training. It should be noted that this increase has been delivered against a backdrop of increasing levels of funding.

Table 10, Adult cycle training

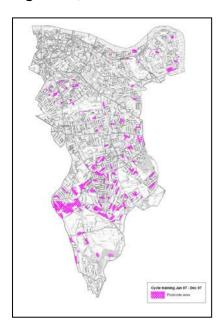
Financial year	Adults trained
2007/08	382
2008/09	387
2009/10	492

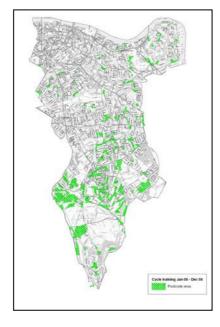
Despite the numbers receiving training, a recent survey conducted for the low carbon zone in Peckham showed most residents in that area (approximately 86%) were not aware there was free cyclist training available to them. Increasing people's awareness of cyclist training and encouraging more active travel amongst those who may benefit most from it, can only serve to improve the health and wellbeing of the borough.

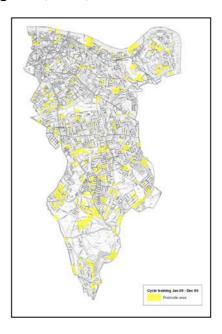
The council currently records the level of training delivered, but it is equally as important to understand the impact it has. For example, how many people start or continue to cycle regularly after receiving the training? Whilst this information is difficult to capture, we are committed to understand the benefits of cycle training to ensure that the council makes the best use of limited funds to get the maximum benefit in terms of more, safer cycling.

Traditionally, the council has focused on improving the physical infrastructure for cyclists, however through training we can provide people with life long skills. Therefore emphasis will be placed on developing people's skills over that of providing infrastructure.

Figure 17, Locations of those who have received cyclist training 2007, 2008, 2009







Where possible, Southwark promotes independent travel by sustainable transport for children and young people. There are 1,600 children with special educational needs in Southwark. Of these, 396 (in 2008/9) qualified for assisted travel to school. Overwhelmingly, the most popular choice of travel at the seven special schools is the dedicated school bus.

The independent travel training programme enables special needs students to make independent journeys. Travelling independently gives these students increased confidence as well as lifelong skills. The programme engages with these students in order to address their particular needs for travelling in the borough. Southwark officers train relevant members of staff who can then train their special needs students in independent travel.

A DVD has also been created for the parents of special needs students informing them of the training and encouraging them to ask their school to provide the training. We are currently exploring ways of involving students taking part in the Duke of Edinburgh award programme to help mentor younger students.

Consultation question

Our aim is to have 6% of all trips in the borough made by bike by 2026.

- The council currently offers free cycle training to those that live, work, study or visit the borough. Given financial pressures we face should we continue to provide free cycle training or should we charge or restrict who is able to access cycle training?
- Should we focus on groups who are more likely to cycle or should we engage with those who
 are less likely, but would enjoy greater health benefits from taking up cycling?
- In promoting cycling should we focus on improving cyclist skills or improving cycling infrastructure?

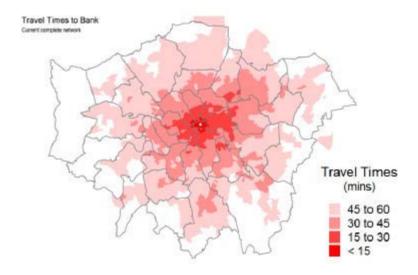
Objective 3: Ensure the transport system helps people to achieve their economic and social potential

Strategic policy 8, Supporting access to employment

Southwark's position to central London provides good access to the employment opportunities provided by the city however poor transport connectivity means that travel time for relatively short distances can be a disincentive to working in central London. The transport network within the borough also suffers from significant pressure due to the high level of demand for transport.

It is important that good access to jobs is supported to ensure that people can access a wide range of jobs within reasonable travel time.

Figure 18, Travel times to Bank station



The journey to work represents 20% of travel and it is important that we encourage people to consider sustainable travel when deciding on how they travel. It is possible that sustainable travel initiatives could be tied into the employment services outreach work carried out. For example when information is given to residents on accessing employment, information on local bus services, or cyclist training for adults could also be given.

One of the groups with higher than average levels of worklessness is the disabled. There is an opportunity to extend independent travel training currently offered to young people to adults with disabilities if travel is thought to be a barrier to accessing jobs.

Strategic policy 9, Supporting the local economy

Southwark's town centres represent the heart of local communities. They are places to meet, to shop and where many local residents work and spend leisure time. The success of the local economy is dependent on people wanting to visit and spend money, so people should be able to get to and move around these locations with ease. The reallocation of street space so that it is conducive to shopping and social activities can contribute to the viability of Southwark's town centres.

High levels of economic and social activity mean that competition for space in our town centres is high and that not all demands for this can be met. While these areas need to provide for essential servicing and delivery activity, vehicle access must be managed in order to provide adequate space for pedestrians and to reduce congestion.

In order to discourage trips by private cars, better access to more reliable public transport is required as are better walking and cycling links. Over 30% of all collisions in town centres involve pedestrians compared to under 20% for the whole of the borough. Tackling the source of this threat requires an increase in pedestrian priority in these areas combined with reductions in traffic volumes and speeds¹⁸.

The council's land use policies set the ambition for the borough's town centres, in particular Camberwell, Peckham, Canada Water, Bankside and Elephant and Castle, to be economically vibrant, lively, welcoming places. Where large scale regeneration is proposed it provides the opportunity to design out crime, improve accessibility and interchange and determine appropriate servicing and loading arrangements.

Away from town centres, local retail parades provide a key service for the community and have the potential to increase accessibility and reduce the need to travel as well as supporting wider social goals. The majority of trips to these locations can generally be made on foot or by bicycle and therefore these modes should be prioritised. Provision for motor vehicle access needs to reflect local circumstance and in particular consider how parking provision may support business viability and affect the travel choices people make.

Strategic policy 10, Supporting the local community

Local people will use their streets more than anyone else and the council supports approaches to enable local communities to lead and develop the way their streets should be managed.

The council has undertaken a large scale programme in the Salisbury Row area and is currently undertaking a trial of a small scale approach in Staffordshire Street. Local residents are invited to be actively involved in the design process and be willing to work together as a community. This approach is particularly suited to residential roads where there is greater scope to deliver change.

It is hoped that this trial helps to address local issues and contributes towards improving community cohesion. We also hope that by encouraging ownership of design proposals the local community will continue to take care of their street into the future, ensuring the quality, appearance and individuality of their street is maintained.

Consultation question

- Our town centres are busy places, providing jobs, supporting the local community, etc. Due to their busy nature, they often have higher levels of penalty charge notices being issued, bus delays and pedestrian collisions. Should we be prioritising improvements to our town centres above that of residential streets?
- The council supports approaches to enable local communities to lead and develop the way residential streets should be designed and managed. Do you want to be involved in what happens in your street?

¹⁸ This is taken from a sample of four town centres comprising, The Blue, Camberwell, Lordship Lane and Peckham.

Objective 4: Improve the health and wellbeing of all by making the borough a better place

People want to stay as healthy, active and as independent as possible. Health and wellbeing is at the top of most of our wish lists for ourselves and our families. Our ability to achieve and maintain these states will be determined by a number of factors including income, housing, environment, ability to get around and access the services we need, education and training.

Improving the public realm has the potential to bring communities and people together. This can also encourage physical activity and recreation, improve access to nature, restore a sense of pride in an area and attract businesses and jobs. A well designed streetscape is important to users but also in providing a sense of place, through its use, to the local community.

Strategic policy 11, Promoting healthy lives

The way people choose to travel can play an important role in leading a physically active and healthy lifestyle. Walking and cycling are very simple ways for people to incorporate more physical activity into their lives.

The level of adult physical activity has marginally increased between 2006 and 2009.

Table 11, Adult participation in 30minutes moderate intensity sport

	APS1 (Oct 2005 to Oct 2006)		APS2 (Oct 2007 to Oct 2008)		APS3 (Oct 2008 to Oct 2009)	
3 sessions a week	%	Base	%	Base	%	Base
Southwark	12.9	1,009	16.3	503	19.1	504

Walking is the perfect exercise; it costs nothing and requires no special equipment or facility. Walking has enormous health benefits such as reduced risk of heart disease, stroke, osteoporosis, diabetes, high blood pressure and some cancers, especially colon. Any form of exercise, including walking, also increases levels of endorphins and feelings of well being.

Walking for pleasure is intrinsically linked to purpose driven walking. Southwark provides led walks in the borough. These involve an individual, trained by the community outreach team, walking a group of people round an area in the borough, for example on a riverside walk or a walk in Dulwich Park. This introduces people to walking, whether for leisure or just for building confidence in travelling by foot. By encouraging people to walk for fun we can influence the way they view walking as a viable travel option, whilst opening people's eyes to local walking routes.

There is ample opportunity for recreational walking in Southwark our position adjacent the Thames alongside our many parks and greens spaces such as Burgess Park, Dulwich Park, Southwark Park and Peckham Rye provide a pleasant and convenient walking environment. The borough supports the Jubilee path, Thames Path, the green chain walk and Surrey Canal path to name a few.

In Southwark the proportion of children in reception year classified as obese is among the highest in England and in 2010 39.8% of reception class children and 40.2% of year 6 children were overweight or obese. Promoting activity and active travel to children will not only improve their health and well being but will give them a sense of independence and increased knowledge of the local community.

Strategic policy 12, Streets for sharing

Our streets need to accommodate many different activities. Most act as a route from A to B in one way or another, but the road network is also a setting for many other activities, from shopping and socialising to exercise and play. Understanding how people use streets is also critical to deciding how to allocate limited space between different road users, to reduce conflict and to promote understanding and tolerance between different user groups.

Some streets also have a different role to play at different times of the day. For example, market areas are often closed to vehicles during market times, but operate as normal streets the rest of the time. The way people use these streets will vary accordingly and our approach to street design and management needs to take this into account. This is discussed in further detail within the council's draft streetscape design manual.

As well as different activities, there are different users to consider. The council's road user hierarchy discussed on page 63, reflects our understanding of the needs of different users and emphasises the need to provide for the most vulnerable. Understanding how different groups use streets is central to understanding how they will interact with each other and how this can be provided for.

One of the key questions we face is how far to separate different users from one another. There will always be occasions when road space is shared; pedestrians will always need to cross the road. The answer to this question must be based not only on an assessment of current conditions, but also on our understanding of how people respond to and affect their environment.

Considering cycling, there is the question of whether we should provide a separate, protected environment for cyclists. This can be a heated topic, with strong views for and against, and it is important that decisions are based on the needs and wishes of cyclists and potential cyclists. We must make a decision on how road users interact including how comfortably cyclists will be able to share the road with other vehicles and whether road users would benefit from separate provision, assuming this is achievable.

Developing our understanding of user behaviour can help us design and deliver street environments that balance the needs of different users according to specific local factors and promote safer and more attractive roads. A user centred approach will help us deliver this goal.

As an example, the Walworth Road project has removed bus lanes to allow us to widen the footway, provided dedicated loading facilities and removed pedestrian railings. Carefully studying how well such spaces work will help ensure any future such proposals meet the needs of all those who use them.

What are 'shared spaces' or 'shared surfaces'

The first is a broad concept about the way different users interact with each other; the second is a design approach where kerbs are removed between the footway and the carriageway in order to encourage user interaction.

The council is inviting the community's views on our approach to shared spaces and shared surfaces, being mindful of our obligation to protect the vulnerable and those with particular mobility needs including those with visual impairments.

Strategic policy 13, Greening our streets

Street trees and landscaping provide an important function in our streetscape, improving the way streets look and making the environment more pleasant for pedestrians. Trees and vegetation provide shading and cooling, help to mitigate climate change, improve local amenity, mask some traffic noise and can act as a form of traffic calming. By intercepting rain and reducing heavy run off, they can reduce flood risk. Well chosen trees can also contribute to biodiversity in terms of habitat and food.

At times it can be necessary to remove a tree, for reasons of safety and integrity, both of the highway and buildings. The council aims to maintain its tree stock by replacing lost trees. However tree replacement will be assessed on an individual basis and using the principle of 'right place, right tree'.¹⁹.

Table 12, Replacement and new street trees on the highway in Southwark

	2006/07	2007/08	2008/09	2009/10
Replacement street trees	523	433	271	215
New street trees	100	56	201	345

When planting or maintaining Southwark's trees we ensure that they do not detrimentally affect street lighting levels and that root guards are installed to remove rising tree root which can create difficulties for pedestrians.

Strategic policy 14, Reducing the impact of noise from transport

The impact of noise from transport such as noise from busy roads or aircraft can have a detrimental impact on people's health and wellbeing. The Department for Environment, Food and Rural Affairs has recently produced noise maps and action plans. The action plans identify the most critical areas, those with noise over a certain level, which are designated as areas of first priority. London contains many areas of first priority including some located in Southwark²⁰.

Through the council's land use policies we promote the improved planning of new developments. This coupled with the better management of transport systems can have a positive effect in reducing noise impact. However it should be noted that in many areas (red routes, rail services and aircraft) the council has limited ability to control these noise generators.

Most of the borough is flown over by aircraft going to and from City and Heathrow airports. The noise caused by these aircrafts is particularly noticeable and more disturbing at night. The council strongly objects to the proposal for a third runway at Heathrow on the grounds of noise, air quality, the impact on health and the contribution to increased CO_2 emissions.

¹⁹ Southwark Tree Strategy 2010, paragraph 4.2.3

²⁰http://www.defra.gov.uk/environment/quality/noise/environment/documents/actionplan/firstpriority/london-agglomeration-south-east.pdf

Southwark is on the flight path for City and Heathrow airports, therefore the council would be concerned were there to be any changes to flight paths which may have a detrimental impact on noise quality in the borough. Any growth in air traffic would lead to an increase in noise and changes to flight paths could change those locations affected by aircraft noise.

Consultation question

• Do you support streetscapes where there is no kerb between the carriageway and footway?

Objective 5: Ensure the transport network is safe and secure for all and improve perceptions of safety

Strategic policy 15, Improve safety on our roads

Southwark Council is committed to safer travel in the borough in order to reduce the potential for road user casualties and to reduce casualty severity. Road collisions have serious and often devastating effects for those involved, their families and their friends. People should be able to travel safely and without fear to the places where they live, work, shop, study and spend their leisure time. The council seeks to achieve measurable reductions in road casualties and to help make all modes of transport safer and more accessible. Recent years have seen record levels of investment in Southwark for improvements to road user safety. Such measures include better facilities for vulnerable road users, training to improve road user behaviour and initiatives to improve our children's safety on the roads.

Figure 19, Collision and casualty trends in Southwark 1

1702 Number of casualties <u>1143</u> ■ All casualties 1994-Year (3yr averages)

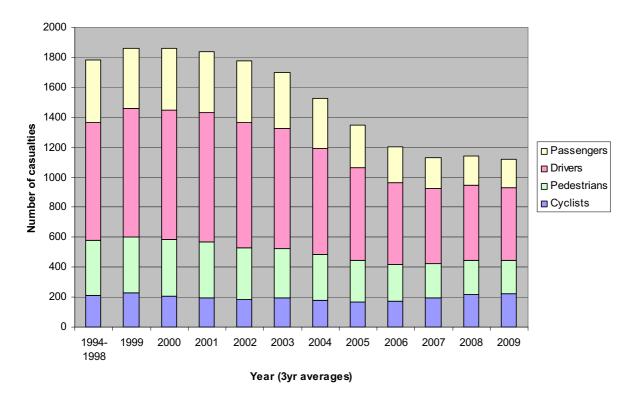
Casualty totals

Around 60% of all collisions in Southwark occur on the busier roads like Borough High Street and the Old Kent Road. In the most recent 3 year period 47% of all collisions in Southwark occurred on the TLRN.

Busy roads play an important role in the distribution of traffic but this should not be at the expense of safety. They are essential for the servicing of our town centres and for the supply of goods and services. The majority of buses also travel on these roads and often run through town centres, where we see higher concentrations of road users and a higher risk of conflict.

Figure 20, Collision and casualty trends in Southwark 2

Breakdown of casualty totals



Unfortunately injuries to cyclists have increased for the fourth year running. This is a major concern for the council, but should be viewed in the context of the rising number of people that have taken up cycling. Of all people injured on Southwark's roads, 20% are cyclists and a large proportion of these are male and aged between 25 and 59.

Most cyclist collisions (77%) occur between 7am and 7pm and of these around two thirds occur in the morning and evening peak. When comparing the percentages of collisions with the percentages of cyclists at a typical commuter cyclist location such as Tooley Street, it can be seen they are very similar. Therefore it is likely that the collisions are proportional to the levels of commuter cyclists. This is reinforced by figure 20 which shows that the majority of cyclist collisions occur on main roads.

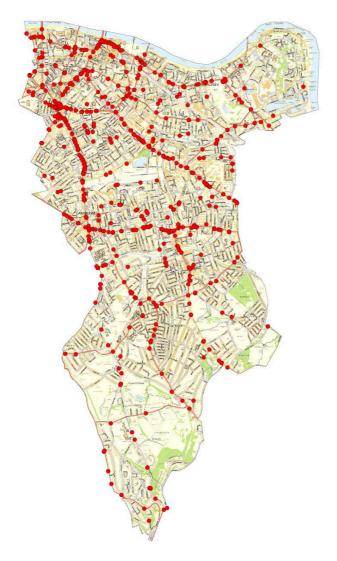
Commuter cyclists therefore form the majority of cyclists that travel to, from and within the borough and so will be targeted in borough road safety campaigns.

Table 13, Percentage of cyclists and cyclist collisions by time of day

Time	% of cyclists	% of collisions
07:00 - 08:00	8.4	8.1
08:00 - 09:00	16.8	17.2
09:00 - 10:00	10.4	10.4
10:00 - 11:00	4.4	5.0
11:00 - 12:00	4.8	5.2

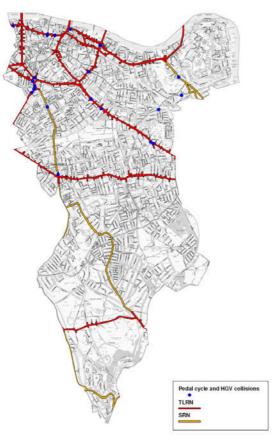
12:00 - 13:00	5.2	5.4
13:00 - 14:00	5.8	4.6
14:00 - 15:00	5.4	4.4
15:00 - 16:00	5.9	6.8
16:00 - 17:00	7.1	8.7
17:00 - 18:00	11.6	10.4
18:00 - 19:00	14.3	13.7
07:00 - 19:00	100.0	100.0

Figure 21, Locations of cyclist collisions



The following figure shows that collisions involving cyclists and Heavy Goods Vehicles (HGV) (over 7.5T) generally occur on the TLRN and the SRN, although there are a few exceptions to this.

Figure 22, Heavy goods vehicles and cyclist collisions



Pedestrians make up 20% of all casualties on our roads and the majority of these are aged 25 to 59. Sadly, collisions involving pedestrians tend to be more severe than other modes and 50% of people killed on London roads are pedestrians. Many of these collisions are located on busy roads and/or in town centres.

Figure 23, Locations of pedestrian collisions



Strategic policy 16, Improving road user behaviour

The way that people behave on the roads ultimately determines their safety and that of others. Recent research by the RAC suggests that the way people now drive has changed over the last 30 years and that road rage and aggressive driving is now more prevalent than ever. The danger of being involved in a collision increases with driver/rider distraction or inattention although ultimately, reducing speed is the crucial element in reducing the impacts of collisions.

Among behavioural factors, inappropriate speed is a primary concern for the council; not only can excessive speed cost lives, but it can also make for unpleasant, intimidating streets that act as psychological as well as physical barriers to movement. Most collisions in Southwark occur on busy roads and at junctions on roads where the speed limit is 30mph. Areas in the borough with lower speed limits, however, typically have lower collision rates when compared nationally and the council will continue to review existing speed limits with this in mind.

Across the borough the speed limit is habitually broken. Even driving at the designated speed limit can be inappropriate at times, especially when there is poor visibility. As a rule, 30 mph cannot be considered an inherently safe speed when more than four out of ten pedestrians hit by a vehicle travelling at that speed will die as a result. As well as working to reduce inappropriate speed through engineering measures, the council will work with the police to target speeding offences and also work to change attitudes among drivers and the wider public.

The council's core approach to reducing road danger is to reduce vehicle speeds and this has been pursued through the introduction of 20mph zones and limits across the borough. The intention is that the default maximum traffic speed in the borough be 20mph, with any streets with higher maximum speeds being the exception to this rule. The council will continue to pursue this policy through the introduction of a variety of targeted measures that address the real issues rather than just addressing the regulations. In practice, this could mean introducing a raised pedestrian crossing, junction or side road entry where there are known safety issues. It also means looking at other options to achieve speed reduction, such as carriageway narrowing and the use of average speed cameras (once these become more widely available).

Vehicles are not only a source of danger when they are being driven or ridden too fast but they are also a danger when they are driven or ridden carelessly, without consideration for other road users and especially when they are being controlled by people under the influence of drink or drugs. Other road users may, of course, increase the level of danger to themselves by not taking care and being unaware of others. Pedestrians impaired by alcohol are amongst one of the higher at risk groups involved in road crashes and make up a noticeable percentage of all pedestrian casualties in Southwark.

Some concepts of driver behaviour are generally understood to be unacceptable, such as drinking and driving, although that message has to be constantly reinforced. The need to keep vehicle speed down is not so widely understood and supported. Indeed, enforcing speed controls is sometimes portrayed as persecution of motorists and simply an excuse to raise revenue through fines. Less than 2% of all reported collisions in Southwark involve a driver/rider impaired by alcohol, while about one third of all collisions involve someone who was speeding or driving too fast for the conditions. A significant shift in the way that people perceive speed can only be achieved through a combination of measures.

The council fleet is one of the largest in the borough. Driver safety and education is very important and as a fleet manager the council hopes to set an example of a safe and efficient fleet.

Five vehicles within Southwark's fleet have had Intelligence Speed Adaptation (ISA) fitted to them. This system provides, within the vehicle, information on the speed limit for the road currently being travelled on. That information can be used to display the current speed limit inside the vehicle and can be linked to engine and brakes without the possibility of an override.

Strategic policy 17, Improving skills and building confidence in using the roads

The council is working closely with schools, the community and partners to deliver a coordinated package of measures to help educate and inform the public. We hope that this will create a step change towards safer behaviour for all road users and help us succeed in reducing road casualties. The sort of work that the council are involved in includes

- Developing a dedicated road safety website containing information and downloadable resources
- Road safety theatre delivered to the elderly and schools
- Campaigns including fitting child seats, drinking and driving and HGV/cyclists
- The council has been involved in some innovative projects such as working with children with learning disabilities for more tailored and specialised pedestrian training
- A road safety DVD has been produced in conjunction with young people from deprived communities

Road safety events engage with a variety of road users, helping them to be aware of each other's vulnerabilities and improve safety on the roads. In terms of value for money, a comprehensive programme can be delivered for less when compared to the growing costs of physical interventions, such as 20mph zones. With this in mind, the council will continue to deliver a coordinated package of training and publicity measures.

The council is addressing the potential for conflict between cyclists and heavy goods vehicles (HGVs) at junctions and undertakes publicity campaigns at routes used heavily by HGVs to educate both cyclists and drivers. HGV and cyclist events involve putting HGV drivers on a bicycle and cyclists in the seat of an HGV. Police officers go out to designated areas in the borough and invite cyclists to join them in the cab of a lorry. They then cycle along the side of the lorry and position themselves in front of the lorry, highlighting to the cyclist the visibility from inside the cab.

Awareness training with the council's own fleet of vehicles has recently been introduced. The council are also involved in training TfL bus driver trainers to raise awareness to the specific needs of cyclists.

The council runs a programme of road safety theatre to deliver a targeted message which is reviewed and updated regularly. Theatre events are held regularly and are aimed at the elderly and children.

Strategic policy 18, Improving safety, security and perceptions of safety

Every one deserves to feel safe travelling whether that is walking to shops or on the public transport network. Creating and maintaining a safe environment is extremely important as people who live in, work in or visit the borough have a right to expect that they can move about without unreasonable concern for their safety. Inconsiderate and antisocial behaviour can have a significant impact on people's perceptions of safety and on their journey experience and can create a sense of unease and increased fear of crime.

Southwark is well served by buses and a large proportion of children and young people already use them to travel to and from school or college. This is aided by the high percentage (90%) able to walk to their nearest bus stop within 6 minutes²¹. At times behaviour during school finishing times could be improved; a number of schools are proactive in managing this issue. Many students are eligible for free bus travel; passengers must act sensibly and lawfully and if they do not do so TfL may remove their Oyster photocard, meaning they will no longer be eligible for free bus travel.

Community warden schemes provide a highly visible, reassuring presence, which helps to reduce crime and anti social behaviour. The wardens also tackle anti social behaviour through education and working closely with the community, officers from the council, the Metropolitan Police and the London Fire Brigade to create a safer borough.

Recent studies have looked at the ways that road users interact with their environment and how the design of the public realm can promote better behaviour and safer roads. By creating a quality street environment and improving the way a place feels, a positive shift towards safer roads can be made.

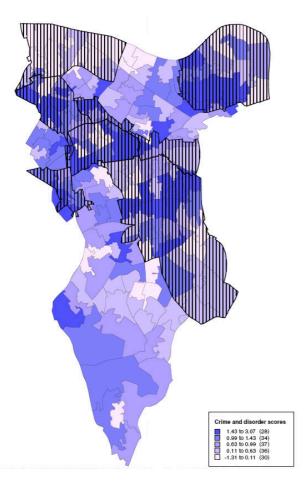
The presence of more pedestrians and cyclists can also have a large impact on the perceptions of drivers/riders and influence them to reduce their speeds. This means that building an environment which facilitates and encourages these activities can have a positive impact on road safety for all users. The council is therefore committed to creating and maintaining high quality street environments which people can enjoy and where they can travel in comfort.

The following figure shows the areas of opportunity as identified in the local development framework where significant regeneration is taking place. This regeneration enables the borough to design out crime when developing the highway network and public space.

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²¹ Office for National Statistics/Department for Transport National Travel Strategy 2007, Interview Data

Figure 24, Development areas and indices of deprivation (crime)



The council is committed to reviewing the provision of pedestrian guard railing as opportunities arise. When assessing the safety benefits of such railing, the potential benefit to pedestrians on the footway must be weighed against any negative impacts to vulnerable road users on the carriageway. Guard railing was originally conceived to protect pedestrians from motor vehicles. More recent thinking questions whether the extensive use of barriers between the carriageway and the footway may result in an increase in vehicle speeds and lead to pedestrians crossing the road in difficult locations.

Consultation question

• Speed reduction is strongly linked to reducing the impacts of collisions. Should Southwark be a 20mph borough?

Objective 6: Improve travel opportunities and maximise independence for all

When people travel they want the journey to be convenient, safe and as short as possible; accessibility holds the key factor to achieving this. If the destination, transport mode or environment is perceived to be inaccessible it may deter all of the community from using it. Southwark seeks to improve the streetscape and provide a seamless journey to make the borough fully accessible for all.

We have a diverse community who deserve to be able to access the public transport system and feel safe and secure when doing so. Travelling in London can be difficult especially for those with disabilities or mobility impairments. Being a disabled²², mobility impaired or elderly person can inhibit everyday activities and, from a transport perspective, can prevent travelling in the same way that a mobile person does. 53,500 (20%) of people living in Southwark said they had health problems with 25% of households containing at least one member with a health problem²³. This includes 18,030 people with long term illness, disability or infirmity. 690 were wheelchair users and 4,460 had other walking or mobility difficulties. 4,470 had difficulties due to old age or frailty.

The council consulted the authorities Equality and Diversity Panel who have highlighted the following issues for consideration;

- Disabled people may have less disposable income and therefore are more likely to depend on public transport
- In addition to transport being made accessible, the attitude of drivers and fellow passengers should be more welcoming too. It is no good in having a freedom pass if you are intimidated by the prospect of using it
- Investment in mobility training is helpful in order to help build the strength and confidence to travel alone. This is particularly important as more sport, leisure and recreational facilities are accessible to the disabled

Overall satisfaction levels with pavements and footpaths have been found to be high (8th out of 95 local authorities surveyed in the 2010 NHT survey). The council also ranked highly for ease of access to key services for those without a car (6th out of 95 local authorities surveyed). However there is much need for improvement for those with disabilities and their ease of access to key services (68th out of 95)²⁴.

It is recognised that accessibility improvements can benefit the entire community, including the elderly, people with dependants, parents with young children, disabled or the mobility impaired. The level of accessibility of the transport network is key for access to local services, jobs, social and recreational facilities. Increasing the level of accessibility to public transport is also essential in helping to improve access to jobs.

²² According to the Disability Discrimination Act 1995 a disabled person is defined as someone 'who has a physical or mental impairment which has a substantial and long-term adverse effect on his ability to carry out normal day to day activities.'

²³ Southwark Housing Requirements Study

²⁴ The 2010 NHT Network Public Satisfaction survey which identifies what the public think about issues such as accessibility, public transport, walking and cycling, congestion, road safety and highway maintenance/ enforcement. This was the first year that the council has taken part in this survey.

Strategic policy 19, Increase accessibility for all

Southwark Council values diversity and aims to improve life chances and help people to become active citizens, whilst making the borough a better place by providing an accessible public realm. The borough has the potential to be a very convenient place to live with job opportunities, leisure, educational and community facilities all close at hand.

Getting around the borough is not always as easy as it could be. Pavements, parks and other public places often have obstacles and hazards which make life difficult for everyone but particularly those with impaired mobility. Examples of barriers include unnecessary street clutter, uneven paving, restricted crossing opportunities, lack of bus stop improvements, poor lighting and signage, no available seating and badly placed landscaping.

Over the last few years there have been many improvements to accessibility. Some examples include dropped kerbs and tactile indicators at road junctions and pedestrian crossings, wheelchair accessible buses and black cabs and disabled persons parking bays. All controlled junctions and pedestrian crossings in Southwark conform to the current standards providing tactile footway indicators, audible green man tone and spinning tactile cone below the push button. The council provides a rapid response to repair or safeguard a damaged pavement that reduces accessibility or is a potential danger as trip hazard as identified in the emerging Highway Asset Management Plan.

Further opportunities often exist to improve accessibility and permeability of public spaces through measures to remove barriers to access.

Pavements can be blocked as a result of businesses placing advertising signs or displaying items for sale. Enforcement action is taken by the council to prevent advertising "A" boards and other pavement obstructions that cause difficulty for pedestrians, particularly blind and partially sighted people. This can be a persistent problem that often requires repeated action to be taken. We must keep investigating ways of keeping the pavement free of unnecessary clutter.

Not all of the signalised crossings in the borough currently have a pedestrian 'green man' phase. To reinforce Southwark's road user hierarchy that recognises the primary importance of pedestrians, work is being carried out to review signal timings at junctions. This is to establish where pedestrian phases are required and whether it is feasible to introduce them. These improvements may include works to provide additional crossing time, improved directional choice or controlled pedestrian facilities.

Southwark is keen to remove unnecessary guard railing where this does not compromise safety, and will carry out guard rail assessments prior to any removal. Pedestrian guard rail can be a barrier to movement which can discourage walking and its removal can reduce community severance, improve the visual environment and make streets more accessible for all.

There is an increasing use of electrically powered personal mobility vehicles. These are either power chairs or the larger scooter type vehicles. Both serve the same function but it is generally not possible to take scooters on public transport. The users of these vehicles would benefit from a fully accessible public realm. In addition to using the pavements personal mobility vehicles are able to use the cycle path network.

A recent initiative has seen the council working together with schools and colleges to provide independent travel training to help support students in the borough with physical disabilities and special educational needs. This helps them to live as independently as possible and to take part in everyday activities, as well as giving them greater freedom with less reliance on friends and family.

Strategic policy 20, Improve the accessibility of public transport

There is evidence that car use reduces as access to public transport increases. The coverage and accessibility of public transport varies significantly across the borough as identified through the relative Public Transport Accessibility Levels(PTALs). PTALs assess the level of service, walk and wait times to produce indices of accessibility to the public transport network. PTALs for the borough are shown in figure 3.

When considering changes to improve the public realm or public transport network it is essential these gaps are addressed and service patterns suit the needs of our residents. While the council does not have control over the operation of public transport in the borough, Southwark works closely with regional bodies and transport operators in order to maximise the benefits provided by public transport services in the area.

Transport services will continue to need improving to meet the needs of all including those with mobility restrictions. Some things just need minor adjustment whilst other improvements need major investment which needs to be planned over the long term.

The borough has a good record of providing bus stops which are fully accessible. The vast majority of the 578 bus stops in the borough are now fully accessible. We will continue to ensure that any remaining bus stops on borough roads be made fully accessible where this is possible. It may be the case that due to issues such as gradient, a handful of stops may not be able to be brought up to standard.

It is acknowledged that constraints of the existing built environment prevent the rail system being fully accessible in the near future. Whilst the borough would like to see all stations made fully accessible the infrastructure and funding constraints are recognised. Provision of fully accessible interchanges will improve travel opportunities for many members of the community who may otherwise be excluded. The majority of Southwark's bus stops now meet accessibility requirements, but this is not the case at several rail stations including key interchanges such as Peckham Rye.

However, a targeted programme of improvements to key locations is underway. The council works with Network Rail and the train operating companies to encourage access improvements. Denmark Hill station has undergone significant access improvements in advance of the works Network Rail will shortly carry out to install lifts, making the station fully accessible to all. This station is even more important because of the access it provides to Kings College Hospital and Maudsley Hospital.

The Jubilee line runs through the northern part of the borough and all of these stations are wheelchair accessible. It is our aim to ensure that the public realm environments surrounding these stations are also accessible to all. Efforts should be focussed on improving access around and to stations that are fully accessible.

Strategic policy 21, Supporting independence by providing appropriate parking

Parking will always be a challenge in an inner city borough. For disabled people, who rely on their own cars, it can crucially affect their ability to work and have a social life. The council therefore recognises the importance of providing appropriate parking places at the origins and destinations of journeys made by people with disabilities.

The council will install a home parking bay (origin bay) to assist a resident with mobility difficulty if traffic and road conditions allow. Disabled persons parking bays must also be available in centres of commercial activity and convenient for places of culture, entertainment and leisure (destination bays). These bays can have maximum stay placed upon them to encourage turn over of space and discourage all day disabled parking that may prevent other visitors using the bay. Through the planning process, we ensure that disabled persons parking places are included in all new developments.

Strategic policy 22, Working with our partners to support independence

TfL regulates taxi and private hire trade in London and ensures that all 20,000 black cabs are accessible for wheelchair users.

Southwark has a thriving community transport service operated by LaSCoT (Lambeth and Southwark Community Transport). It provides safe, low cost, accessible minibus transport for a wide range of community organisations, from under fives groups to over 60s clubs, faith groups, sports clubs and disability groups. The vehicles can be provided on a self drive basis, with accredited training provided to community group members to drive them safely or they can be provided with a driver. Vehicles can be used from as little as an hour to a number of days, enabling the vehicle use to be maximised.

Dial a Ride provides door to door transport in tail lift equipped vehicles for people who are unable to use public transport. The service is operated by TfL. Taxicard is a scheme of subsidised taxi travel jointly funded by Southwark Council and the Mayor of London. Capital Call is a complementary scheme to Taxicard, funded by the Mayor of London. It enables people with disabilities to use subsidised licensed minicab transport in eleven London boroughs, where there is a shortage of black cabs. Capital Call is available to all registered Taxicard users in Southwark and enables them to book trips up to a total value of £200 annually. Users contribute £1.50 per trip, for trips up to £11.80 in value.

Consultation question

Should the council support mobility scooters being driven on the pavement?

Objective 7: Ensure that the quality, efficiency and reliability of the highway network is maintained

Ensuring our highway network is fit for purpose is one of the borough's greatest challenges and responsibilities. The highway has many functions from moving people and goods, to supporting the local economy through servicing, parking and hosting street markets.

The road network can be divided into three categories

Transport for London Road Network (TLRN); classified A roads that are owned and managed by TfL. These are often delineated by red markings on the road edge and are commonly known as 'red routes'. The red route network carries a third of all traffic in London and is managed by TfL rather than the boroughs.

Principal roads; there are approximately 31km of principal roads in the borough. These roads carry significant levels of traffic and are classified A routes and busy bus routes. They provide links to the TLRN for journeys between boroughs and access to town centres.

Non principal roads or borough roads; the boroughs non principal road network consists of 317km of road. These roads are primarily used as distributor roads for bus routes and heavy goods vehicle routes, as well as for local journeys.

In addition to these categories, there is the Strategic Road Network which forms part of overall network management programme with the additional requirement to gain the appropriate approvals from TfL for changes to the network.

Southwark is committed to maintaining and improving the existing road network within Southwark, whether it be the TLRN or the borough road network and making the best use of it through careful management and considered improvements. This continued management, maintenance and improvement underpins the successful delivery of the council's ambitions of improving transport in Southwark.

Strategic policy 23, How we manage the use of our roads

Southwark's network is diverse both in its usage and complexity, supporting central London activities to the north of the borough and the suburban area to the south. There is a finite amount of road space available on our roads and in managing the needs of users the council must consider how best to use this space. The council has developed three hierarchies including the road user hierarchy, the road hierarchy and the parking hierarchy to assist in balancing the, at times, competing demands on the road network.

The road user hierarchy was established in Southwark's Lip (2006) and assists us in considering the needs and experiences of all road users, the street space they utilise and the need for improving the environment for our residents. Since the introduction of the road user hierarchy we have come to the conclusion that the need to support the economy and the business community is of increased importance and therefore the needs of freight and distribution is placed higher within the hierarchy.

The revised road user hierarchy is

Pedestrians		
Cyclists		
Public transport and community transport		
Freight vehicles		
Taxis		
Powered two wheelers (PTWs)		
Private cars		

The road user hierarchy is not about one group's interests dominating another's but should be utilised as a guide in striking the balance between the different users. For example, in the choice of benefiting 100 pedestrians and disbenefiting 100 cyclists or 100 motorists you choose to benefit the pedestrians.

Complementing the road user hierarchy, all roads in Southwark are categorised in the road hierarchy, which reflects their purpose, level of importance for traffic movement within and through the borough and role within the overall road network.

- TLRN, classified A roads owned and managed by TfL
- Borough principal road network, classified A roads and busy bus routes, these roads provide links to the TLRN for journeys between boroughs and access to town centres
- Non principal B roads, roads primarily used as distributor roads for buses and heavy goods vehicles and for local journeys
- Non principal C roads, local distributor roads for movement within the borough between B distributor roads and the principal roads
- Unclassified local roads, all other roads in the borough with a local function including access to adjacent land
- Strategic Road Network, management of the strategic road network forms part of overall network management programme with the additional requirement to gain the appropriate approvals from TfL

Vehicles should travel on roads appropriate to their purpose; local residential roads are not to be used as distribution routes and the council will continue to work to identify rat running and provide measures to prevent it where possible. In recognition of the need to update our road classifications, the council will be undertaking an assessment of the road classification to determine the appropriate classification for roads within the borough.

The third hierarchy specifically focuses on road space and its use to support parking. The hierarchy prioritises the needs of the local community over those driving into local areas as well as provision for essential and sustainable vehicles over private motor vehicles.

Table 14, The parking hierarchy

	Local disabled resident parking need (parking at origin)
	Non local disabled parking need (parking at destination)
	Car share and car club bays
	Local resident parking
Road users	Building contractors, appliance repair and other tradesman services
	Essential worker in the delivery of public service and carers
	Local business essential parking/servicing need
	Short stay shopper/visitor parking need
	Long stay shopper/visitor parking need
	Long stay commuter parking need
	Emergency vehicle
	Cycle
	Bus
Vehicle type	Public service vehicle including managed levels of short term coach parking
vernicle type	Taxi
	Shared/pool car
	Cleaner/greener private car
	Private car and powered two wheeler

Strategic policy 24, Managing the network

The council's emerging Network Management Policy (NMP) will provide more detail on how we manage the transport network and traffic that uses the highway network and use the assets that comprise the highway network. This plan will consider the causes of congestion and other disruptions to traffic movement on its road network both current and future and consider possible actions or mitigation.

Southwark has a high level of bus patronage and buses in Southwark are generally reliable, and rarely suffer significant delays. It is therefore crucial that this level of service is kept and the council will continue to lobby TfL London buses to improve bus service frequencies, journey times and reliability on the borough's increasingly crowded bus network. The borough will also prioritise measures in areas that experience delays.

Temporary road works not only have the potential to cause inconvenience by disrupting traffic flows, they can potentially be a risk for certain road users such as pedestrians and cyclists.

Whilst the council has a duty to coordinate all temporary works, where private contractors are involved responsibility to ensure such sites are safe rests with the companies carrying out the works. The council works actively with such companies to ensure sites are safe and works completed without undue delay with adequate provision made for the needs of all road users.

In 2009 Southwark signed up to the London Permit Scheme. This pan London system gives authorities greater powers to regulate and monitor works on the highway. Utility companies/contractors that wish to

carry out an activity in a road or street must obtain a permit. This will only allow the company to carry out works:

- At a specified location
- Between the dates shown and duration shown
- In accordance with specific conditions

Utility companies and the council's own internal contractors must seek approval to undertake works through a formal permitting arrangement.

When works are undertaken current legislation only permits the council to inspect a random 10% sample of such sites, though if a potentially unsafe site is brought to the council's attention it is fully investigated to guarantee remedial measures are taken where necessary. This ensures works are undertaken with the minimum of disruption and to the highest possible safety standards.

Southwark has designated the roads shown in the following figure as traffic sensitive. On these roads it is thought that roadworks would be likely to cause serious disruption or unacceptable delays. If a road is designated as traffic sensitive we can impose working times and conditions on anyone working on the highway, so as to direct and coordinate works effectively. These restrictions may be to limit works to certain times of the day, days of the week or even days of the year.

Figure 25, Traffic sensitive routes



Strategic policy 25, Keeping the highway in a good state of repair

Everyone who travels in Southwark is affected by the condition of the road network at some stage of their journey. The council's emerging Highway Asset Management Plan (HAMP) is being developed so that the limited resources available can be used most effectively to keep our assets in a good state of repair. As well as the structure and surface of the roads themselves the plan includes all street furniture, lighting, signs and markings. These help people travel safely and find their way around so it is of the utmost importance that all elements are maintained in a good order. For example, yellow lines and parking restrictions contribute to protecting other road users by designating where it is and is not safe for vehicles to be.

Reactive maintenance is carried out in response to ad hoc inspections arising from reports to the council or from other reporting. Such defect repairs tend to be small in nature and implemented within 24 hours for emergency work (when an issue of safety or potential hazard to property has been identified) or 28 days for lesser defects.

Each year, the council surveys and inspects the roads in the borough, including lighting and street furniture, and provides maintenance programmes for servicing, cleaning and repairs. The inspections form part of the selection criteria for identifying which roads should be prioritised for improvement.

The forward planning and targeting of investment in the highway network is crucial in minimising whole life costs. The average life (as generally accepted) for each asset within the highway network needs to be considered.

Table 15, The average life expected from each asset type in the highway network

Asset	Average life of asset
Carriageway	25 years
Footway	30 years
Street lighting	25 years
Highway structures	Dependent on type and age of structure
Highway surface water drainage	Dependent on type and age of system
Street furniture	30 years

For annual investment in each asset item it is essential that the selection of individual schemes (or asset item being replaced) is made on the basis of need, i.e. the condition of the asset. The UK Pavement Management System is the national standard for the assessment of local road network condition and for the planning of investment and maintenance on paved areas of roads, kerbs, footways and cycle tracks on local roads within the UK. A strict prioritisation process ensures that the asset with the worst condition is selected first for renewal.

When carrying out any major improvements the council will remove trip hazards, install dropped kerbs where needed and ensure that levels of lighting on the road are to a safe high standard. This benefits all road users and makes an important contribution to achieving our road casualty reduction targets.

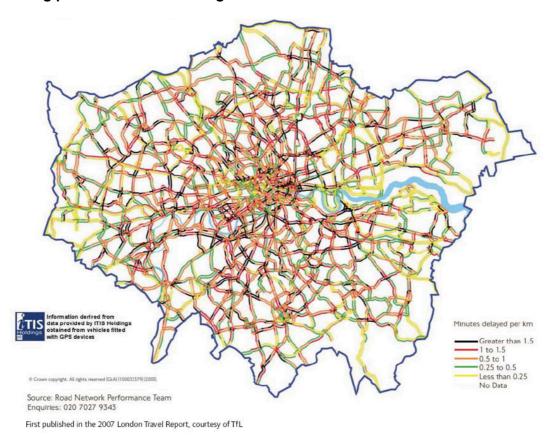
Before each winter a Winter Maintenance Plan is produced setting out the winter maintenance procedures and policies. Following the 2008 and 2009 winter periods and general concerns about national winter maintenance activities the forward planning and investment for winter maintenance in Southwark Council is to be reviewed.

Strategic policy 26, Manage traffic

Southwark's highway network carries a substantial volume of traffic, particularly in the peak hours. The highest daily traffic flows generally occur in the northern section of the borough on roads such as the inner ring road comprised of Kennington Lane, the Elephant and Castle, New Kent Road and Tower Bridge Road, Old Kent Road, Jamaica Road and the Rotherhithe tunnel and Blackfriars Road and London Bridge. Although these roads are all part of the TLRN, the council remains reliant upon these key roads to facilitate and distribute traffic.

This high demand means that sections of the borough experience significant congestion .The borough experiences delay in key areas including access to the Rotherhithe Tunnel, Tower Bridge, Peckham High Street and Old Kent Road.

Figure 26, Morning peak road network congestion²⁵



²⁵ Excess delay is calculated by comparing average traffic speeds recorded on roads on TfL's Network of Interest (NOI) during the time period in question with overnight speeds, which are assumed to be unconstrained by other vehicles. The difference between the two averages is the excess delay brought about by traffic congestion during the time period in question, expressed in terms of minutes per km.

Road congestion leads to delay, poor reliability and low network resilience. Poor reliability and predictability of journey times means those who use the road network have to allow significantly longer for their journeys to ensure they reach their destination on time. As pressure grows on the highway network traffic conditions will continue to present a challenge in maintaining reliability.

Journey time reliability is a key concern of road users. Journey time reliability is defined as the proportion of traffic which, for a 'typical' 30-minute journey, takes less than 35 minutes (a representative average journey time of 30 minutes plus a five minute 'allowance').

The following table shows equivalent delay data for inner London boroughs, comparing two recent years²⁶. The table compares both speeds and delays across three time periods of the working day (morning peak, inter peak and afternoon peak). This shows that Southwark experienced increases in delay in comparison to other inner London authorities in the interpeak and evening, possibly due to the level of construction and utility works during this period.

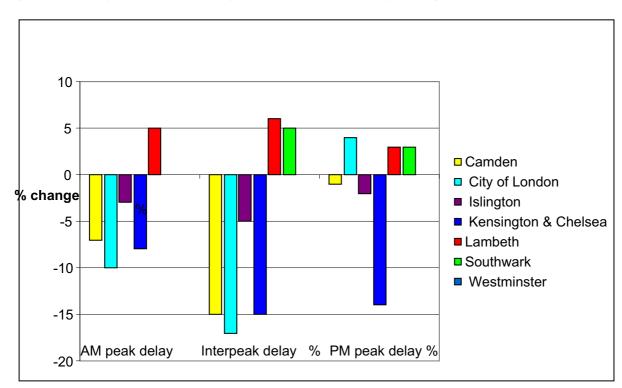


Figure 27, Delay comparison for y/e September 2008 to y/e August 2009

Congestion impacts on economic productivity, adversely affects Londoners' quality of life, causes frustration to road users, contributes to a deterioration of air quality and leads to higher CO₂ emissions. However mitigating traffic congestion in Southwark is very difficult, for a number of reasons

- The level of strategic through traffic with origins and destinations outside the borough
- The physical space constraints on many over loaded traffic junctions in the borough
- The lack of feasible alternative routes for traffic
- The volume of large vehicles on the road network, including HGVs and buses

²⁶ Academic years

• The extent of subterranean utility related infrastructure, resulting in increased costs associated with undertaking road works

These difficulties have led to a more response based approach to highways planning in the borough, with the focus on attempting to deal with localised issues rather than formulating a strategic long term approach to traffic management. However the NMP seeks to address this by providing a comprehensive toolkit including the policies and procedures related to core areas of network management – the demonstration of how day to day functions such as streetworks, coordination, events, licensed activities, collisions, contingency planning, road closures and parking are managed.

Strategic policy 27, Understanding changes in our travel patterns

The forecasted population and employment growth are the main drivers of the growth in freight traffic due to the increase in demand for goods and essential materials. In the central activity zone, freight makes up 25 per cent of the kms travelled, whereas across London, freight accounts for only 17 per cent of kms travelled. Road freight, currently 89 per cent of London's freight by tonnage, is expected to grow to meet the demand from London and the rest of the country.

In addition, the number of vans (LGVs) is forecast to grow by 30 per cent between 2008 and 2031 with some growth in HGV activity. This is being driven by a change in consumer behaviour with an increase in home deliveries.

Home delivery

Whilst home deliveries also involve vehicles they can cut overall congestion on the roads. For many people shopping is one of their main uses of the car so cutting this out may make them consider giving up the car. A study written in 2005²⁷ looked into this issue and stated that at the time of writing, car travel for food and other household items represented about 40% of all UK shopping trips by car.

Southwark encourages home deliveries whenever possible, for example by requiring new residential developments to include facilities for deliveries to be left. The council also encourages sourcing from regional suppliers (reducing distance travelled), better planning of deliveries reducing vehicles returning long distances to depots after making only one or two stops. The council also encourages companies to consider alternative fuels and better planning of deliveries.

²⁷ Delivering supermarket shopping: more or less traffic? Sally Cairns, 2005 ESRC Transport Studies Unit, University College London, London, UK

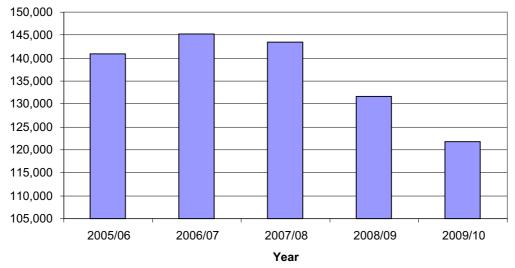
Strategic policy 28, Ensuring appropriate use of the highway network

All road users have a duty of care to respect others and behave responsibly. As well as respecting the rules of the road and complying with traffic regulations, this means showing consideration of the needs of others, at all times. Unfortunately, there are some people who do not use the highway network as they should and therefore the council along with key partners such as the police need to ensure that the appropriate action be taken.

Parking controls are there to improve safety, accessibility, servicing and the flow of traffic and are a method of ensuring the appropriate use of the highway network. The aim of current enforcement arrangements is to be firm but fair. The level of enforcement activity is pitched at a level which is intended to keep traffic moving, avoid frequent obstructions and safety hazards, and encourage adherence to the regulations.

In recent years there has been a marked downward trend in the number of penalty charge notices (PCNs) issued in Southwark. From a peak of 145,296 in 2006/07 PCNs issued fell by 8% to 121,761 in 2009/10. This reflects a wider trend across London. This trend may be partially attributed to reduced economic activity due to the impact of the recession, but also to improved compliance linked to more effective enforcement activity, including the increased use of CCTV.

Figure 28, Southwark total PCNs



General traffic PCNs can be mapped in terms of 'hot spots'. This gives an indication of key corridors where significant parking contraventions are taking place and provides a valuable tool for understanding parking pressures. As shown on the following figure, points of stress include the Lordship Lane / Denmark Hill / Camberwell Road / Walworth Road corridor as well as Peckham town centre and the commercial district in the north of the borough.

Figure 29, PCN hotspots



As well as parking enforcement, the council now has the power to enforce against a number of 'moving traffic offences'. This covers offences relating to banned turns and manoeuvres, such as U turns. By selective use of enforcement through mobile CCTV cameras the level of these offences can be reduced considerably.

Much of the enforcement activity described above is designed to protect vulnerable road users, but this does not imply that those users are exempt from the rules of the road or from being expected to behave appropriately and considerately. For example, while cyclists should have a reasonable expectation that enforcement action will be taken against motorists infringing cycle lanes and advanced stop areas they themselves should be the subject of enforcement action if they go through red lights or ride on the pavement.

Strategic policy 29, Supporting the distribution of goods and services and waste collection

Congestion on the network may impact on the ability of the economy to operate efficiently and the potential for people to live and work in the borough. For example, small businesses may suffer if deliveries and potential customers are delayed or deterred from reaching them.

The council will investigate the best practice in quiet delivery technology and techniques, and believes that a balance can be found between protecting residents and relaxing curfews for a range of locations

and delivery types. This will be extend to out of hours delivery as this can assist in reducing congestion and pollution for the borough and improved operational efficiency for the retailer.

Waste collection is also a key issue for the borough, ensuring our streets remain clear from waste and clutter. At times it can be difficult for waste collection vehicles to access collection areas. This issue contributed to approximately 60% of all missed refuse and recycling collections. This has fallen over recent years and has been a major driver in raising performance and customer satisfaction and reducing complaints. This has been achieved through undertaking car lifting blitzes, ticketing illegally parked cars and installing yellow lines and hatching in front of bin stores on housing estates to assist access.

Given Southwark's river frontage, river freight using the Thames should be considered in order to reduce freight on road. However most of the piers in the borough are located in residential areas and so in many instances it would be inappropriate to use these for the onward transfer of river freight to road freight.

However there are instances where it is appropriate to use the river. To construct the new station entrance at Blackfriars, Network Rail will bring up to 70% of materials in and out via the river. This will include over 14,000 tonnes of materials to build the station's new bridge deck, longer platforms and a roof spanning the river. At the same time, more than 8,000 tonnes of deck and pier demolition will also be removed. Not only does the river allow Network Rail to bring more materials to site more efficiently, it also reduces the impact on the highway network and deliveries can be guieter.

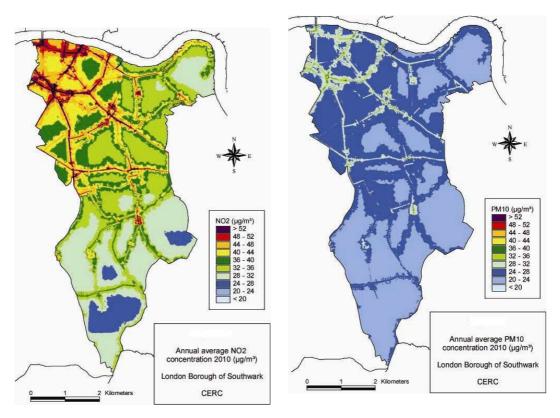
Consultation question

- In a recent survey of Southwark residents, people ranked the condition of streets (pothole repair, etc) as being of significant importance. Do you agree?
- Southwark's highway network experiences significant congestion. Would you support night time deliveries to help reduce congestion on our roads?
- Would you support prioritising buses over general traffic on our roads?

Objective 8: Reduce the impact of transport on Southwark's air quality

There is a clear link between air quality and transport, in particular road traffic. Emissions from road transport are the primary source of both NO_2 and PM_{10} in Southwark and London as a whole. The following figure shows NO_2 and PM_{10} concentrations predicted for Southwark for 2010 and shows the impact of busy roads on air quality.

Figure 30, NO₂ and PM₁₀ emissions predicted for 2010



Quality of the environment and ambient air quality correlate to general health and wellbeing. Airborne pollution in the form of fine particles (PM2.5) comes mostly from combustion sources; transport, domestic and industrial. Increased exposure to particulates aggravates respiratory and cardio vascular conditions. A recent report estimates that fine particles had an impact on mortality equivalent to 4,267 deaths in London in 2008.²⁸

Reducing the need to travel and encouraging more sustainable transport can reduce local emissions, whilst improving activity levels and public health. It is essential to ensure a strategic approach to improve quality of life for those living near to busy roads and junctions.

It is important to note that whilst air quality and climate change are linked, there are differences, and some measures which are designed to reduce our impact on climate change may have an unintended negative impact on air quality. For example the Mayor has proposed changes to the central London congestion charge scheme which would mean that diesel cars with low CO_2 emissions would be able to enter the zone free of charge. However modern diesel cars are known to emit higher levels of NOx which could exacerbate air quality issues. When providing interventions, the impact on both air quality and climate change emittants need to be considered.

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 $^{^{28}}$ Estimation of Health Impacts of Particulate Pollution in London , Greater London Authority, June 2010

Strategic policy 30, Understanding the impact of travel on air quality

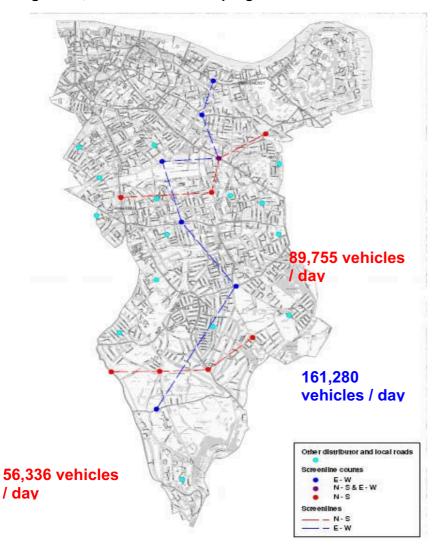
In response to air quality monitoring the majority of the borough was declared an air quality management area in 2000. The council has installed two air quality monitoring stations in the borough. These monitoring stations will collect information on NOx and PM₁₀ and are located at

- Old Kent Road, by the gasworks
- Elephant and Castle, at St Mary's Newington Church Yard

However these two air quality monitoring stations only provide details for those specific locations. To complement the stations, it is proposed to use the outputs from the council's traffic count programme to look at trends in road traffic. Although traffic counts do not directly measure air quality, they can be used as a proxy measurement if we assume that as traffic volume increases, air quality will decrease.

New screen line counts to monitor east west and north south traffic movements in the borough have been proposed and are shown in the following figure. Any significant increase in traffic volumes would be a cause for concern as air quality would be assumed to have got worse.

Figure 31, Annual screenline programme



Traffic volume, traffic composition and vehicle speeds are used in the air quality impact assessments of new developments to determine the amount of pollution along a given road in a specific location. If any of these factors change then there can be an impact on air quality in the surrounding area. When undertaking major highway improvement schemes that will change traffic patterns it is important that we understand the potential for an impact on air quality. Therefore we will undertake air quality assessments on major highway based schemes that have the potential to have an impact on air quality.

Strategic policy 31, Reducing emissions through managing the use of the network

How the highway network is used also affects the borough's transport emissions; road congestion, route choice and idling engines can all have a negative impact on local air quality.

The Mayor of London has identified areas of concentrations of air pollutants which are most at risk of not meeting the EU limit values and will be taking targeted action. One area which is at risk of not meeting the European Union Limit Value for daily mean PM₁₀ concentrations in 2011 is along the Victoria Embankment from Upper Thames St to Tower Hill Road. If this area is targeted for action days and special measures then it could have knock on impacts for Southwark. This would be particularly important if roads were closed and traffic rerouted through the borough.

Route choice can affect levels of emissions, this is particularly important for fleet operators. In Southwark the council's waste collection is carefully managed to ensure there is no unnecessary travel. This has benefits in reducing fuel consumption and vehicular emissions.

Currently, it is an offence to leave a vehicle engine idling unnecessarily whilst parked however enforcement can be problematic. The penalty charge is fixed at £20, which is too low to be a powerful disincentive. The £20 penalty for idling compares unfavourably to the £120 penalty charge issued for parking offences. Consequently the council would support the penalty charges for no idling offences being brought into line with penalty charges used for parking offences in London. It is recognised that alongside enforcement it is important to raise awareness of the impact of idling engines, particularly at locations such as schools where parents who leave their cars running contribute to poor air quality for their own children.

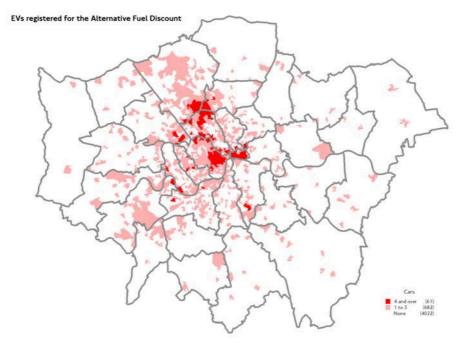
Strategic policy 32, Supporting low emission technologies

There are a variety of new technologies in the market including electric vehicles and tailpipe emission controls. Electric vehicles offer a clean and green alternative to petrol and diesel powered transport. Electric power gives us a promising opportunity to cut our Carbon dioxide (CO₂) emissions, air pollutants and noise from road vehicles and should reduce our dependence on fossil fuels.

Whilst electric vehicles do not directly produce any emissions, this does not mean that they are 100% carbon neutral, as the electricity used is mostly produced in the traditional manner, using fossil fuels. When these are taken into account, most impacts are still significantly reduced, for example the CO_2 life cycle for a mains-powered electric car is typically 40% less than for a petrol equivalent.

Electric vehicles are currently 100% exempt from the congestion charge and the council already encourages electric vehicles by way of a 75% discount for resident's parking permits.

Figure 32, Electric vehicles registered within the borough



Source: London electric vehicle delivery plan 2009

This figure shows electric vehicles registered within the borough and indicates clusters of ownership in the East Dulwich area. There is much contention about electric vehicle ownership, whether vehicles are purchased in addition to a traditional car or, as suggested by TfL, as a replacement of an existing vehicle. It must be recognised that whilst electric vehicles may contribute to improved air quality they will not remove vehicles from the road and may even add to pressures on both the road network and on street parking. It is also possible that they might encourage people away from walking and cycling.

To determine the best way for Southwark to install electric vehicle charging points, a variety of approaches has been considered including eligibility, charging structures and site location. Following this, it has been decided that a trialled approach would be most effective for Southwark. The trial will provide a clear picture of the practical issues and costs behind electric vehicle charging points, enabling Southwark to develop its longer term approach. By limiting the maximum stay period for electric vehicle parking, the council will uphold its policy to prevent long stay commuter parking.

The Mayor of London supports the introduction of charging points, currently they are installed when a developer chooses to include them. As part of the revisions to the London Plan the Mayor intends to place a condition that all new developments with 5 parking spaces or more should ensure that at least 20% of parking spaces are equipped with charging equipment.

This should not override the council's existing policies regarding parking provision in developments.

Consultation question

We want to cut our CO₂ emissions

 We are considering installing charging points for electric vehicles, would this make you consider purchasing an electric vehicle?

Objective 9: Reduce transport's contribution to climate change

 CO_2 is a primary cause of climate change and transport represents 28% of the UK's carbon emissions. The Mayor of London has committed to reduce the capital's CO_2 emissions by 60% from their 1990 levels by 2025'²⁹. This is supported by the Climate Change Act 2008 which seeks an 80% reduction in the UK's CO_2 emissions over 1990 levels by 2050 and the binding commitment to generate 15% of the UK's total energy from renewable sources by 2020.

In Southwark, the borough's carbon dioxide emissions from road transport represent 11% of the borough's total emissions. As the main emitter is road traffic and the borough has more influence to reduce these than to reduce emissions from aviation, shipping and rail, initiatives to reduce CO₂ emissions are focussed on road traffic.

Table 16, Southwark CO₂ emissions³⁰

Indicator	Data	Londonwide quartile position
Road transport (2005 CO ₂ eq kilotonnes)	222	3rd Quartile
Road transport as % of all emissions	11%	Top Quartile

The most straightforward way to reduce carbon dioxide emissions from transport is for people to reduce use of the car in favour of modes of transport such as walking and cycling.

It is important that we focus on tackling short journeys as these can give quicker results than long journeys as cars are least fuel efficient for short journeys. Over 50% of journeys to work within Southwark are under five kilometres and it is reducing the use of the private car for these journeys that will achieve the greatest results.

We can also help to reduce carbon emissions by supporting the use of new low carbon technologies, such as improvements to petrol and diesel engines, the use of lightweight materials, hybrid petrol electric or diesel electric vehicles, and biofuels. However this alone will not reduce our carbon emissions.

Strategic policy 33, Supporting lower emission vehicles

Southwark currently applies variable tariffs to incentivise the use of alternative fuel vehicles (75% discount on parking permits for residents).

In 2007 a survey was carried out showing resident's permits banded by CO₂ emissions in terms of grams per kilometre. Vehicles banded below 100 grams per kilometre are currently entitled to the discounted rate.

³⁰ London Energy and Greenhouse Gas Inventory (LEGGI).

²⁹ Mayor's Climate Change Action Plan (GLA, 2007)

Table 17, CO₂ emissions

Band	C0 ₂ Emit	No. of vehicles per band (2007)	% of vehicles per band (2007)
Α	<100	44	1
В	101-110	44	1
С	111-120	89	2
D	121-130	89	2
Е	131-140	354	8
F	141-150	620	14
G	151-165	797	18
Н	166-175	398	9
I	176-185	354	8
J	186-200	531	12
K	201-225	443	10
L	226-255	398	9
М	255+	266	6
٦	Total	4,426	100

Initiatives to promote lower emission vehicle such as the London's Low Emission Zone (LEZ) or alternative fuel vehicles will assist in reducing the borough's CO₂ emissions.

The LEZ affects larger vans, minibuses, motor caravans and other specialist vehicles from 3 January 2012. This date is 15 months later than initially proposed to allow operators more time to comply given the economic downturn. It is likely, however, that there will be further deterioration of air quality in London due to this delay.

We recognise that the use of an alternative fuel vehicle is an individual choice and the council as a community leader and fleet manager has supported these technologies.

Strategic policy 34, Leading by example reducing the impact of the council's fleet

The council operates one of the largest fleets in the borough making up a significant proportion of vehicles on the road. The council aims to set an example of a safe and efficient fleet while recognising the importance of driver safety and education.

In 2010 the Energy Saving Trust carried out a green fleet review for Southwark council. Emissions from Southwark's fleet are estimated to be just over 636 tonnes CO₂ per annum. Vehicles over 3.5 tonnes were not included as part of the review. At the time of the review the council fleet consisted of 149 light commercial vehicles, 395 lease cars and 289 drivers who use their own private vehicle on council business.

The green fleet review identified measures which could help to reduce these emissions by 417 to 442 tonnes of CO₂ per annum equating to nearly 70% of the CO₂ emissions produced by the council's fleet. The measures will be investigated further and include improved fuel management, targeted smart driver training, and reviewing overnight storage.

Eco driving is another way that the council and the community can reduce emissions. Eco driving involves using gears, acceleration and powers of anticipation to adopt a more fuel-efficient driving style. Eco driving has the following benefits:

- Reduces fuel bills
- Cuts carbon emissions
- Reduces vehicle wear and tear
- Safer, less stressful journeys

The council also undertakes smarter or eco driving training with those that drive for work. Eco driving is being promoted to council staff through a questionnaire to determine existing driving habits and an eco driving simulator. The simulator awards participants with a higher score the lower their fuel consumption. Factors such as moving quickly up through the gears, sticking to the speed limit and anticipating traffic lights well in advance can all help to reduce fuel consumption and therefore carbon emissions.

Strategic policy 35, Increase the council's existing tree stock

One of the biggest challenges facing London is climate change. Some experts believe that the impacts of climate change are already beginning to be felt, with the country facing more extreme weather conditions. Increasing the number of trees, particularly along the highway, will have a direct mitigating affect with regards to climate change.

Trees in the right place, like other vegetation, will; reduce flood risk by absorbing and temporarily retaining rainfall thereby reducing the rate and scale of eventual run-off; moderate the temperature by offsetting the urban heat island effect; reduce energy demand by providing shade and reducing wind speeds; and help to reduce noise and air pollution.

It is therefore the council's policy to plant new trees where the opportunity arises.

Section 6: Delivering change

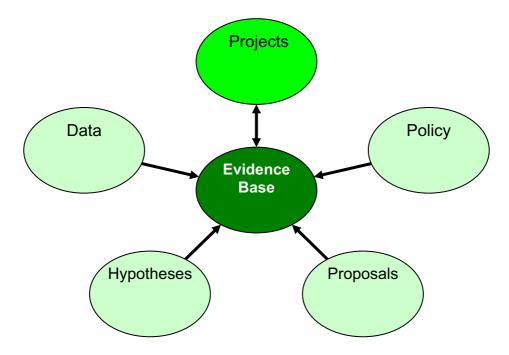
The delivery plan of Southwark's Transport Plan sets out how we will achieve the objectives and aspirations of the Transport Plan, the schemes to be carried out, projected budgets and timescales. We have also considered how we will oversee delivery, manage change and risks as well as how we intend to monitor our progress.

Developing the transport improvement programme

Southwark has developed an objective method for identifying new schemes and determining their priority to ensure that the funding provided for transport schemes is spent wisely. This approach helps us to decide what to spend and where, to deliver the Transport Plan. It ensures that expenditure is prioritised on schemes which will achieve the most and identifies what impacts they will have.

Scheme identification: an evidence based approach

Southwark has developed and implemented an evidence based approach to scheme identification and determination. The following diagram shows the key stages in the scheme identification process.



The first step in this process is the development and maintenance of a transport evidence base. The evidence base brings together information from different sources such as issues raised by the community, parking hotspots, collision data, traffic speed and volume data, accessibility levels and other previous proposals. This information is then mapped and used to identify potential transport projects. For example if an area is shown to have high speeds (as identified by traffic speed data), speed related collisions and supported by correspondence relating to speed, then this area would be identified for further investigation.

This data led approach is complemented by cross council discussions to identify any further issues or opportunities for joint projects.

Site visits are then carried out to assess feasibility and to scope out engineering solutions to the problems identified from the evidence base. Improvement options identified are then priced, enabling the prioritisation process to begin. Whole life costs are considered at this stage, so future maintenance requirements for the scheme are factored in for use during the prioritisation process.

We continually seek to broaden our evidence base to indicate opportunities to change behaviour, and not just the environment.

Scheme prioritisation: a policy based approach

Prioritisation is a valuable, transparent process which can ensure delivery of our transport objectives in a cost effective and efficient manner. Prioritisation has been essential in ensuring that limited resources are focussed on areas with the greatest need and where there is an opportunity to achieve the most.

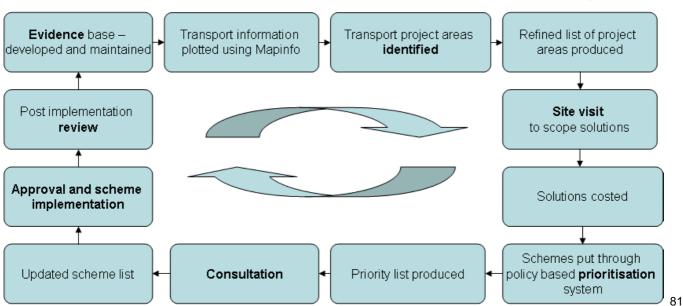
The council's prioritisation process is both proactive and reactive. It is policy driven and demonstrates why schemes are or are not included in the transport improvement programme. It gives weight to issues identified by the public and councillors, local stakeholders and community councils. It also considers the level of change the scheme would bring by considering before and after conditions and whether a scheme represents value for money. Consideration is also given to available complementary or match funding opportunities. An overall score considering all factors is given to each scheme to enable comparison and ranking.

Schemes for the financial year 2011/12 were prioritised using policies from our Sustainable Community Strategy as our borough Transport Plan objectives were not finalised in time for this process. Although our 3 year delivery programme has been developed using this same prioritisation system (2011/12 to 2013/14), an annual "refresh" will be carried out each year and the prioritisation system will be adapted to include the newly adopted transport objectives as well as targets established in this plan for prioritisation for 2012/13 and onwards.

Consultation

Once all schemes have been prioritised consultation is undertaken with key stakeholders and the council's eight community councils. Following this Cabinet agree the transport improvement programme for submission to TfL for their consideration.

A summary of our approach to scheme identification and prioritisation is outlined in the diagram below:

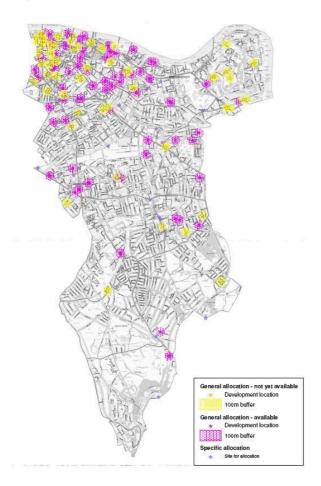


Funding the transport improvement programme

Southwark's key source of funding for the Transport Plan is from TfL and this currently totals £8.337 million across the three years (2011/12 through to 2013/14) for transport schemes. This does not include any additional funding for major schemes.

Funding is routinely secured as part of planning obligations (s106) for transport projects. This can either be site specific or through strategic contributions to increase the capacity of public transport provision across the borough and to deliver the Transport Plan. In 2010, there is approximately £27m of s106 money for transport schemes in the borough. This includes money currently available to spend and money agreed but not yet available. It includes money for strategic transport as well as for specific locations. Where possible this funding will be made available to assist in delivering the plan.

Figure 33, Locations where s106 money is available to deliver transport schemes



In addition to funding from TfL and s106, the council does spend a significant amount on highways and transport schemes through its revenue budget. In 2009/10 the highways and transport services had a gross expenditure of nearly £29m. This work includes the borough's parking, maintenance and highway asset programmes. The council's highways and transport services budget is determined annually and this plan sets in place initiatives to align the maintenance programmes alongside that of the transport investment programme.

The detailed programme of investment, the council's programme and funding sources for the next three years (2011/12 to 2013/14) is contained in appendix B. We are required to refresh the delivery plan at least every three years, however we will review our programme annually and refresh after three years.

Scheme outlines and proposed levels of spend should be viewed as indicative only as the council confirms the programme annually where the programme is detailed.

Transport improvement programme areas

The transport funding programme is divided into three categories; Integrated transport, maintenance and Major Schemes.

Integrated transport programme

This programme area incorporates infrastructure and behaviour change initiatives.

This funds the deliver of physical changes to the highway network and focuses on issues such as safety, traffic flows and speed, buses, cycling & walking along key routes, parking and better street design in local areas. To complement this a programme of behavioural change initiatives has been established and considers sustainable travel to schools, hospitals and businesses as well as wider road safety education, training and promotional activities. These programmes complement one another and maximise the potential for achieving the Transport Plan.

Maintenance

The maintenance programme includes maintenance to both the principal and non principal road network. When developing the maintenance programme investment will be directed at roads with the highest UKPMS score and will consider other factors including complementary schemes, usage (in particular of pedestrians, cyclists and powered two wheelers). The maintenance programme is developed in parallel with the borough's transport and highway asset management priorities.

This prioritised list of investment is considered by the Cabinet for funding.

Major Schemes

Major Schemes are interventions generally costing more than £1m over the whole life of the project. Two major schemes have been identified within the borough and they are listed below in priority order.

Camberwell town centre – The Camberwell town centre scheme, while focussing on transport issues, will provide the opportunity for coordination across a range of regeneration activities and initiatives in the area, and more joined up working across Southwark Council services.

Camberwell is located on the borough boundary with Lambeth Council and this scheme will provide the opportunity for better working across the authorities.

Currently the town centre is dominated by vehicular movement. To support the local economy this schme will improve conditions for deliveries and servicing, whilst also increasing footfall through pavement widening, reviewed signal timings, and a reduction in street clutter and pedestrian railings. It is proposed to improve the interchange by reviewing bus service and stopping arrangements.

This is a priority scheme for the council. It is estimated that £350k will be required for development of the scheme and an additional £6m for the design and implementation of the scheme. Part of this scheme is on the TLRN and cycle superhighways five and six have been designated to go through this area. An application was submitted to TfL in October 2010 and a decision is awaited.

Lower Road gyratory removal – this is on the alternative Olympic Route Network secondary route (used only if there is a problem with other routes) so any works can only take place following the Olympics. The total cost of this scheme is estimated to be in the region of £9m. It is expected that developer contributions will be in the region of £7.5m therefore funding will be sought from the TfL Major schemes budget to deliver this scheme totalling £2m. It is expected that an application will be submitted to TfL for this scheme in October 2012/13 with the view to commencing the development of the scheme in 2013/14.

The following improvements to Lower Road are sought;

- Creating a new high street linking the Canada Water Basin with Lower Road
- Undertaking public realm improvements on Lower Road to improve the retail environment
- Improving pedestrian and cycle links between Hawkstone Road, Surrey Quays station and the shopping centre
- Reintroducing two-way traffic movement on Lower Road to help make traffic movement more
 efficient and improve the environment around the gyratory
- Enabling a straight through movement for vehicles between Plough Way and Rotherhithe New Road

Risk assessment and mitigation

In implementing this plan there are risks which we must be aware of and plan for. At the strategic level the drive and support for the transport improvement programme must be maintained but it is also essential to consider variations in funding availability.

Table 19 identifies a range of risks and mitigation measures relating to the delivery of the overall transport improvement programme. To manage the risks of individual schemes a risk register is established and maintained for each scheme in the programme. As part of our risk assessment process, programme delivery is monitored at monthly meetings in order to identify and resolve any problems as soon as they occur.

Table 19, Transport improvement programme risk register

Risk	Mitigation
Resources	Identification of a reserve list of schemes in order to ensure efficient use of funding and resources if initially prioritised schemes cannot proceed.
Delay	Timescales for delivery should allow sufficient time for detailed design, consultation and to address any issues identified.
Budget reductions / cost increases	Scheme budgets are set, although include contingency, before detailed design therefore scheme costs can vary as the schemes are developed.
	Scheme costs are reviewed internally on a bimonthly basis and any variations must go through our change management process.
	Where a scheme experiences delays, funding may be transferred to the next scheme in the priority list.
Political	Each scheme feasibility design is approved by the portfolio holder for Transport, Environment and Recycling before going out for consultation.
Traffic signals – TfL controlled and long lead in times for changes	Forward planning required.
Works on the Strategic Road Network	Works on the Strategic Road Network require approval from Network Assurance (TfL). It may be that their aspirations are different from ours. For example we may wish to see improvements for walking which may mean a reduction in the overall traffic capacity.
Policy alignment	There is a risk that a scheme may not meet its initial objective as it could be changed in the delivery process. Our change management process will mitigate this risk.

Change management

The importance of effective change management should not be underestimated as funding for the transport improvement programme is fixed. This means that any overspend on a particular project in a given year will directly affect the ability of the council to deliver the other agreed projects in the programme scheduled for the same or future years.

Changes to a scheme, its allocation or works, can sometimes be necessary. The delivery programme may change due to a variety of factors and require schemes to be redefined, rescheduled, or removed from the programme. Should this occur, there may be an opportunity to introduce 'substitute' schemes to fill any resulting gaps in the programme. In order to anticipate and manage potential changes to the programme a formal review meeting with the Cabinet Member for Transport, Environment and Recycling will be held three months into each delivery year, and then at months six and ten.

Where a 'gap' in the programme arises, the scheme with the next highest priority in the delivery programme should be brought forward as a matter of course. However, this will be subject to deliverability factors and it may be necessary to go further down the list to find a project that can be delivered within the available budget, to the required timescales and in an efficient manner. Any scheme changes will have to meet our transport objectives and the Cabinet member for Transport, Environment and Recycling has the authority to approve changes to the transport improvement programme.

Meeting the borough transport objectives

1. Manage demand for travel and increase sustainable transport capacity

By managing the demand for travel we will relieve pressure on the public transport system as well as the road network. Whilst Southwark Council is not directly responsible for some areas of sustainable travel (such as bus and rail) we will work hard to campaign and lobby for increases in capacity on those as well as increasing the transport capacity for walking and cycling.

- Managing demand for travel: Through our land use policies we will continue to support
 development in areas of high public transport accessibility. We will continue to support schools
 and businesses through the travel plan process.
- Car clubs: There is evidence to suggest that as the membership and use of car clubs increases the number of cars on our streets will decrease. Therefore we will continue to promote the use of car clubs in the borough.
- Cycling and walking infrastructure: We will ensure that safe and attractive infrastructure
 improvements are made for pedestrians and cyclists. This may include measures such as
 improved accessibility for pedestrians (dropped kerbs, improved crossing points, reduced street
 clutter etc), increased cycle parking (on street and estate) and general improvements (such as
 advanced stop lines, wayfinding systems such as Legible London and improved footway
 surfaces).
- Cycle parking: We will continue to provide cycle parking on street as well as within our housing
 estates as part of our infrastructure improvements. We will continue to require cycle parking to be
 provided through the planning process as required by our sustainable transport SPD.
- Bus service and network enhancements: We will continue to work with TfL London Buses to ensure that services are reliable, convenient and accessible for all.
- Rail/ Underground improvements: We will support the Mayor, TfL and other partners in the
 delivery of committed major public transport improvements affecting the borough including the
 Thameslink programme, Bakerloo line extension, Phase two of the East London line and
 improvements to stations and services. Our Transport Plan investment programme provides a
 range of complementary measures including improvements to the pedestrian and cycling
 environment, and the wider public realm. These will provide additional value and ensure that a
 wide range of benefits are realised.

2. Encourage sustainable travel choices

Southwark is committed to encouraging people to use more sustainable and active modes of travel, i.e. walking, cycling and public transport. Our transport improvement programme will make sustainable travel choices easier to make by creating the conditions in which more people will feel attracted to walking, cycling and public transport.

- School travel plans: We will continue to work with schools to develop and promote their travel
 plans in order to increase the number of children travelling to schools in the borough by
 sustainable modes.
- Workplace travel plans: We will continue to work with businesses and travel plan groups in the borough to expand the number with active travel plans in place.
- Ensuring people have the skills to travel sustainably: The main focus of this is through practical training. This involves cyclist and pedestrian training as well as awareness raising and independent travel training.
- Cycle superhighways: Southwark will continue to work with the Mayor and TfL to deliver the cycle superhighways following on from the successful delivery of route 7. There are 3 further routes to be delivered in the borough.
- Cycle hire scheme: Southwark will continue to work with the Mayor and TfL to enable the continuation and expansion of this scheme.

3. Ensure the transport system helps people to achieve their economic and social potential

The council aims to increase the number of people who both live and work in the borough. Achievement of this will mean that these people are not travelling great distances to work and they will have greater sustainable travel options such as walking and cycling.

- Worklessness and travel training:
- Supporting shopping centres:
- Development planning:
- Bus services: lobby for improvements where appropriate and for protection for the current provision
- Rail/ Underground improvements: We will support the Mayor, TfL and other partners in the
 delivery of committed major public transport improvements affecting the borough including the
 Thameslink programme, Bakerloo line extension, Phase two of the East London line and
 improvements to stations and services. Our Transport Plan investment programme provides a
 range of complementary measures including improvements to the pedestrian and cycling
 environment, and the wider public realm. These will provide additional value and ensure that a
 wide range of benefits are realised.

4. Improve the health and wellbeing of all by making the borough a better place

Encouraging more cycling and walking is a key priority for Southwark and will also help us to achieve a number of our other Transport Plan objectives. This objective will be achieved by continuing work with

the community and in particular young people, helping to improve health and physical activity in the borough.

- Improved public realm, we recognise that our roads are public spaces shared by all those who
 use them (residents, workers, shoppers etc.), and have a key role to play in delivering our
 transport objectives.
- School travel initiatives: we will continue our school travel plan programme which encourages pupils to walk and cycle to school.

5. Ensure the transport network is safe and secure for all and improve perceptions of safety.

Southwark Council is committed to safer travel in the borough in order to reduce the potential for road user casualties and reduce casualty severity. People should be able to travel safely and without fear to the places where they live, work, shop, study and spend their leisure time. Our investment programme has been derived using an evidence base which addresses areas experiencing collisions in particular focusing on cyclists collisions.

- Road safety campaigns
- Designing out crime: We will ensure that safety and security considerations are incorporated into the planning and design of transport facilities
- Community wardens
- Support for the roll out of new countdown system for London Buses
- Safety audits: We will undertake safety audits for all new transport infrastructure including controlled parking zone reviews to provide safer travel for all modes

6. Improve travel opportunities and maximise independence for all

Pavements, parks and other public places often have obstacles and hazards which make life difficult for everyone but particularly those with impaired mobility. Transport services will need to continue to improve to meet the needs of people such as wheelchair users. Some things just need minor adjustment like installing dropped kerbs or correct tactile paving. Other improvements need major investment which needs to be planned over the long term such as making stations fully accessible.

- Transport system accessibility: We will seek to improve the streetscape environment to make the borough fully accessible for all, for example through dropped kerbs and tactile indicators at crossing points. We will also continue to invest in bus stop accessibility improvements.
- Enhancing the public transport system: We will continue to work with TfL, Network Rail and the train operating companies to encourage access improvements. For example Denmark Hill Station is to be made fully accessible with the installation of three passenger lifts.
- Provision of disabled parking spaces
- Continuation and expansion of independent travel training

7. Ensure that the quality, efficiency and reliability of the highway network is maintained.

Southwark is in the third quartile compared to other boroughs, in terms of the condition of its principal roads with 11% of principal roads deemed to be in need of repair in 2009/10.

- Maintaining the road network: we will ensure that our highways are well maintained and that the risk and occurrence of defect related collisions on the transport network is reduced.
- The emerging Network Management Policy considers the movement of people, goods and
 materials around the transport related network and how we will work towards fulfilling the
 borough's network management duty to ensure the expeditious movement of traffic through the
 borough on borough roads.
- The policies contained within the NMP will be complemented by the maintenance strategies of the Highways Asset Management Plan.
- Smoothing traffic flow: We will work with TfL to help smooth traffic across all modes, provided this can be achieved without disadvantaging vulnerable road users. We will use the ibus data from four chosen bus routes in the borough to help monitor their journey time reliability. We will support the removal of traffic signals where they are shown to be unnecessary, but at the same time resist any measures that have a negative impact on pedestrians.

8. Reduce the impact of transport on Southwark's air quality

Air pollution is one of the most pressing environmental concerns for people living in London. Emissions from road transport are the primary source of both NO₂ and PM₁₀ in Southwark and London as a whole. Encouraging sustainable travel choices will help to increase air quality as modal shift away from the car occurs in the borough.

- Eco driving: Southwark will train an officer to deliver "in-house" smarter driver training to all employees that are required to drive for work.
- Idling engines: The council has pledged to undertake enforcement action on idling engines at hotspots within the borough following a publicity campaign.
- Pilot scheme to identify and implement local air quality improvements near to schools.
- Air quality assessments will be undertaken on all major traffic management schemes and initiatives.

9. Reduce transport's contribution to climate change

Southwark is committed to reduce its climate change impact, particularly through transport. Our Transport Plan target for CO₂ reduction from road based transport has been set so that it is consistent with the Mayor's 2025 CO₂ reduction target. Southwark's Transport Plan delivery actions focus on:

- Southwark staff travel plan
- Electric vehicle charging points pilot
- Parking provision: As part of the parking contract renewal we will seek to implement emission based parking permit charges

Delivery of Mayor's high level outputs

The following section outlines how each of the Mayor's six high level outputs will be supported at a local level in Southwark.

Cycle parking

The Mayor aims to increase the number of cycle parking spaces by 66,000 by 2012. Southwark will continue to require that developments in the borough adhere to the cycle parking requirements as set out in the sustainable transport SPD. We will also collect data on the amount and type of on and off street cycle parking secured and report on this to TfL on an annual basis.

The council will continue to respond to requests for additional on street cycle parking and for secure off street parking in residential areas.

Cycle superhighways

The Mayor plans to implement a total of 12 radial cycle superhighways to improve cycle access to central London, to encourage a modal shift to cycling and reduce congestion and emissions. The cycle superhighways project is one of the key schemes which the Mayor has begun to implement with the aim of bringing about a cycling revolution to achieve a 400% increase in cycling levels by 2025 (compared to 2000 levels).

One of the first cycle superhighways, route 7, runs through part of Southwark. It starts at Southwark Bridge over the Thames and heads south leaving the borough to join the neighbouring borough of Lambeth in the Kennington area. The remaining 10 routes will be implemented by 2015.

Cycle superhighway route 7 has been supported by the provision of cycle training which is offered free to all those who live, work or study in the borough. It has also been supported by additional residential cycle parking which has been offered to housing estates falling within a 1.5km corridor either side of the cycle superhighway. Those estates who do receive cycle parking will also be offered Dr Bike sessions and informed of the cycle training available.

Provided that funding is available, similar work will be carried out to support the remaining 3 cycle superhighways routes which will run through parts of the borough. These routes are:

- CS4: Woolwich to London Bridge (by 2015)
- CS5: Lewisham to Victoria (by October 2012)
- CS6: Penge to City (by 2015)

Electric vehicle charging points

Southwark will be installing four on-street electric vehicle charging points as part of a pilot programme. If this pilot is successful and funding is available then further investment will go into providing more electric vehicle charging points across the borough.

In addition to this the number and locations of electric vehicle charging points installed as part of the development process will be recorded and monitored as required by TfL.

Better streets

The Mayor's "better streets" initiative considers that all schemes should be distinguished with good quality sustainable materials, high levels of craftsmanship, and reflect the local area's character. This aim is supported by Southwark's new Streetscape Design Manual which sets out the council's requirements for the design of streets and provides advice on how to configure these. The desire to create 'better streets' does not replace, but rather sits alongside the basic requirement that infrastructure schemes deliver on key outcomes as defined by the transport objectives above.

Where appropriate a "guard rail removal assessment" is carried out on each scheme so that where it is deemed safe, existing guard railing is removed. This will be reported on as part of the annual reporting required by TfL.

Cleaner local authority fleets

In 2010 the Energy Saving Trust carried out a green fleet review for Southwark council. Specific measures to reduce the CO₂ emissions of the fleet were identified and subsequently some of these measures have already been implemented. Four vehicles have had intelligent speed adaption technology fitted to them and providing that this is a success, further vehicles in the Southwark fleet will also have intelligent speed adaption fitted to them.

The draft Air Quality Strategy and Action Plan supports smarter driver training that will be offered to all employees that are required to drive for work purposes.

Street trees

Southwark is fully supportive of the Mayor's aim to plant an additional 10,000 street trees in London by 2012. The number of new street trees in the borough has been going up steadily for the past 3 years. The council's Tree Management Strategy, aims to have all publicly owned trees, not including parks, surveyed and mapped by 2011/12. This will allow for accurate reporting to TfL on an annual basis.

Section 7: Performance monitoring

In order to monitor delivery of our Transport Plan objectives and intended outcomes, we have identified a number of targets and indicators shown in the following table.

Table 20, Targets and indicators for monitoring delivery of Transport Plan outcomes

Target/ Indicator	Baseline	Transport Plan objectives
Excess wait times for high frequency services from 1.0 minute to 0.9 of a minute in 2013/14	2009/10	1, 3, 7
Maintain the proportion of principal road length in need of repair at 11% by 2013/14	2009/10	3, 7
Reduce CO_2 emissions from road based transport from 227kt CO_2 in 2008 to 190kt CO_2 in 2013	2008	1, 2, 8, 9
Reduce traffic levels in Southwark by 3% by 2013	2010	1, 2
Increase the walking mode share in Southwark to a third (33%) by 2013	2006/2008	2, 4, 5, 6
Reduce all cyclist collisions by 40% by 2014	2004/2008 baseline	2, 5
Increase the proportion of those cycling in Southwark from 3% to 4% by 2013/14	2007/09 average	2, 4
Reduce the number of killed and seriously injured by 16% to 2014	2004/2008 baseline	5
Reduce the total number of slight casualties by 17% by 2014	2004/2008 baseline	5
Reduce all cyclist casualties by 40% by 2014 based on a 2004/08 baseline	2004/2008 baseline	5

Target setting

We have identified a number of targets to monitor our performance and ensure delivery of outcomes. These targets are focused on five themes improving bus service reliability and the condition of our principal roads, reducing CO2 emissions, encouraging walking and cycling and improving road safety. These targets aim to be both ambitious and realistic given anticipated funding levels.

Bus journey time reliability target

Improving public transport reliability is of particular importance given the reliance on bus services in the borough. This is measured by excess wait time (EWT). EWT of any service reflects the delays occurring on the whole route, in many cases including sections of the route running outside of the borough. It does not include additional wait time for passengers unable to board a bus that is full on arrival at the stop. This indicator measures excess wait time (EWT) for all high frequency services running within the borough.

Table 21, EWT in Southwark from 2008/09 to 2009/10

Q3 2008/9	Q4 2008/9	Q1 2009/10	Q2 2009/10	Q3 2009/10	Q4 2009/10
1.4	1.1	1.0	0.8	1.3	1.0

Table 22, Bus service reliability target

Reduce the average excess wait time for high frequency services from 1.0 minute in 2009/10 to 0.9 of a minute in 2013/14				
Target trajectory	0.9 minute			
Evidence that the target is realistic and ambitious	Over the period 2008/09 to 2009/10 the EWT in the borough was on average 1.0 minute. This places the borough in the top quartile when compared to all London boroughs.			
	TfL projects that the annual average EWT across London will increase from 1.1minutes (2010/11) to 1.2minutes in 2013/14. Therefore the target set by Southwark is more ambitious than this. Our target is considered to be both realistic and ambitious given the planned interventions and improved management of roadworks. However it should be noted that the council has only a limited role in influencing the boroughwide EWT.			
Key actions for the council	 Improving interchange at Peckham Rye station Camberwell town centre improvements North Peckham green links – including bus improvements 			
Key actions for local partners	Bus operators can support this target through better contract management in partnership with TfL and improved driver training.			
Principal risks	Key risks are associated with reductions in service frequency and increases in traffic			

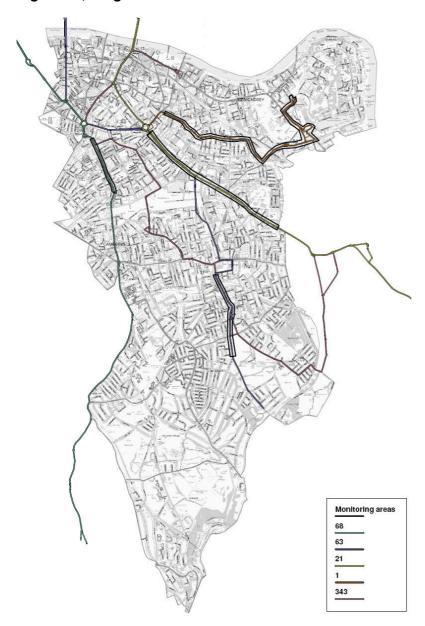
and how they will	volumes, which would increase bus delays. An additional key risk is funding for a
be managed	major scheme not coming forward – e.g. Camberwell town centre and Lower Road
	gyratory.

In order to build up a picture of bus delays in Southwark we monitor bus journey time annually on four key route sections using information provided by TfL. These are shown in the following table.

Table 23, Target bus corridors

Road	Route	Start and end location
Old Kent Road	Route 21	Old Kent Rd/ East St to Old Kent Rd/ Ilderton Road
Walworth Road	Route 68	Elephant and Castle station to Camberwell Rd/ Albany Road
Rye Lane	Route 63	Peckham Rye station to Peckham Rye/ Barry Road
rtyo Lano	Route 343	Southampton Way to Hampton Street

Figure 34, Target bus corridors



Road condition target

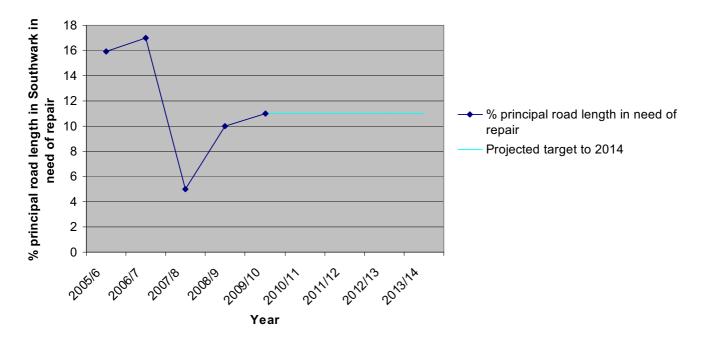
This indicator measures the proportion of the borough's principal road network where maintenance should be considered. As shown in figure 35, road condition has varied significantly between 2005/06 and 2009/10. The condition of the highway network is affected by a number of factors including usage, works, and weather condition. Given this and funding constraints, our target is to maintain the length of principal roads in need of repair at a constant level.

Table 24, Road condition target

Maintain the % of	principal road length in need of repair at 11% by 2013/14
Target trajectory	See figure 35
Evidence that the target is realistic and ambitious	Maintain the proportion of principal road length in need of repair at 11% from 2009/10 to 11% in 2013/14 The condition of the principal roads in Southwark currently places the borough in the 3 rd quartile when compared with the rest of London. The funding likely to be made available through maintenance funding is only expected to enable us to maintain the current standard of the principal road network. Recent performance data has shown condition of the principal roads has worsened so it is considered that to aim to maintain the current state of repair is ambitious.
Key actions for the council	 Enhancements will be targeted at roads with the highest UKPMS score but would also be targeted at achieving maximum benefit by complementing other TfL funded schemes. The council prepares a prioritised list of principal and non principal roads in need of repair which is considered by the Cabinet for funding.
Key actions for local partners	Close working with our contractor will be required to ensure the effective programming and delivery of schemes.
Principal risks and how they will be managed	Unusual or extreme weather conditions, such as hot dry summers and snow and ice in winter, may cause increased damage to road surfaces in the borough and across London as a whole. A lower level of funding than anticipated could also severely affect performance.

Figure 35, % principal road length in need of repair

% Principal road length in Southwark in need of repair from 2005/6 to 2009/10



CO₂ emissions target

This indicator measures CO_2 emissions from all sources of ground based transport. The Mayor's target of a reduction in CO_2 emissions, emanating from ground based transport, of 60% from 1990 levels by 2025 is the basis for Southwark's CO_2 reduction target. The data in table 26 (source: LEGGI) has been plotted in figure 36 as the borough's target trajectory.

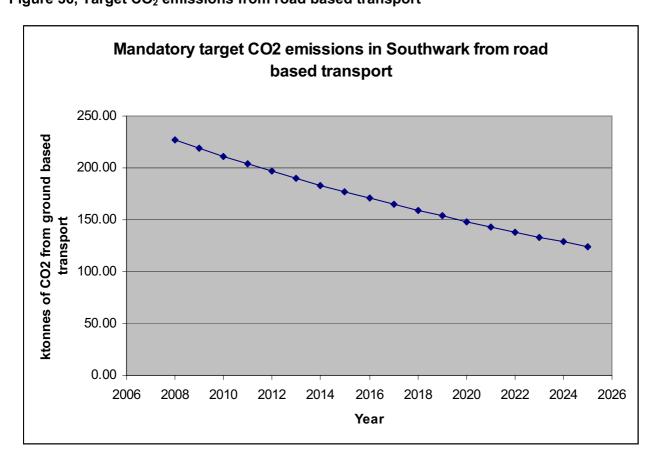
Table 25, CO₂ emissions target

Reduce CO ₂ emiss	sions from road based transport from 227kt CO ₂ in 2008 to 190kt CO ₂ in 2013
Target trajectory	See figure 36
Evidence that the target is realistic and ambitious	Our target for 2013 is an interim target based on the MTS target of a 60% reduction in London's CO_2 by 2025 from a 1990 base. The trajectory shown in figure 34 is in line with this target.
	Collection of data for the national indicator 186 (per capita CO_2 emissions) shows that transport emissions have fallen by 6.6% between 2005 and 2008. This is a 2.2% decrease every year whereas our target is slightly more ambitious than this with a decrease of around 3.3% every year from 2008 to 2013.
Key actions for the council	Continue to implement policies which reduce the need to travel
	 Support the uptake of sustainable travel through training, awareness and promotion activities
	 Implementation of electric vehicle charging points as part of a London wide scheme subject to successful trial
Key actions for local partners	Smarter travel interventions require liaison with local schools, workplace travel plans to be promoted within local travel planning groups and developed by local businesses. Corporate working on staff travel plan required. Where appropriate trees will be planted as part of transport schemes.
Principal risks and how they will be managed	Key risks relate to the delivery of the projects and programmes in the delivery plan. Uptake up of electric vehicles is dependent on improved infrastructure as well as being dependent on Government initiatives. Participation in a London wide electric vehicle scheme can minimise the risk of a low take up.

Table 26, CO₂ baseline data with target trajectory

Definition	Base year	Base year value	Target year	Target year value	2010	Trajecto	ory data	2013	Long- term (2025) target
% reduction in CO ₂	2008	227	2013	190.09	211.45	204.07	196.96	190.09	124.17

Appendix A Figure 36, Target CO₂ emissions from road based transport



To complement the information sourced from the London Energy and Greenhouse Gas Inventory (LEGGI). Traffic volume data will be used a proxy measure for CO_2 , if we assume that as traffic volume decreases so to would CO_2 emissions.

Traffic level reduction target

This target is set to complement the council's CO₂ emissions and mode share targets. If sustainable mode share (walking and cycling) can be increased by 3% then a corresponding decrease in traffic volumes could be projected over the same timescale.

Table 27, Traffic level reduction target

Reduce traffic leve	Reduce traffic levels in Southwark by 3% from 2010 to 2013				
Target trajectory	See table 28				
Evidence that the target is realistic and ambitious	This target is set to complement the mandatory indicator on CO ₂ emissions as well as mode share. If sustainable mode share (walking and cycling) can be increased by 3% then a corresponding decrease in traffic volumes could be projected over the same timescale. This will be measured throughout the borough by monitoring traffic flow at chosen locations across screen lines annually. Figure 30 shows these locations				
Key actions for the council	 Continue to implement policies which reduce the need to travel. Continue to support school and workplace travel plans with the council leading by example and Developing walking improvements; such as at Lordship Lane, Rye Lane, Copeland and Consort Roads as well as the Walworth and north Peckham areas. Reprioritisation of road capacity; through schemes such as Grange Road / Southwark Park Road, Peckham Rye South, and Paxton Green. 				
Key actions for local partners	TfL demand management measures				
Principal risks and how they will be managed	Increased development will lead to an increase in demand for travel, this can be mitigated by ensuring that, where feasible, developments are car free and that all developments have robust travel plans in place.				

Table 28, Southwark screenline programme

Traffic count screen line	Traffic flow (both directions) for a "virtual" day	3% reduction projected by 2013
Northern north-south screen line	89,755	87,062
Southern north-south screen line	56,336	54,646
East-west screen line	161,280	156,442

Walking mode share target

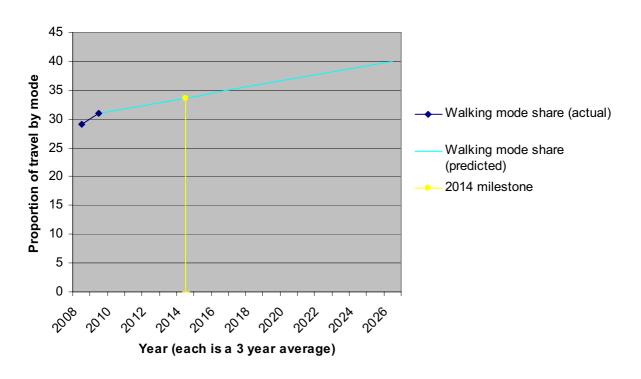
This indicator measures the proportion of trips made on foot. The percentage of walking trips has varied over time reflecting car ownership and usage levels, changes to the public transport services and shifts in community attitudes. Walking levels increased significantly during the 1970's and declined during the 1980's to a low in 1991, since this time they have remained relatively stable.

Table 29, Walking mode share target

Increase the walking mode share in Southwark to a third (33%) by 2013		
Target trajectory	See figure 36	
Evidence that the target is realistic and ambitious	Our target is to increase the walking mode share in Southwark from 29% in 2008 (2006/08 3 year average) to 33% by 2013 (2011/13 3 year average). The trajectory shown in the graph below shows a final target of 40% mode share by 2026. We believe that as walking is already a significant proportion of the overall mode share that aiming to increase it to this level is ambitious. This target, together with the cycling mode share target, complements our target for CO ₂ reduction and in particular a reduction in vehicular traffic in the borough.	
Key actions for the council	 Work with local travel planning groups to increase walking for work purpose Working with 200 club to develop travel plans and promote sustainable travel Prioritisation of footway maintenance Travel plan support and implementation 	
Key actions for local partners	 Local travel planning groups Business community 	
Principal risks and how they will be managed	There is a risk that improved traffic flow and greater reliability of motorised modes may increase this mode share and therefore reduce walking levels. This will be combated by prioritising walking (as shown in our hierarchy) above all other modes in scheme design.	

Figure 36, Walking mode share target

Walking mode share target for Southwark to 2026



Data

source: LTDS

Cycling mode share target

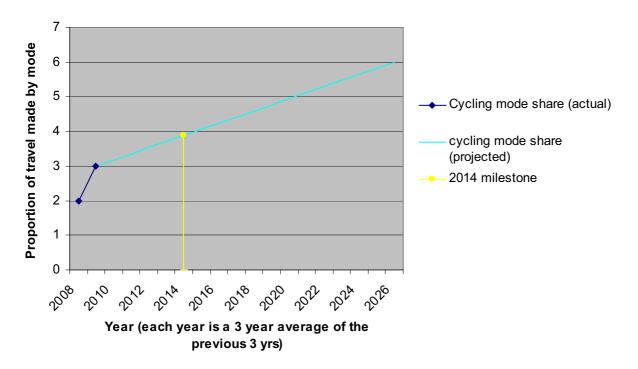
This indicator measures the proportion of trips made on bike. The popularity and usage of cycling has increase in the past five years and this target is based on a projected mode share of 6% by 2026.

Table 30, Cycling mode share target

Increase the proportion of those cycling in Southwark from 3% in 2009 (2007/09 average) to 4% by 2013/14	
Target trajectory	See figure 37
Evidence that the target is realistic and ambitious	The target for 2013 is based on a projected mode share of 6% by 2026 (Mayoral target for inner London)
Key actions for the council	 Prioritisation of maintenance on key cycling routes Cycle training
	Travel plan support and implementation
	Advance stop lines at signals
	Work with local travel planning groups to increase cycling for work purpose
	 Working with 200 club to develop travel plans and promote sustainable travel'
	 Work with TfL to maximise benefits of the cycle superhighways running through the borough.
Key actions for	Local travel planning groups
local partners	• 200 club
	• PCT
Principal risks and how they will be managed	There is a risk that improved traffic flow and greater reliability of motorised modes may increase this mode share and therefore reduce cycling levels. This will be combated by prioritising cycling (as shown in our hierarchy) above all other modes in scheme design.
	Unusual or extreme weather conditions, such as hot dry summers and snow and ice in winter, may cause increased damage to road surfaces in the borough and across London as a whole. A lower level of funding than anticipated could also severely affect the comfort of cycling.

Figure 37, Cycling mode share target

Cycling mode share target for Southwark to 2026



Data source: LTDS

Road safety target

This indicator measures the total number of people killed and seriously injured (KSI) from road traffic accidents and total casualties, all slight collisions and collisions involving cyclists.

Table 31, Road safety target, reducing KSIs

Reduce the number	r of killed and seriously injured by 16% from 2004/2008 baseline to 2014
Target trajectory	See figure 38
Evidence that the target is realistic and ambitious	Reduce the number of killed and seriously injured from 140 (2004/2008 baseline) to 117 (16% reduction) by 2014 (as a 3yr average 2012/2014)
	Neither the government nor the Mayor have set new road safety targets for 2010. However the DfT ³¹ have consulted on a series of national targets, applicable to all local authorities. The proposed target for this indicator is to reduce the number of KSIs by 33% by 2020 compared with a 2004/08 baseline. Both the previous Mayoral target of a 50% reduction in KSIs from a 1994/98 baseline and this new predicted reduction derived from the DfT target have been plotted on the graph in figure 35. Therefore our target for 2014 is based on a 33% reduction by 2020 using a baseline from 2004/8. We consider that this is an ambitious target given that data for KSIs appears to be levelling out.
Key actions for the council	 Our actions are: Speed reduction measures through schemes such as the those proposed in Grange Road / Southwark Park Road, Peckham Rye South, Forest Hill Road, Copeland and Consort, Barry Road and Paxton Green Cyclist training for children and adults Pedestrian training Travel awareness promotion and events
Key actions for local partners	Over half of all casualties in the borough occur on the TLRN and so TfL has a pivotal role in reducing the number of KSIs on these roads.
Principal risks and how they will be managed	An important risk to this target is that increases in walking and cycling may lead to greater numbers of collisions. Pedestrian and targeted cyclist training can help to reduce this risk. There is decreased scope for reducing casualty numbers through engineering measures and so increased emphasis will be given to influencing the behaviour of road users.

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³¹ A Safer Way: Consultation on Making Britain's Road the Safest in the World, Department for Transport, 2009

Figure 38, KSI target trajectory for Southwark to 2014

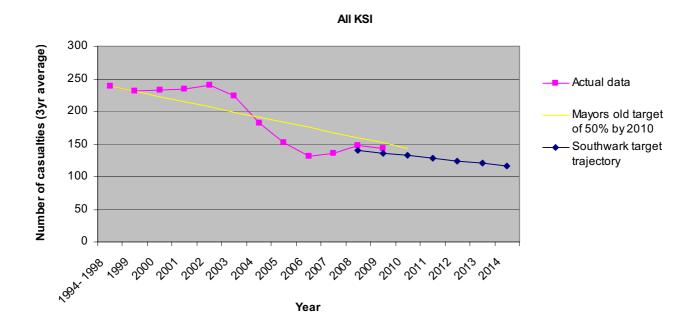
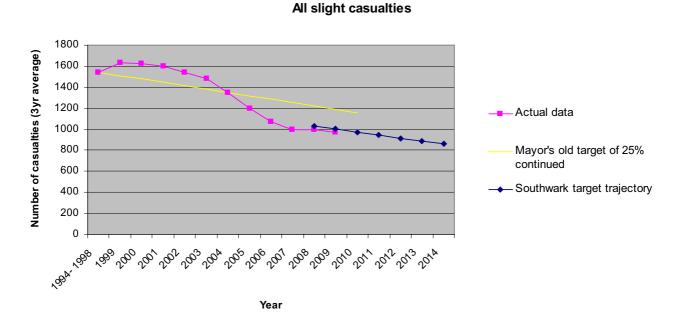


Table 32, Road safety, reducing slight casualties

Reduce the total number of slight casualties on within the borough from 1,030 to 858 (17% decrease) by 2014 compared with a 2004/08 baseline.	
Target trajectory	See figure 39
Evidence that the target is realistic and ambitious	Total slight casualties fell from 1,543 in 1994/98 (baseline) to 569 in 2009 (a reduction of 37%). No targets have been set by the government or the Mayor to reduce the number of slight casualties. Therefore the proposed target for this indicator is to reduce the number of slight injuries by 33% by 2020 compared with a 2004/08 baseline with an interim target of 17% decrease by 2014.
Key actions for the council	 Our actions are: Speed reduction measures through schemes in Grange Road / Southwark Park Road, Peckham Rye South, Paxton Green, Forest Hill Road, Copeland and Consort, Barry Road, Newington Causeway (2012/13), and Ilderton Road (2012/13). Cyclist training for children and adults Travel awareness promotion and events
Key actions for local partners	Over half of all casualties in the borough occur on the TLRN and so TfL has a pivotal role in reducing collisions on these roads.
Principal risks and how they will be managed	An important risk to this target is that increases in walking and cycling will lead to greater numbers of collisions. Targeted pedestrian and cyclist training can help to reduce this risk. There is decreased scope for reducing casualty numbers through

engineering measures and so increased emphasis will be given to influencing the behaviour of road users. There is a possibility of migration of casualties from KSI to slight as speed reduction measures reduce the severity of collisions but not the actual risk of collision.

Figure 39, Target for slight casualties in Southwark to 2014.

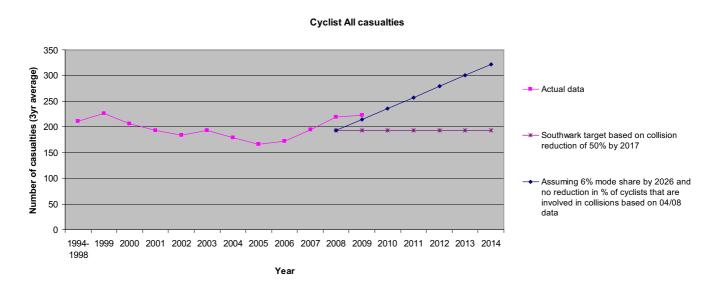


As shown in figure 40, injuries to cyclists have increased for the fourth year running from a low in 2005. This is a major concern for the council and we have set a target to reduce cyclist casualties.

Table 33, Road safety, cyclist casualties target

Reduce all cyclist casualties by 40% by 2014 based on a 2004/08 baseline		
Target trajectory	See figure 40	
Evidence that the target is realistic and ambitious	Our chosen interim target is to reduce the total number of cyclist collisions in the borough from a 2004/2008 baseline by 40% in 2014 given an increase in mode share. This is based on the trajectory for our final target which is a 50% reduction in cyclist collisions by 2017 given an increase in mode share.	
	When developing this target we have considered our ambition to increase the number of cyclists on our roads. The trajectory of this target appears in figure 38 as a straight line on the graph. Also shown on the graph is a projected increase in cyclist collisions if mode share increases to 6% by 2026 and no improvements are made. This interim target will be reviewed in 2014 and adjustments will be made for actual cycle mode share change.	
Key actions for the council	 Deliver tailored cyclist training Driver training and education 	
Key actions for local partners	Working with the police on an enforcement programme	
	Over half of all casualties in the borough occur on the TLRN and so TfL has a pivotal role in reducing collisions on these roads.	
Principal risks and how they will be managed	Increased exposure to risk as numbers of cyclists increase, mitigated by targeted training of cyclist and awareness campaigns for targeted groups such as HGV drivers.	

Figure 40, cyclist casualties



Additional information the council will monitor

To support the information collected and reported as part of the target monitoring, the council also collects the following information to track performance.

Table 34, Annual information collated

	School hands up surveys
	Annual school census data
	School travel plan progress reports
	% development that has been built complying with UDP car parking standards
Tuononout	% development that has been built complying with bicycle parking standards
Transport Plan outcomes	Amount of approved development in controlled parking zones restricted from having on street parking permits
	Amount of approved development subject to a travel plan
	Funding gained from planning (S106) agreements for transport
	Travel plan monitoring
	Bus and tube patronage data
	Ofsted reports and school self evaluations

In addition to the monitoring for our Transport Plan targets and the information to be collated above we will also be collecting data for TfL through their output reporting sheet shown below.

Table 35, Output reporting sheet, information required annually by TfL

Description	Unit of data	Number	
Cycling			
Cycle parking facilities	Number of on street spaces		
	Number of off street spaces		
Cycle training	Number of adults		
	Number of children		

Walking	
Protected crossing facilities (eg refuges, zebra crossings, pelican crossings etc)	Number
Guardrail removal	Metres
Road safety and personal security	
Education and training interventions (eg theatre in education or pedestrian training)	Number
20 mph zones / limits	Number
Buses	
Bus lanes	Kilometres
Accessible bus stops	Number
Smarter travel	
Development of workplace travel plans and review of existing plans	Number of workplaces
Annual monitoring of school travel plans	Number of schools
Walking promotions (eg Number of schools participating	Number of schools
in 'Walk on Wednesdays'	Number of workplaces
	Number of events
Cycling promotions (eg Number of events during Bike	Number of schools
Week)	Number of workplaces
	Number of events
Smarter driving (ie Eco-driving), greener vehicles, liftshare and car club promotions	Number of events
Public transport promotions (eg Freedom Pass promotions)	Number of events

Environment	
Electric vehicle charging points	Number on street
	Number off street
	Number of workplace
Car club bays implemented or secured by the borough	Number on street
	Number off street
Street trees	Number of new trees planted
	Number of replacement trees planted
	Number felled for natural / safety reasons
	Number felled for other reasons
Local area accessibility	
Shopmobility or scootability	Number of schemes implemented
Controlled parking and freight	
New zones implemented	Number
Waiting and loading reviews	Number
Cleaner local authority fleets	
European emission standard of fleet for heavy duty	Number of Euro II vehicles
diesel-engined vehicles (all vehicles with a gross vehicle weight of 8,800kg or over, including lorries and buses)	Number of Euro III vehicles
	Number of Euro IV vehicles
	Number of Euro V vehicles
Electric vehicles in fleet	Number fully electric
	Number hybrid electric

Appendices

Appendix A

Policy context and issues

Our transport objectives have been informed by, and are consistent with the wider policy context at national, London, sub regional and local level detailed below.

Policy in Southwark

Sustainable Transport Supplementary Planning Document (SPD)

The Sustainable Transport SPD (2010) provides more detailed guidance for developers so that all development is easily accessible and encourages people to walk, cycle and use public transport; as well as reducing congestion and pollution.

Section 106 SPD

Planning obligations or 'section 106 (s106) agreements' are an effective way of securing funds to implement measures to mitigate the impacts of generally acceptable development proposals on the environment, economy and community. Development may put additional pressure on existing infrastructure, such as public transport, schools and health services and create a demand for additional provision.

The s106 SPD provides guidance for s106 planning contributions negotiations. Some standard charges are set out for strategic transport projects. These are a set of general formulae used to establish the amount of contributions that are likely to be sought for a particular type of development. These are often collected from developments that in themselves would not require new facilities but would contribute to a cumulative impact.

Housing Strategy, 2009 to 2016

The strategy sets out the borough's plans for promoting new housing, improving the quality and management of existing housing, addressing the housing needs of the borough, preventing homelessness and eliminating rough sleeping.

Southwark's housing options appraisal in 2006 showed that Southwark could retain both ownership and management of its stock, and meet the Government's Decent Homes Standard by 2010/11. Retention was seen as a positive option.

The overarching vision of this strategy is "To improve residents' lives by providing high quality homes and housing services that promote successful and inclusive communities."

To achieve this, vision four strategic objectives were agreed:

- 1. Improve the quality of existing housing and use it more efficiently
- 2. Increase the supply of good quality housing
- 3. Enable choice while meeting housing needs
- 4. Prevent homelessness and reduce the use of temporary accommodation.

Economic Development Strategy 2010 to 2016

Southwark's Economic Development Strategy 2010-2016 states that due to its proximity to the centre of London, Southwark has been able to harness the dramatic growth of the London economy in order to regenerate areas of the borough, and generate significant improvements for local communities and businesses. This has meant that the number jobs and businesses in the borough has expanded rapidly and Southwark has continued to outperform London averages and similar London boroughs. However, despite the large scale growth in jobs, rates of worklessness remain high and unemployment is concentrated among certain groups, particularly in certain localities.

The responsibility for the delivery of the *Southwark Economic Development Strategy 2010-2016* lies with the Southwark Alliance Local Economy Group. The vision of this strategy is: to build sustainable, inclusive and prosperous communities by reducing worklessness and sustaining high quality employment for all Southwark's residents, and; to create a strong sustainable economy, with a thriving network of town centres, built on an entrepreneurial culture.

Southwark's strategic economic development priorities are to

- Tackle the barriers to work faced by priority groups
- · Increase business and employer engagement
- Raise skills for sustained employment
- Support existing businesses
- Develop key business districts and town centres
- Increase business start ups

Following the impact of the recession the economic outlook remains uncertain. Major changes are taking place in the national and regional policy environment that affect the planning and delivery of skills development, including the introduction of welfare to work programmes and a major shift in priorities for business support provision, and businesses are set to suffer a loss of opportunities from a shrinkage in public expenditure. Public sector investment in employment and enterprise initiatives will be limited.

Safer Southwark Partnership Plan (2008 to 2012)

The Safer Southwark Partnership (SSP) is the crime and disorder reduction partnership for Southwark. The SSP brings together a range of statutory and voluntary sector services to jointly agree how they can work together to make improvements to reduce crime and substance misuse.

"The issue of safety and providing safe journeys will be increasingly important. In addition, community safety will need to take a central role in the development of the new transport infrastructure to ensure that they are not used as gateways to crime and in particular drugs markets.

The partnership review concluded that issues around transport and safe journeys should be considered in the context of all our priorities, particularly around preventing youth crime."

The priorities for 2009 to 2012 are:

- · Reducing violent crime
- Tackling youth crime

- · Tackling anti-social behaviour
- Drugs and alcohol
- · Reducing reoffending
- Communities and Communications

Home to school transport policy

The council's Home to school transport policy sets out the criteria in which the council may provide transport for children with special educational needs, disabilities, or mobility difficulties³².

Towards a low carbon Southwark: Climate Change Strategy (2006)

The council's climate change strategy *Towards a low carbon Southwark: Climate Change Strategy* (2006) aims to achieve an 80% reduction in overall emissions by 2050 (using a 1990 baseline), and states that "by working with TfL and other partners on major transport improvements Southwark should be able to achieve a 50-60% reduction in carbon dioxide from transport within the borough by 2050." Currently 16% of Southwark's CO₂ emissions are from road transport³³.

The following are policies in the climate change strategy which are relevant to transport.

Policy 14	Encourage the take up of alternative fuels and cleaner vehicles and lobby national and London Government to provide incentives their use
Policy 13	Improve town centre environments and promote local shops
Policy 12	Plan developments to minimise private car use
Policy 11	Promote and enable carbon free modes of transport (i.e. walking and cycling)
Policy 10	Set targets in the Lip

Healthy Weight Strategy 2009 to 2012

This strategy replaces the Southwark Obesity Prevention and Management Strategy and aims to be a coherent strategy for achieving Southwark's healthy weight vision. The document sets out the healthy weight vision, summarises the evidence and the causes of obesity, reviews the current programmes for reducing obesity and sets out the strategic priorities.

Sport and Physical Activity Strategy

The strategy which covers a four year period (2009-2013) responds to key issues regarding sport and physical activity in Southwark. Below is the issue and recommendations relating to transport:

³² Southwark Council and Southwark Primary Care Trust, Home to School Transport Policy 2007/08, 2007

³³ Department of Energy and Climate Change (DECC), used for NI186 target

Issue	Summary of recommendations
Street scene under utilised and limited active promotion of this as a resource	Additional research to identify suitable walking routes across Southwark; improve the promotion of cycle and walking routes, more detailed mapping of street scene facilities

Open Spaces Strategy (2009)

In 2009 an open space, sport and recreational facilities study was undertaken and set out the provision regarding size, quality and distribution of open space sites across the borough. The Open Spaces Strategy document presents the quantity, quality, accessibility and design standards for the borough's open spaces, together with an action plan.

The accessibility standard for each type of open space is the maximum length of time it takes any resident to walk to their nearest open space of that type. These times range from 8mins for Local Parks to 25mins to District Parks.

Southwark Biodiversity Action Plan 2006 to 2010

The Southwark Biodiversity Action Plan - Work for Wildlife - outlines how Southwark Council will work with its partners to conserve, enhance and promote biodiversity in the parks and opens spaces for the benefit of residents, visitors and future generations. Work for Wildlife is designed to be a valuable toolkit that provides a unified strategic framework for managing the Borough's natural resources.

Southwark Tree Management Strategy (2010)

The tree management strategy is a policy framework for the trees owned, managed and / or protected by Southwark Council. The tree management strategy sets out a vision for the next five years and explains how Southwark will achieve this vision. It is a reference document for anyone with an interest in Southwark's trees.

Legislation

The Equality Act 2010

The Equality Act brings together nine separate pieces of legislation into one single Act simplifying the law and strengthening it in important ways to help tackle discrimination and inequality. The Act provides a new cross-cutting legislative framework to protect the rights of individuals and advance equality of opportunity for all; to update, simplify and strengthen the previous legislation; and to deliver a simple, modern and accessible framework of discrimination law which protects individuals from unfair treatment and promotes a fair and more equal society.

Disability Equality Duty 2006

The council like all public bodies across Great Britain is covered by the Disability Equality Duty (DED), which came into force in December 2006. The DED is meant to ensure that all public bodies - such as central or local government, schools, health trusts or emergency services – pay 'due regard' to the promotion of equality for disabled people in every area of their work.

Race Relations Amendment Act 2000

The Race Relations Amendment Act 2000 requires all public bodies to examine how their policies, services and practices affect the local community across three overlapping areas of responsibility

- To eliminate discrimination
- To promote equality of opportunity
- To promote good race relations

Disability Discrimination Act 1995

The Disability Discrimination Act 1995 (DDA) seeks to ensure disabled people are not discriminated against when accessing employment, goods and services.

The Act defines disability as any person who has a physical or mental impairment which has a substantial and long term adverse effect upon a disabled person's ability to carry out normal day to day activities. In transport terms, this means a substantial and long term adverse effect upon a disabled person's ability to gain access to or travel independently on transport systems.

The DDA sets out clear requirements for the provision of transport services and any barriers, be these physical or attitudinal, that must be removed to satisfy the requirement of this Act. The delivery of more effective and efficient accessible transport services for residents with a mobility need is paramount.

Road Safety Act 2006

The Road Safety Act was introduced after the first review of Tomorrow's Roads. The Act allowed a raft of new measures to help achieve the road safety targets. These include new penalties for careless, unlicensed, uninsured and disqualified drivers and penalties relating to the use of mobile phones while driving.

Traffic Management Act 2004

The Traffic Management Act 2004 (TMA) proposes a network management duty on traffic authorities, which would require active and coordinated management of the road network, consistent with wider local, regional and national policies and guidance.

The four cornerstones of the Act are outlined as follows

- Provide for TfL to develop its role as a network manager and empowering TfL to recruit traffic
 officers to manage planned and unplanned incidents on the trunk road network
- Ensure a coordinated approach, the Act will require local traffic authorities to have someone (the traffic manager) responsible for ensuring they meet a statutory duty to keep traffic flowing on their roads
- Provide a new regulatory regime for utility companies' street works, amending existing legislation to give highway authorities effective controls over those works
- Allow for more civil enforcement of parking and moving traffic offences

Road Traffic Reduction (National Targets) Act 1998

The Road Traffic Reduction Act 1998 (RTRA) places a duty on the borough to assess current levels of local road traffic, forecast future growth in those levels and identify targets for reduction. Southwark Council as an inner London borough has adopted a target reduction of 25% by 2010.

Road Traffic Act, 1988

The 1988 Road Traffic Act, Section 39, puts a 'Statutory Duty' on the local authority to undertake studies into road accidents, and to take steps both to reduce and prevent accidents.

Education and Inspections Act

Section 508A of the Education and Inspections Act 2006 places a duty on local authorities to promote the use of sustainable modes of travel and transport to children and young people. There are four specific elements to this duty

- Assess travel and transport needs of children and young people
- Audit sustainable travel and transport infrastructure
- Develop a strategy that aims to make improvements to sustainable travel and transport infrastructure, addressing the needs of children and young people
- Promote sustainable modes of travel and transport for the journey to schools and other education institutions

Road Safety Act 2006

The road safety act was introduced after the first review of Tomorrow's Roads. The act allowed a raft of new measures to help achieve the road safety targets. These include new penalties for careless, unlicensed, uninsured and disqualified drivers and penalties relating to the use of mobile phones while driving.

Crime and Disorder Act 1998

Section 17 of the Crime and Disorder Act 1998 confers a general duty on Local Authorities to exercise functions with regard to the likely effect of the exercise of those functions and the need to do all that can be reasonably done to prevent crime and disorder in a particular Local Authority's area.

National policy

Government's Motorcycling Strategy

The theme of this strategy is to support motorcycling as a choice of travel within a safe and sustainable transport framework. The strategy represents an important step in recognising the special needs of motorcyclists and its growth is usage.

The strategy covers a whole range of issues including suitable infrastructure, traffic management measures, motorcycle design, safety issues including improved training and taxation. It takes account of the recommendations made to government by the advisory group on motorcycling.

DfT's child safety strategy sets out what will be done to improve road safety for children aged up to 15 to help meet the 2010 casualty reduction target, identifying priority areas and giving a plan for further actions. Particular actions refer to training, lifelong learning, education, publicity, engineering and environmental themes.

Active Travel Strategy

The Active Travel Strategy was produced in February 2010 by the Department for Transport (DfT) and Department for Health and sets out the Government's vision and existing programme for promoting active travel and supporting better local delivery of active travel with the aim of making walking and cycling the natural choice for many short journeys.

National Institute for Health and Clinical Excellence (NICE) public health guidance

A series of guidance has been produced for a range of topics including several which relate to transport including; cardiovascular disease, work place health promotion and promoting and creating built or natural environments that encourage and support physical activity. The guidance is for government, the NHS, local authorities, industry and all those whose actions influence the topic.

New Horizons Confident Communities, Brighter Futures

Published by the Department of Health (mental health division) in March 2010 this report sets out the argument and evidence base for prioritising well-being, and provides a systematic approach to improving mental well-being with selected evidence-based approaches and interventions that have been shown to be effective across the life course, and across key public health domains.

The Great Outdoors: How our natural health service uses green space to improve well being (National action report):

This report, written by the Faculty of Public health in association with Natural England, argues that green space can play an important part in tackling a range of health and social problems – obesity, cardiovascular disease, mental ill-health, antisocial behaviour, and health inequalities. It outlines the evidence that the natural environment can enhance our health and wellbeing, and explains how town planners, health professionals, policymakers and people themselves can work together to create more green space and make better use of it for the benefit of all.

Cardiovascular Disease and Air Pollution

This report was completed by the Committee on the Medical Effects of Air Pollutants (COMEAP) for the Department of Health (DH) in 2006 to give advice on the possible effects of outdoor air pollutants on cardiovascular disease in the UK. The Committee formed a subgroup which reviewed the literature in detail and drafted the report. This included a systematic review on a range of scientific studies and analysis of the relevant data available.

Regional policies

Mayor's draft Climate Mitigation and Energy Strategy

The Mayor's draft *Climate Change Mitigation and Energy Strategy* (2010) considers a change to how energy is produced and commits to the London wide target of reducing CO₂ emissions by 60% by 2025 (using a 1990 baseline). The three policies in the strategy relevant to transport are:

- Policy 10: Minimising CO₂ emissions through a shift to more efficient modes of transport
- Policy 11: Minimising CO₂ emissions through more efficient operation of transport
- Policy 12: Minimising CO₂ emissions from transport through the use of low carbon vehicles, technologies and fuel.

Mayor's draft Climate Change Adaptation Strategy

The Mayor's draft *Climate Change Adaptation Strategy* (2010) details how London can best prepare for a changing climate by adapting homes, communities and lifestyles. The key actions proposed are to improve understanding and management of surface water flood risk, an urban greening programme (to increase the quality and quantity of green space and vegetation) to create a buffer from floods and hot weather, and to retro-fit up to 1.2m London homes (by 2015) by improving the water and energy efficiency of them.

Economic Strategies

The Mayor's *Economic Development Strategy* 2010, sets out a vision with respect to the London economy, and how it can be realised. The Mayor's ambitions are for London to be the World Capital of Business, and to have the most competitive business environment in the world; to be one of the world's leading low carbon capitals, for all Londoners to share in London's economic success and for London to maximise the benefits of the 2012 Olympic and Paralympic games. Objective 3 of this strategy is "to make London one of the world's leading low carbon capitals by 2025 and a global leader in carbon finance."

London Freight Plan (2008)

The London Freight Plan (2008) identifies that the planned growth of London will lead to a 15% increase in demand for freight and servicing by 2025. Without intervention this increase would have a severe impact on congestion, air quality and climate change. Freight distribution needs to become more sustainable. Sustainable freight distribution can be measured using the following indicators taken from the London Freight Plan:

- Total no. of commercial vehicle related PCNs per million freight vehicle kms
- Overall reliability measure for freight
- Emissions impact of road freight vehicles: CO₂, NOx and particulates
- Freight fly tipping incidents
- Overall no of killed and seriously injured in collisions involving freight vehicles
- No. of thefts linked to freight activities on London's Roads

Based on 2006 data, the estimated contribution from freight transport in London is 2.2m tonnes of CO_2 emissions, which accounts for 23% of the total ground based transport and 5.1% of the Capital's CO_2 production and energy use. The plan states that up to 1.21m tonnes per year of CO_2 could be saved by 2025. This is based on detailed analysis which took place following the production of the Mayor's *Climate Change Action Plan* (2007)³⁴.

Electric Vehicle Delivery Plan (2009)

The Electric Vehicle Delivery Plan outlines a comprehensive strategy to stimulate the market for electric vehicles in London. The plan also aims to increase the number of benefits of electric vehicle ownership and to communicate their social, economic and environmental potential. Through addressing infrastructure, vehicles; and providing incentives, marketing & communications.

The plan sets an ambition of to deliver a network of 25,000 charging points across London by 2015.

³⁴ Note that both the London Freight Plan and the Climate change Action Plan were published under the previous Mayor and so both take into account the previous Mayor's Transport Strategy.

Appendix B: Delivery plan

The specific interventions set out in the delivery plan table will be delivered by April 2014 unless they are ongoing measures, e.g. road safety education and training. These ongoing interventions are marked with an asterisk * in the delivery plan.

		Allocation	
Programme	2011/12	2011/12 2012/13	2013/14
Corridors & neighbourhoods	2,496	2,395	2,053
Supporting measures	501	480	412
Total allocation	2997.00	2875.00	2465.00

					2
Project	Community	Description	2011/12	2012/13	2013/14
School Travel Plan initiatives	Boroughwide	Encouraging the use of sustainable modes of travel to and from school, especially active travel, through school travel plans. This includes staffing a school travel plan advisor, campaigns such as Walk to School and WoW, small grants and small infrastructure works.	118	113	97
Travel awareness campaigns and events	Boroughwide	Various events and activities associated with promoting smarter travel choices. Including mobility week, Dr Bike and travel awareness for physical schemes.	74	7.1	61
Travel Plan support and implementation	Boroughwide	Advice and support for travel planning groups and travel plan development and implementation. Includes staffing, implementation of the councils own travel plan and providing funding for local travel planning groups.	58	55	47
Road Safety education, training and publicity	Boroughwide	Campaigns and events to encourage safer travel behaviour. Including independent travel training, child road sfaety, LGV and cyclist campaigns and theatre for children and the elderly.	88	85	73

Cycle training	Boroughwide	Provision of cycle training acr esplacetholik. A e cover staffing, management, promotion, publicity and delivery of training sessions to all groups	163	156	134
North Peckham green links	Peckham & Walworth	Walking, cycling and bus improvements		300	
Copeland and Consort Road	Nunhead and Peckham Rye	Changes to the roads forming the one-way system in order to improve safety, reduce speeds and reduce community severance. Year 2 of scheme.	100		
Surrey Square green links	Walworth	Walking and cycling improvements		200	
Sustainable travel infrastructure	Boroughwide	Identification and delivery of on street cycle parking, dropped kerbs, estate cycle parking and other measures to support sustainable modes of travel	09	09	09
Southwark Park Road/Grange Road (between St James's Road and Tower Bridge Road)	Bermondsey	Road safety and access to Spa Park. Reduce speeds and address vehicle dominance. Year 2 of scheme.	180		
CSH complementary measures	Nunhead and Peckham Rye, Peckham & Camberwell	Permeability improvements, estate cycle parking, permeability, secondary schools, training along Route 5.		130	12
Pedestrian phases	Borough wide	Introduce pedestrian facilities at signalised junctions on borough roads.	90	50	3 09
Rotherhithe Peninsula	Rotherhithe	STP, walking and cycling improvements		175	
Camberwell quick wins	Camberwell	Walking routes and environmental improvements on quiet streets around town centre. Dropped kerbs, declutter, planting, artwork.		150	
Peckham Rye South (between Scylla Road, East Dulwich Road and Nunhead Lane)	Nunhead and Peckham Rye	Review of signalised junctions, pedestrian and cycle improvements. Extended to cover Scylla, Whorlton and Old James Road. Year 2 of scheme.	538		
Peckham Rye station access	Nunhead and Peckham Rye	Walking links to the station and pedestrian safety improvements on Rye Lane adjacent to the station.		250	
Community Streets	Borough wide	Community led, small scale interventions. Mainly residential, but could extend to retail parades similar to 'DIY Streets'	90	20	20
West Walworth	Walworth	Legibility, permeability and accessibility improvements on streets to the west of Walworth Road	250		

Bellenden traffic management	Nunhead and Peckham Rye	Changes to the one-way syst enthanalizate d improvements. Incorporates Bellenden Road (north) scheme.		275		
Forest Hill Road	Nunhead and Peckham Rye	St Francesca Cabrini STP measures in year 1 and general speed reduction measures in year 2	165	400		
East Dulwich public realm and pedestrian access scheme (Grove Vale and Lordship Lane)	Dulwich	Public realm and improved access to East Dulwich station, improved pedestrian crossing provision on Lordship Lane, speed reduction measures on Grove Vale	400			
Lordship Lane	Dulwich	Collision reduction and pedestrian access improvements			421	
Rotherhithe New Road	Rotherhithe	Collision reduction, school and park access, new cycling route			672	
Greenland Pier	Rotherhithe	Local accessibility improvements	235			
Paxton Green	Dulwich	Reconfiguration of the roundabout in order to reduce speeds and improve pedestrian access through the area, particularly for school children. Wider STP measures for local schools. Complements Lambeth scheme in area.	250	300		
Rye Lane	Nunhead and Peckham Rye	Footway widening, loading improvements, urban realm			124 298	
Barry Road and Underhill Road		Safety measures at the junction of Barry Road and Underhill Road in year 1, wider speed reduction measures and junction treatments on Barry Road in year 2.			389	
Lant (Mint) Street	Borough and Bankside	Measures to deter through traffic from using Mint Street/Weller Street/Lant Street.	64			
Lower Road junction with Plough Way	Rotherhithe	Remove No Entry restriction to allow through access to Rotherhithe New Road	100			
EVCB	Boroughwide	Further implementation of electric vehicle charging points and running costs (subject to trial in 10/11)	25	25	25	
Surveys	Boroughwide	Cross borough programme of surveys and monitoring at a strategic level, including walking, cycling and traffic counts	30	30	30	
						_

2,466 2,054 412

2,875 2,395 480

2,998

Totals

Corridors and Neighbourhoods

Supporting measures

501

2013/14

2012/13

2011/12

Appendix C: Consultation

The transport plan contains initiatives and proposals that will affect the community as a whole and it is imperative that those who live, work and study in Southwark are able to comment on and provide input to the document.

Southwark is a very diverse borough and the consultation of the plan must be accessible to all sections of the community. It is important that all sections of the community be provided with the opportunity to engage in the consultation process. To enable this, involvement is to be clear, concise, fair, transparent and efficient and consultation methods tailored to specific needs of our community.

The consultation strategy has been prepared in liaison with the Cabinet Member for Transport, Environment & Recycling, the council's communications team, public transport consultative forum (PTCF) and the Equality and Diversity Panel (EDP).

Supporting documents to be consulted alongside the transport plan

Strategic Environmental Assessment (SEA)

The SEA was undertaken to identify the potential cumulative environmental effects of the different Transport Plan options that were considered. It also details possible mitigation measures than can be carried out alongside the final Transport Plan to alleviate or avoid any adverse environmental effects arising from the implementation of the Plan.

Equality Impact Assessment (EqIA)

Southwark has a duty under race, disability and gender legislation to carry out an Equalities Impact Assessment (EqIA) of the transport plan. This should identify whether or not and to what extent the Transport Plan has an impact, either positive or negative, on a particular equality target group, or whether any adverse impacts identified have been appropriately mitigated.

Health Impact Assessment (HIA)

A HIA has also been carried out. This considers the impacts, positive and negative, of the transport plan on health. It also contains a clear analysis of whether the health of the whole borough's population or just certain sections of the population will be affected.

Sustainable Modes of Travel Strategy (SMoT)

The Sustainable Modes of Travel Strategy is a statement of the council's vision for improving accessibility to schools and colleges and promoting sustainable travel for children and young people and is the council's response to Section 508 of the Education and Inspection Act 2006. The strategy aims to help children and young people, including those with special educational needs (SEN), parents, carers and schools to use sustainable modes of transport safely and easily.

Consultation on the transport plan

There are three stages to the consultation process.

- Internal consultation
- Stakeholder consultation including those outside agencies with an interest in the document, such as the Metropolitan Police Service
- Finally and most importantly, is to consult members of the public.

Consultation methodology

Internal

On the 18 October 2010 the Transport Plan, together with the Air Quality Strategy & Action Plan and the Sustainable Modes of Travel strategy, was presented internally, to all those council departments who may have an interest in the documents.

The presentation outlined the documents and how they may impact on other departments. Attendees were asked to respond with any comments and suggestions, either verbally or written and if necessary request individual meetings where specific queries could be addressed.

Stakeholder

It is recognised that external stakeholders will have technical queries and for this reason we shall hold a specific workshop(s), where the transport plan and related documents can be discussed.

Public

In order to appeal to the greatest number of people and gain the largest response yield, a multi modal approach is required. As a general rule, consultation and engagement methods can be split into two groups, quantitative (such as surveys) and qualitative (interviews, focus groups etc).

Qualitative consultation

A qualitative approach, i.e. interviews and focus groups, offer a much more interactive experience and should be used to gain a more detailed understanding of issues, than the more simplistic answering. It is about the "how" and "why" questions that shape quantitative work. Three examples of qualitative consultation are public meetings, roadshows and drop in sessions.

The key advantage to holding a public meeting is that it is a two way process that can give members of the public the opportunity to give their views and seek answers. It also offers an opportunity to present to the public a high level or detailed overview of the Transport Plan.

Roadshows or drop in sessions can be a successful method of consulting with the public, particularly when you want to inform communities of changes and seek opinions or feedback. Advantages are:

- You can take issues to a number of communities
- Useful way of giving visual presentation to inform the public
- Can be an informal means of obtaining the views of the community
- Can be carried out in-house

· Officers get the opportunity to discuss issues with the public

As a smaller number of people's views are being sort, qualitative consultation cannot provide statistically reliable results. However, it is more likely to provide a rounded view on why opinions and views are held.

Quantitative consultation

Using a quantitative approach, i.e. surveys, gives statistical information using a sample drawn from the whole population or group. If a sample has been drawn using statistically reliable methods then it could be possible to extrapolate this out to the population as a whole.

There are a variety of methods available to canvas views when undertaking a quantitative work. It is therefore important to consider the most appropriate method that will give you the best results. The table below details the advantages and disadvantages of various survey methods.

The two approaches, both quantitative and qualitative, can compliment each other and if possible the best method may be using a combination of both.

Method	Advantages	Disadvantages
Postal	Provides potentially large scale and therefore statistically valid analysis	Response rate can be low especially if consultation subject is not of inter-
saiveys	Can easily target geographical areas provided address data base is available	to the majority of sample.
	Respondee availability is less of a factor as can be answered at leisure	Administration costs are potentially high.
Email	Delivery to a large amount of people can be almost instant	Need current email addresses
surveys	Potential for high response rate	Can be viewed as junk mail by some therefore reducing response rate
	Low cost	Not suitable for longer questionnaires
Web based	Fast response	Multiple responses from one individual could be sent
surveys	Likely that people would give a more honest opinion on questions of a	Excludes individuals without web access or web skills
	sensitive nature	People can give up and 'quit' in the middle of the survey, which may be Is
	High response rate	likely with postal surveys
	Low cost	Technical problems can occur
	People tend to give more lengthy answers to questions	It is difficult to control where individuals are responding from unlike a post
	Survey tool can be used for analysing survey data	survey where addresses can be tailored as appropriate. Passwords coulc added in however this adds an additional level of administration
Telephone	Direct access to service users particularly when they telephone the council	Members of the public could resent being contacted in their own home fo
surveys	contact centre	survey purposes or being surveyed when they call the council
	More people can be contacted over the phone	If internal staff are being used to ask the questions this could skew the
	Potentially a broader cross section of people can be contacted	answers given as the respondent may feel uneasy giving negative respor

Based on the above information and previous experience, the following methods will be used to consult the public on the Transport Plan: a public consultation questionnaire, both online and hard copies to be left in public locations, such as libraries, leisure centres, supermarkets; community councils; and two publicly accessible drop in surgeries.

Community Councils

Community councils are part of the council's decision making process and are a focal point for discussion on local matters. They act as a forum for consultation with local people and provide an opportunity for residents to influence the delivery of council services. It gives decision making back to the citizens.

The Transport Plan and associated documents will be presented at each community council. Those in attendance will be able to ask more strategic / general questions and make comments and suggestions. Those present will be directed to the council's website and encouraged to complete the public consultation questionnaire, but there will also be hard copies available.

Drop in surgeries

Two public workshops will be held during the course of the consultation period. At these events, members of the public will be invited to make representations in a variety of ways. There will be copies of the Transport Plan to hand and officers will be available for face to face discussions, there will also be copies of the public consultation questionnaire available.

Public consultation questionnaire

Not all members of the public will be able to attend either their community council, or one of the 'drop-in surgeries' it is therefore proposed to prepare an online survey.

The online tool, Survey Monkey, will be used to create simple on line questionnaires. This offers an easy to use format for the public and will analyse results. The survey and URL will be designed with the Southwark branding and the real time results can be downloaded to either Excel or as a PDF. As many languages are spoken in Southwark, it is also possible for any Survey Monkey questionnaire to be translated and in order for them to be fully accessible, they comply with accessibility standards³⁵. It is the council's policy to reduce paper use and printing where possible and this online method will help achieve this.

A postal survey was considered but discounted, as consultation on the previous LIP, November to December 2005, included a postal survey of 240 interest groups, but only 63 were returned. Although relatively high for this type of exercise, a return rate of 26% is not sufficient to justify the large amount of resources involved. However, stakeholders and the public will be invited to complete the survey on line.

Keyboard access for mobility impaired users

- Colour contrast for users with low vision
- Alternative content for visual aspects of the site so that assistive products, such as screen readers, can easily access and translate information to users.

³⁵ Section 508, US 1998:

It is recognised that some sectors of the community are unable to access the internet to complete the survey. In order to address this issue, hard copies of the public consultation questionnaire will be provided upon request with notices in public places, such as libraries, leisure centres, supermarkets and community halls. These can be made available in large print and / or translated into any of the languages spoken in the borough. Contact details for the transport policy team, responsible for the Transport Plan, will also be provided on all questionnaires, so that members of the public can reply by either email or telephone if they wish.

It is the objective of the questionnaire to draw the public's attention to key issues contained within the transport plan and to gauge their opinion. Whilst this is not the forum for in depth discussions concerning the minutia of the document, it is an opportunity to gain the average opinion of the public on the wider issues concerning transport in their borough.

To encourage the greatest rate of return, the questions are very brief and the questionnaire must be kept as simple as possible.

Objective 1, Southwark aims to manage the demand for travel and encourage sustainable travel

Should we prioritise resident parking above short stay parking for shops and local businesses?

Should we focus cycle improvements on the main roads where most people cycle, or develop quieter cycle routes?

Objective 2, Our aim is to have 6% of all trips made in the borough by bike by

The council currently offers free cycle training to those that live, work, study or visit the borough. Given financial pressures we face should we continue to provide free cycle training, should we charge or restrict who is able to access cycle training?

Should we focus on groups who are more likely to cycle or should we engage with those who are less likely, but would enjoy greater health benefits from taking up cycling?

In promoting cycling should we focus on improving cyclist skills or improving cycling infrastructure?

Objective 3

Our town centres are busy places, providing jobs, supporting the local community, etc. Due to their busy nature, they often have higher levels of penalty charge notices being issued, bus delays and pedestrian collisions. Should we be prioritising improvements to our town centres above that of residential streets?

The council supports approaches to enable local communities to lead and develop the way residential streets should be designed and managed. Do you want to be involved in what happens in your street?

Objective 4

Do you support streetscapes where there is no kerb between the carriageway and footway?

Objective 5

Speed reduction is strongly linked to reducing the impacts of collisions. Should Southwark be a 20mph borough?

Objective 6

Should the council support mobility scooters being driven on the pavement?

Objective 7

In a recent survey of Southwark residents, people ranked the condition of streets (pothole repair, etc) as being of significant importance. Do you agree?

Southwark's highway network experiences significant congestion. Would you support night time deliveries to help reduce congestion on our roads?

Would you support prioritising buses over general traffic on our roads?

Objective 8

We are considering installing charging points for electric vehicles, would this make you consider purchasing an electric vehicle?

Appendix D: Equality Impact Assessment, scoping report

The key issues of this Equality Impact Assessment include improving accessibility to services and improving employment opportunity. Road safety and personal security are key themes. The management of road space and its allocation between different road users and between different functions is also a key consideration.

Stage one: scoping

1. What policy/strategy is this assessment addressing?

The Transport Plan sets out how we will improve travel to, within and from the borough and contribute to wider economic, social and environmental objectives of the council. The Transport Plan sets out our long term goals and transport objectives for the borough (up to 20 years), a three year programme of investment, and the targets and outcomes we are seeking to achieve.

Southwark's Transport Plan responds to the revised Mayor's Transport Strategy (MTS), the emerging Sub Regional Transport Plans (SRTPs), Southwark's Sustainable Community Strategy, and other relevant policies.

The Transport Plan, incorporating Southwark's Local implementation plan (Lip) is a statutory document, prepared under Section 145 of the Greater London Authority Act 1999, which sets out how a London borough proposes to implement the Mayor's Transport Strategy in its area, as well as other locally and sub-regionally important goals. Southwark's transport plan will replace the borough's first Local implementation plan (2006).

2. Is this a new or an existing policy/strategy?

The Transport Plan is the successor document to the Local implementation plan (Lip) adopted in 2006. An Equality Impact Assessment was prepared as part of the Lip.

3. If existing, has the policy/strategy already been reviewed under the previous Equality Impact Assessment programme? If so, what were the findings to come out of this and has the agreed action plan been implemented? What has changed since the last assessment was undertaken (in terms of context, nature of the policy/strategy or the type of people affected by the policy/strategy).

Not applicable

4. What do you think are the main issues for your policy or strategy in relation to equality, diversity and social cohesion?

Taking cultural factors into consideration

One of the key aims of the Transport Plan is to encourage people to travel sustainably e.g. avoid private car trips and use public transport, walk or cycle instead. This key message may be interpreted differently

by different sections of the community according to cultural factors; some seeing the benefits and opportunities, others seeing a potential threat to their established travel behaviour.

In many cases, travel behaviour is an expression of cultural attitudes as well as purely practical considerations. For example, for some groups the ownership of a car is seen as a natural aspiration and the use of other modes, such as public transport may have a negative association. Where this is the case, there is a danger that resources may be deployed in a way that does not strike a chord with some sections of the community. For example, considerable resources have been invested in promoting cycling, but the majority of cyclists remain young, white males with older people, minority ethnic groups and women under represented. Of course, many of the reasons for this are likely to be practical, such as concerns about safety, but the role of cultural factors also needs to be acknowledged. This does not mean that for certain groups the expectation will be that driving will continue to be the main aspiration, but that varied approaches may be required in order to promote sustainable modes of travel to the whole community.

Addressing economic inequality

As well as cultural factors that may result in transport initiatives having a differential impact on different groups, economic factors may present a barrier to the benefits of those initiatives being enjoyed by all. Some policies may have unintended consequences in this area. For example, the council may wish to promote the use of 'green' vehicles, such as electric cars or conventional cars with low emissions. The use of incentives such as discounted parking may encourage the use of such vehicles. There is a danger, however, that these opportunities may only be available to those who can afford them and that a 'two tier' system of charges may develop. The risk of direct benefits being restricted to particular groups must be weighed against the broader outcomes of such policies, such as improved local air quality, which will benefit the whole community. On a more straightforward level, while the council wishes to encourage the use of public transport, the affordability of these services may restrict the ability of some groups to use them.

Fair distribution of resources

The availability of funding to deliver improvements as part of the transport plan is sometimes restricted to particular geographical areas and this can result in unequal impacts across the borough which may disadvantage certain groups. For example, funding the council receives from developers is often concentrated in the business district to the north of the borough. The restricted availability of such funding may prejudice certain groups or communities who live outside of those areas.

Safety and security for all

How safe we feel in our own community is a key to encouraging more people to walk, cycle and use public transport and is at the heart of the transport plan.

Factors such as age and level of deprivation can increase the risk that people face on our roads and this is a key issue to address. For example, the young (under 16) tend to be more vulnerable on our roads, but also are more likely to be on our streets than other age groups.

Feelings of insecurity are sometimes a factor in travel choices and can have a differential impact for certain groups. For example, women are more likely to rely on bus services and so any real or perceived threat to the security of bus users will have a disproportionate effect on that group.

The way we design our streets can have an impact on actual and perceived safety. For example, 'shared space' or 'shared surface' designs often seek to increase pedestrian priority by blurring the distinction between carriageway and footway. Any such designs, however, need to fully consider the needs of those users who rely on a clear physical transition between 'safe' areas and areas where vehicles may be present.

Access to opportunity for all

The Transport Plan seeks to improve access for all and to remove barriers to access experienced by some groups. As well as access to employment, this includes access to educational, social and cultural opportunities.

Increasing access to opportunity can have unintended consequences. For example, freedom passes (free travel cards) operate during off peak hours which means that older people are often travelling home at school leaving time, creating conflict with school children. This can mean that older people become more reluctant to travel and therefore more isolated.

Some parts of the public transport system in Southwark effectively exclude certain users who cannot physically access the services provided. When promoting the use of public transport, the plan must identify ways around these barriers (often outside the council's control), while continuing to lobby for their removal.

Finally, when the council considers the educational and training opportunities it offers around transport, it will need to consider how inclusive these activities are. For example, in offering free cycle training, is provision identified for disabled people to participate?

Promoting social cohesion

Competing demands for limited space on our streets can result in stress and conflict between users. Poor behaviour from some road users can affect safety, result in social exclusion and damage community relations. The transport plan will need to address these issues by encouraging considerate and tolerant behaviour on our streets, in particular protecting the interests of vulnerable groups such as older people and disabled people.

There are particular life stages that may present an opportunity to increase social cohesion with the context of the plan. For example, focussing on how children travel to school can help promote integration of different groups by increasing opportunities for community interaction.

Appendix E: Health impact assessment



Transport Plan – Health Impact Assessment

November 2010

www.southwark.gov.uk

The Transport Plan

Southwark's Transport Plan sets out how we will improve travel to, from and within the borough. The plan will also show transport's contribution to the council's wider economic, social and environmental objectives. The plan sets out long term goals and transport objectives for the borough (up to 20 years), a three year programme of investment, and targets and outputs that will help us to track progress.

In preparing the Transport Plan, we have completed a strategic environmental assessment, equality impact assessment and a health impact assessment. This is to ensure that our proposals do not result in harm to the environment, discrimination or unfair treatment of equality groups¹ and that they promote the health and well being of the community.

Health impact assessments

Health impact assessment is defined as: "A combination of procedures, methods and tools by which a policy, programme or project may be judged as to its potential effects on the health of a population, and the distribution of those effects within the population²". As well as considering any positive and negative health impacts of a proposed policy, this means identifying any unintended health consequences. It also involves an analysis of who will be affected and whether some will be affected more than others. The Health impact assessment should be done early enough so that there is still time to make changes to the proposed policy.

Each step of the assessment process requires judgements to be made and these should be backed up by evidence and research findings. We have summarised the evidence base for our judgements in Appendix A at the end of this document.

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¹ Equalities groups covering race, gender, health, disability, socioeconomic, sexual orientation, age, religion or belief.

² Lehto & Ritsatakis, 1999

What is health?

Health is defined by the World Health Organisation as: "A state of complete physical, mental and social wellbeing and not merely the absence of disease or infirmity³". In this assessment, both physical health and wider issues of wellbeing are covered.

Social, economic, environmental and cultural factors directly and indirectly influence our health and wellbeing. This includes diet and exercise, where we live and work, social relationships and connections we have with other people and organisations.

People who experience material disadvantage, poor housing, lower educational attainment, insecure employment or homelessness, are among those more likely to suffer poorer health outcomes, compared with the rest of the population⁴.

The process

The Department of Health identify five stages in the health impact assessment process, as follows

Stage 1: Screening

Stage 2: Identify health impacts

Stage 3: Identify impacts with important health outcomes

Stage 4: Quantify or describe important health impacts

Stage 5: Recommendations to achieve most health gains

The first stage, screening, assesses whether the policy will have any direct or indirect impacts on health or well being. If no impacts are found then this is the end of the process. Assuming impacts are expected, then stage two lists all of these. Stage three then considers whether any of the impacts identified have serious implications for health and wellbeing. If this is the case, then stage four investigates these serious impacts. Stage five makes recommendations to minimise any negative impacts and maximise positive ones.

Stage 1: Screening

In order to consider whether the Transport Plan is likely to have any health impact, we looked at each transport objective contained within the plan. We assessed each objective against a number of criteria: Whether the impact was positive or negative; whether it was direct or indirect; whether it would affect physical health and/or wider issues of wellbeing; and how the impact would be spread across the community. Table 1 below shows the results of this screening process.

We found that none of the transport objectives would have an overall negative impact. We expect all but one to have a positive impact, with the remaining objective being neutral. Positive impacts we found related to both physical health and wider wellbeing. In some cases, we found that the distribution of impacts was likely to be unequal across the community.

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³ World Health Organisation, 1948

⁴ Health impact assessment of government policy: A guide to carrying out a Health Impact Assessment of new policy as part of the Impact Assessment process. Department of Health, July 2010

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	tribution	Equalities groups	Reduced congestion may lead to reduced emissions and therefore an increase in air quality, but could also lead to higher speeds and increases in traffic flows. Parking policy assists disabled drivers. Affects all road users, but may be of disproportionate benefit to vehicular users, both public and private.	Indirect impacts from traffic management and increased likelihood of walking and cycling. Could have negative impact if access to services is reduced for equality groups who rely on cars	Direct benefits through increased physical activity, reduced emissions and less stress. More affluent groups may be overrepresented in benefits.	Direct health benefits in terms of reduction in accidents. Equalities groups are disproportionately affected by safety issues	Access to health services specifically affects outcomes. Travel independence can enhance well being.	Direct impact on respiratory and cardiovascular diseases. Older people, those with respiratory diseases and those living in areas of deprivation are more acutely affected.
	Impact distribution	Population Equ	Part	Part	Part	Whole	Whole	Whole
4	Impact type	Well being		>		>	>	
Appendix A	ımp	Health		>	>	>	>	>
Appe		Indirect		>			>	
	t	Direct			>	>		>
	Health impact	Neutral	>					
	Heal	Negative						
		Positive		>	>	>	>	>
	Policy objective		Ensure that the quality, efficiency and reliability of the highway network is maintained	Manage demand for travel and increase sustainable transport capacity	Encourage sustainable travel choices	Ensure the transport network is safe and secure for all and improve perceptions of safety	Improve travel opportunities and maximise independence for all	Reduce the impact of transport on Southwark's air quality

Policy objective		Неа	Health impact	_ਲ	Appel	%ipu	Appendix Act type	Impac	Impact distribution	Notes
	Positive	Negative	Neutral	Direct	Indirect	Health	Well being	Population	Health Well being Population Equalities groups	
Reduce transport's contribution to climate change	>				>	>		Part		Indirect impact though effects of extreme weather events. Distribution of emissions is unequal, with those who emit least, likely to suffer most.
Ensure the transport system helps people to achieve their economic and social potential	>				>		>	Part	>	Reductions in social exclusion and more equal income distribution has positive effect on well being
Improve the health and wellbeing of all by making the borough a better place	>				>	>	>	Whole		Improved street design and road user behaviour increases social cohesion and reduces stress levels. More active travel helps reduce obesity. Reductions in noise and air pollution have positive health impacts.

Table 1: Screening

As we didn't find any negative impacts associated with the transport objectives, it was not considered strictly necessary to complete the next stage of the impacts linked to delivery. We also wanted to look at how we could maximise the positive impacts we found. For this reason, we decided to proceed to health impact assessment. However, we decided that we should review how these broad objectives might be delivered in practice and any negative stage two and prepare a long list of all potential impacts that might result from delivering the objectives considered above.

Stage 2: Identify health impacts

Whitehead and Dahlgren⁵. They identified a number of categories affecting an individual's health and well being. Of these, we chose lifestyle, community, To give some structure to this stage, we chose a simple framework. This was based on previous research around factors affecting health, developed by local economy, activities, the built environment and the natural environment.

Table 2 below groups impacts we found under these categories.

 $^{5}\,\mathrm{Whitehead}$ and Dahlgren, The Lancet 1991 (reproduced in DoH guidance)

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Lifestyle	Community	Local economy	Activities	Built environment	Natural environment
Diet, physical activity, work/life balance	Social capital, networks	Wealth creation, markets	Working, shopping, moving, living, playing, learning	Buildings, places, streets, routes	Natural habitats, air, water, land
More people using active travel may increase absolute number of collisions / casualties for those modes	Greater integration of different road users may lead to increased conflicts	Parking restrictions and local congestion may adversely affect some businesses	Encouraging use of public transport may lead to overcrowding increasing stress levels	Disruption and potential hazard during physical improvement works	Air quality likely to remain poor by busy routes
Reducing the need to travel may reduce physical activity and encourage sedentary lifestyles	Promotion of specific modes, such as cycling, may exclude certain sections of the community	Economic cost of congestion affects viability of local businesses	Disincentives to car use may frustrate aspirations to drive / increase feelings of injustice or inequality	Lack of resources may lead to inequalities between different areas and frustrate local aspirations	Construction materials are a finite resource and may have negative impacts during extraction, transportation and deployment
Promotion of 'sustainable' lifestyles may lead to health inequalities due to patchy take-up	Strategic policy objectives may not match needs of whole community e.g. those who rely on private car travel may oppose traffic calming measures	Stricter parking and loading restrictions may adversely affect deliveries and loading to some businesses	Journey delays and local congestion may cause stress and hardship	Traffic calming measures may cause discomfort for some road users travelling over them	
	Scheme proposals may be divisive with 'winners' and 'losers'			Pedestrian routes may be adversely affected by requirement to keep traffic moving	
	Requirement to keep traffic moving may lead to community severance, especially where residential areas adjoin busy routes			Increased density of development may lead to greater demand on currently stressed public transport and/or parking overspill, causing stress and frustration	
	Managing traffic onto main routes may increase severance for communities affected.				
	Lack of fully accessible public transport system reinforces inequalities				

Lifestyle	Community	Local economy	Activities	Built environment	Natural environment
Diet, physical activity, work/life balance	Social capital, networks	Wealth creation, markets	Working, shopping, moving, living, playing, learning	Buildings, places, streets, routes	Natural habitats, air, water, land
	Feelings of exclusion from the decision making process can lead to stress and resentment				

Table 2: Potential negative health impacts

Many of the impacts identified above relate to possible unintended consequences that may result from Transport Plan initiatives. For example, reducing the need to travel may have a positive impact in terms of promoting work / life balance and reducing stress caused by overcrowding on public transport. However, if people no longer need to leave the house to go to work, this may lead to reduced physical and social activity.

Another key group of impacts relate to the difficulties of reaching all groups within the community, particularly with regard to promoting sustainable travel. For example, promoting walking and cycling may exclude certain sections of the community for whom this may not be physically possible, or for whom the message may not appeal.

A third area relates to initiatives which involve a trade-off between one group of road users and another. For example, the introduction of traffic calming measures is generally well supported by the local community who wish to see reduced traffic speeds where they live. On the other hand, some people living nearby road humps report increased noise and some travelling over them report discomfort.

Finally, there are a number of areas where regional policies may conflict with local policies. For example, the Mayor of London's policy to 'smooth traffic flow', particularly on major routes, may make it more difficult to deliver improvements for vulnerable road users such as pedestrians.

As we identified a number of health impacts at this second stage, we now moved on to the next stage in order to assess how important these were likely to be.

Stage 3: Identify impacts with important health outcomes

Based on Department of Health guidance, we considered that important health impacts would have the following characteristics

- Impact on specific age groups, ethnic groups, religious groups or socioeconomic groups
- Be difficult to remedy or have an irreversible impact
- Be medium to long term
- Cause a great deal of public concern
- Have cumulative impacts

Table 3 below shows the results of this analysis. In cases where the identified issue matched all or most of the characteristics listed above then we considered the impact to be important, unless there were any mitigating circumstances.

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	Answering	Answering yes to these questions indicates that this may be an important health impact.	questions ir tant health	ndicates th impact.	at this may	Important impact?	
Identified impact	Differential impact	Difficult to remedy or irreversible	Medium to long term	Public	Cumulative / synergistic	Combining the answers, will there be an important impact on health?	Notes
More people using active travel may increase absolute number of collisions / casualties for those modes	>	×	×	>	×	×	Specific groups are more likely to be involved in road traffic collisions. The benefits of physical exercise are thought to outweigh the risk of involvement in traffic collisions. As greater numbers take up active travel the accident rate is likely to diminish ('safety in numbers')
Reducing the need to travel may reduce physical activity and encourage sedentary lifestyles	×	×	>	×	×	×	Greater accessibility to local services (including employment) may result in shorter journeys, but these are more likely to be made using active modes. Impact of home working should be monitored
Promotion of 'sustainable' lifestyles may lead to health inequalities due to patchy take-up	>	×	>	×	>	×	Affluent groups are more likely to be responsive to sustainable travel messages and this could reinforce existing underrepresentation of certain community groups. A flexible and targeted approach can address this issue. Linked to next impact.
Promotion of specific modes, such as cycling, may exclude certain sections of the community	>	×	>	×	>	×	Affluent groups are more likely to be responsive to sustainable travel messages and this could reinforce existing underrepresentation of certain community groups. A flexible and targeted approach can address this issue. Linked to previous impact.
Greater integration of different road users may lead to increased conflicts	>	×	×	>	×	×	Mobility and visually impaired groups, the young and older people may be disadvantaged by some street layouts which do not include physical segregation between users. Context sensitive design as well as user education can help address such issues.

	Answering	yes to these questions indicates be an important health impact.	questions i rtant health	ndicates the impact.	Ppendix /	Answering yes to these questions indicates that this may be an important health impact.	
Identified impact	Differential impact	Difficult to remedy or irreversible	Medium to long term	Public	Cumulative / synergistic	Combining the answers, will there be an important impact on health?	Notes
Strategic policy objectives may not match needs of whole community e.g. those who rely on private car travel may oppose traffic calming measures	>	×	×	>	×	×	Difficult to achieve consensus around traffic management measures which tend to polarise views. Needs of essential motorised road users should be accommodated and realistic alternatives offered to non-essential users.
Scheme proposals may be divisive with 'winners' and 'losers'	>	×	×	>	>	×	Although there is generally a trade off between different users and uses, a 'holistic' scheme approach will balance needs as far as possible. Transparency around aims and objectives will help gain broad support for schemes.
Requirement to keep traffic moving may lead to community severance, especially where residential areas adjoin busy routes	>	×	>	>	>	×	Disproportionate impact on areas of deprivation. Prioritise measures to improve local safety and accessibility. Limits to council influence on TfL roads. Ensure that vulnerable road users, including pedestrians are fully considered in traffic management schemes. Linked to next impact.
Managing traffic onto main routes may increase severance for communities affected.	>	×	>	>	>	×	Disproportionate impact on areas of deprivation. In order to protect residential streets from excessive traffic, main routes are expected to carry heavier flows. Resulting issues can be mitigated by local environmental, safety and accessibility improvements.

	Answering	yes to these questions indicates be an important health impact	questions i rtant health	ndicates th n impact.	Answering yes to these questions indicates that this may be an important health impact.	A Important impact?	
Identified impact	Differential impact	Difficult to remedy or irreversible	Medium to long term	Public	Cumulative / synergistic	Combining the answers, will there be an impact impact on health?	Notes
Air quality likely to remain poor by busy routes which often coincide with areas of deprivation	>	>	>	>	>	>	Disproportionate impact on areas of deprivation. While issues such as air quality along busy routes are difficult to resolve completely, mitigating measures should be put in place. The council's air quality improvement plan sets out Southwark's policy to achieve improvements in air quality. The council's ability to influence air quality impacts are limited, particularly where it is not the highway authority.
Lack of fully accessible public transport system reinforces inequalities	` >	×	>	>	×	×	The council's policy of encouraging public transport use may discriminate against those who are unable to access these services. The council lobby for these barriers to be removed, but ultimately does not have control over access improvements. While alternatives, such as taxis to the nearest accessible station may be available, the lack of equity and reduced access to services can affect mental and physical health for those excluded.
Feelings of exclusion from the decision making process can lead to stress and resentment	×	×	×	>	×	×	The council consults widely on policy matters, but nonetheless some individuals and groups may feel excluded from the process. Early engagement with stakeholders and the public can help address this issue.
Parking restrictions and local congestion may adversely affect some businesses	×	×	×	>	>	×	Parking policy needs to balance the desire to constrain unnecessary car trips while at the same time allowing vital business functions to continue so that jobs and services can continue to be provided locally, particularly small businesses.

	Answering	yes to these questions indicates be an important health impact	questions i rtant health	ndicates th impact.	Answering yes to these questions indicates that this may be an important health impact.	A Important impact?	
Identified impact	Differential impact	Difficult to remedy or irreversible	Medium to long term	Public	Cumulative / synergistic	Combining the answers, will there be an important impact on health?	Notes
Economic cost of congestion affects viability of local businesses	×	×	×	>	>	×	Travel demand management measures and travel awareness campaigns seek to reduce traffic levels and encourage alternatives to private car use. The importance of local enterprise is recognised.
Delays and congestion may cause stress and hardship	×	×	×	>	>	×	See above.
Disincentives to car use may frustrate aspirations to drive / increase feelings of injustice or inequality	>	×	>	>	×	×	Groups who tend not to have access to a car for economic reasons may be disproportionately affected. The aspiration to own a car is likely to endure. Travel demand management strategies need to recognise this issue and find ways to raise the status of alternative modes.
Disruption and potential hazard during scheme construction	×	×	×	>	>	×	Street works have the potential to pose a direct threat to health, or indirect by forcing road users onto less suitable routes. Good network management and health and safety practice can reduce these impacts.
Lack of resources may lead to inequalities between different areas and frustrate local aspirations	×	×	>	>	×	×	A transparently fair, evidence based approach to scheme selection is required, particularly given increasingly limited resources.
Traffic calming measures may cause discomfort for some road users travelling over them	>	×	×	>	>	×	Little research in this area .Possible disproportionate impact on older people and those with specific health conditions. Vertical traffic calming measures need to be designed and constructed to high standards to minimise any discomfort.

	Answering	yes to these questions indicates be an important health impact	questions i tant health	ndicates th	Answering yes to these questions indicates that his may ln be an important health impact.	$oldsymbol{A}$ Important impact?	
Identified impact	Differential impact	Difficult to remedy or irreversible	Medium to long term	Public	Cumulative / synergistic	Combining the answers, will there be an important impact on health?	Notes
Pedestrian routes may be adversely affected by requirement to keep traffic moving	>	×	>	>	>	×	Disproportionate impact on areas of deprivation. Prioritise measures to improve local safety and accessibility. Limits to council influence on TfL roads. Ensure that vulnerable road users, including pedestrians are fully considered in traffic management schemes. Linked to next impact.
Encouraging use of public transport may lead to overcrowding increasing stress levels	>	×	\	>	>	×	Promotion of public transport should be balanced with measures to reduce the need to travel and to promote active travel.
Increased density of development may lead to greater demand on stressed public transport and/or parking overspill, causing stress and frustration	`	×	>	>	>	×	See above.
Construction materials represent a finite resource and may have negative impacts during extraction and transportation and deployment	×	×	×	×	×	×	Sustainable procurement policy required to ensure whole life cost and negative externalities of construction are fully assessed and minimised.

Table 3: Important health outcomes

Only one of the impacts identified at stage two matched all the characteristics identified above. This impact relates to air quality along heavily trafficked routes, which also often coincide with areas of high deprivation.

The main factor affecting local air quality in Southwark is motor vehicular traffic. A reduction in traffic volume, potentially combined with an increased proportion of less polluting vehicles, would help to improve air quality in affected areas. However, the council's ability to influence traffic levels can be limited, particularly on major routes which the council does not control. These routes are designed to carry higher levels of traffic in order to reduce impacts on lesser roads, including residential streets, and will continue to do so for the foreseeable future.

As the council has a separate plan addressing this issue – the Air Quality Strategy and Action Plan – further detailed analysis of this issue is included in that document, rather than here as part of a stage four assessment. As this was the only important impact identified, the rest of this document concentrates on stage five, covering how we can maximise health gains relating to the Transport Plan.

Stage 5: Recommendations to achieve most health gains

This health impact assessment has so far concentrated on potential negative health impacts relating to the Transport Plan. We have, however, found a number of areas where there are potential positive impacts. These are often the planned consequences relating to the unintended consequences identified above. Table 4 below summarises the positive health impacts that we have identified.

	Impad	ct type	Impact dis	stribution
Positive health themes	Health	Well being	Population	Equalities groups
Safety in numbers	✓		Whole	
As more people take up active travel (particularly cycling), the accident / collision rate falls				
Active travel and improved health	✓	✓	Whole	
Increased physical activity as part of a daily routine is linked to positive health outcomes				
Reduced stress and anxiety		✓	Whole	
More active travel can relieve pressure on public transport, reducing overcrowding. Exercise can also promote good mental health.				
Reduced conflict between road users	✓	✓	Whole	
Well designed streets and improved journey time reliability can reduce levels of conflict, actual and potential				
Reduced exposure to inappropriate levels of traffic	✓	✓	Whole	
Effective network management routes traffic away from minor roads onto designated routes. Reduces noise and pollution in residential areas.				
Increased accessibility to transport and services	✓		Whole	✓

B 30 1 10 0		ct type	Impact dis	stribution
Positive health themes	Health	Well being	Population	Equalities groups
Local accessibility improvements and better access to public transport improve health outcomes				
Increased opportunity for economic activity		✓	Whole	
Improved access to employment and support for local businesses improves life chances and access to services.				
Increased transparency and accountability		✓	Whole	
Early consultation and stakeholder engagement reduces feelings of exclusion and promotes community involvement				
Reduced impact of road collisions			Whole	✓
Lower vehicle speeds reduces the volume and severity of collisions				
Improved local air quality		✓	Whole	✓
Less congestion, reduced vehicle emissions and the greening of streets reduces harmful pollutants				
Improved perceptions of safety and security		✓	Whole	✓
Well designed and maintained public spaces reduce feelings of intimidation and promote inclusive access to the public realm.				

Table 4: Positive health impacts

The rest of this assessment looks at how the positive impacts identified above are addressed by the Transport plan and what we can do to maximise the benefits of those impacts.

Safety in numbers

The presence of more pedestrians and cyclists can have a significant impact on the perceptions of drivers/riders/people and influence them to reduce their speeds and be more aware of other road users. The Transport Plan aims to create an environment which encourages walking and cycling, which in turn will have a positive impact on road safety for all users. The 'safety in numbers' effect requires more people to walk and cycle and making this happen requires a targeted approach. In order to make best use of resources, we will focus on those who are more likely to take up walking and cycling, but in order to ensure fairness, we will also try to reach under represented groups and remove any barriers that they face.

Active travel and improved health

We will ensure that infrastructure improvements are made for pedestrians and cyclists through our delivery programme. Measures to encourage active travel will include improved accessibility for pedestrians (dropped kerbs, improved crossing points, reduced street clutter etc), increased cycle parking (on street and estates) and general improvements as part of traffic schemes (such as advanced stop lines, reduced street clutter, improved footway surfaces, etc). As well as infrastructure improvements, we will also promote the uptake of active travel through events, promotions, education and training. We can maximise benefits by targeting key walking and cycling links and working with key partners such as schools and health providers.

Reduced stress and anxiety

We aim to minimise congestion and over crowding on public transport by lobbying service providers and regional bodies to provide increased capacity and better levels of service. At a local level we will

prioritise bus journeys and promote an increased share of trips made by active means, walking or cycling, so as to relieve pressure on public transport.

We will seek to tackle the causes of congestion on our roads and minimise disruption that affects drivers, riders and passengers. We can maximise benefits by linking to active travel initiatives where walking or cycling provide realistic alternatives for existing trips.

Reduced conflict between road users

We will seek to ensure that pedestrians and cyclists can travel through Southwark without conflict between them or with other traffic. As well as infrastructure measures this will involve training and education of road users. This includes training for those who drive on council business and training for bus drivers. We can maximise benefits by focussing on key areas of concern such as the interaction between cyclists and lorry drivers.

Reduced exposure to inappropriate levels of traffic

We will continue to manage traffic flows according to our network hierarchy, making sure that traffic on our streets is in proportion to their type e.g. removing heavy traffic from residential streets. The council's Network Management Plan sets out the details of our approach to allocating road space.

Increased accessibility to transport and services

We will seek to improve the streetscape and provide a seamless journey to make the borough fully accessible for all. This involves physical changes such as providing dropped kerbs and tactile paving, working with public transport providers to improve access to their services and delivering independent travel training for those who have difficulty negotiating our transport system. We can maximise benefits by working closely with equalities groups to find out what the key issues are for them.

Increased opportunity for economic activity

As outlined above, increasing the level of accessibility to public transport is essential in helping to improve access to jobs, for all members of the community. We will seek to integrate transport initiatives with employment services outreach work and extend independent travel training to adults with disabilities if travel is thought to be a barrier to accessing jobs.

We will seek to boost the local economy through the reallocation of street space so that it is conducive to shopping and social activities that can contribute to the viability of Southwark's town centres. While these areas need to provide for essential servicing and delivery activity, vehicle access will be managed in order to provide adequate space for pedestrians and to reduce congestion.

Increased transparency and accountability

The Transport Plan and the initiatives included within it will be as transparent and accountable as possible. The plan encourages stakeholder support and gives weight to correspondence from the public and cabinet members, local stakeholders and community councils.

Reduced impact of road collisions

The council seeks to achieve measurable reductions in road casualties and to help make all modes of transport safer. Collisions involving pedestrians tend to be more severe than other modes and 50% of people killed on London's roads are pedestrians. Tackling the source of this threat requires an increase in pedestrian priority combined with reductions in traffic volumes and speeds. We will target at risk groups in order to maximise health benefits.

Improved local air quality

Encouraging sustainable travel choices will help to increase air quality, whilst improving activity levels and public health. The Transport Plan introduces a range of actions it is hoped will improve air quality in Southwark including car clubs, 'eco driving' campaigns, air quality assessments and planting street trees. Further details can be found in the council's Air Quality Strategy and Action Plan.

Improved perceptions of safety and security

As well as making physical improvements to our streets in order to make them safer, we will also work to challenge any negative perceptions of sustainable modes and to address real and perceived issues of personal safety. We can maximise benefits by working with key partners, such as schools, and addressing key issues such as cycle theft and safety on public transport. We will continue to promote community warden schemes that provide a highly visible, reassuring presence, which helps to reduce crime and anti-social behaviour.

Appendix A: Health impact assessment evidence base

Congestion and emissions

A systematic review of the effects of transport pollution found good evidence for an increase in total mortality, respiratory morbidity, allergic illness and symptoms, cardiopulmonary mortality, non-allergic respiratory disease, and myocardial infarction and a possible link to lung cancer. These problems are likely to be exacerbated by rising temperatures from climate change and rapid urbanisation and increasing time spent in congested traffic means that exposure is increasing even where pollution levels are falling.

Reference

Heinrich, J., Schwarze, P.E. and Stilianakis, N *et al.* (2005) Studies on health effects of transport-related air pollution. In: Krzyzanowski, M., Kuna-Dibbert, B. and Schneider, J., Editors, *Health effects of transport-related air pollution*, World Health Organization, Geneva

Congestion and economy

Congestion is perceived as a problem primarily because of the broad range and scale of impacts it imposes on individual travellers, the economy and society – including delays, frustration, pollution and reliability problems amongst others. However, despite the widespread use of the term 'congestion' there is still some ambiguity regarding how this is defined and what constitutes a state of congestion in practice. There is also disagreement on what the actual cost of congestion is - for example estimates for the UK range from £2 billion per year (Dodgson et al., 2002) to the often quoted CBI estimate of £20 billion per year.

Reference

Grant-Muller, S. and Laird, J. (2006) Costs of Congestion: literature based review of methodologies and analytical approaches, Institute for Transport Studies, University of Leeds, for the Scottish Executive Social Research

Safety in numbers (the more people cycle, the safer it is)

Research suggests that a doubling of cycling would lead to a reduction in the risks of cycling by around a third, i.e. the increase in cycle use is far higher than the increase in cyclists' casualties. There are plenty of examples to show that steep increases in cycling can go with reductions in cycle casualties. The Cycle Touring Club (CTC) has found that cycling is safer in local authorities in England where cycling levels are high. London has seen a 91% increase in cycling since 2000 and a 33% fall in cycle casualties since 1994-98. This means that cycling in the city is 2.9 times safer than it was previously. York, the authority where cycling to work is most common, is, by CTC calculations, the safest place in England to cycle. Comparing 1991/3 and 1996/8: mode share for cycling rose from 15% to 18%, cyclist KSI fell 59% (from 38 to 15).

Reference

Safety in Numbers: halving the risks of cycling, Cycle Touring Club, (2009)

http://www.ctc.org.uk/resources/Campaigns/CTC Safety in Numbers.pdf

Equality groups and representation in traffic collisions

In children and adults, road traffic injury rates were higher in 'Black' groups (305 per 100,000 population in children; 617 in adults) and lower in 'Asian' groups (175 in children and 421 in adults), compared with rates in 'White' groups (234 in children and 479 in adults). 'Black' Londoners have been on average 1.3 times more likely to be injured on the roads than 'White' Londoners.

Reference

Steinbach R, Edwards P, Green J, and Grundy C (2007) *Road Safety of London's Black and Asian Minority Ethnic Groups:* A report to the London Road Safety Unit. London: LSHTM.

Levels of risk for different road users / accident rates

The fatality risks per billion passenger-kms are very low for 'public service vehicles' 0.3, whilst the risk for motorcyclists is 111, very much higher than that for car occupants (2.7). The risk to cyclists (36) and pedestrians (46) fall between the two.

Reference

Helman, S., Hunt, M., Kennedy, J. and Taig, T. (2010) *Cross-modal safety: risk and public perceptions*. Transport Research Laboratory.

Exercise and obesity

Obesity is one of many symptoms of poor life style associated with morbidity and mortality. These undesirable health risks can be greatly reduced by physical activity leading to improved fitness. Exercise is one of the ways in which we can cut obesity numbers and improve people's health, along with diet and drinking/smoking.

Reference

Gill, T., Weiler, R, et al Should health policy focus on physical activity rather than obesity? BMJ 29 May 2010, volume 340, pages 1170 – 1171

Active travel and improved health

The Government's Foresight Report predicts that by 2050, 60% of men, 50% of women and 25% of children may be obese. This would cost the UK economy a staggering £49.9 billion per annum with a seven fold increase in NHS costs alone.

Walking and cycling are accessible, affordable ways in which people can reduce their risk from disease. Physical activity can make a huge contribution to maintaining health and wellbeing. Inactive and unfit people have almost double the risk of dying from CHD compared with more active and fit people. Active people are half as likely to develop type II diabetes, high blood pressure can be both prevented and treated by physical activity and low levels of physical activity can increase the risk of certain cancers. Physical activity is also effective as a treatment of mild, moderate and severe clinical depression.

Reference

Website: http://www.travelactively.org.uk/pages/why-active-travel-evidence, accessed 26 October 2010

Health and air quality

There is robust scientific evidence indicating that exposure to air pollutants can affect human health in a variety of ways, ranging from subtle biochemical and physiological changes to severe illness and death. Studies reporting such effects have been carried out since early last century, when marked increases in mortality and morbidity followed short-term episodes of extremely high levels of air pollution (1–3). This and subsequent evidence resulted in the adoption of ambient air quality standards to safeguard the public from the most common and damaging pollutants, especially those derived from the combustion of fossil fuels.

The introduction of cleaner fuels, and the implementation of pollution control technologies that followed, successfully reduced levels of air pollution in several urban areas during the second half of the twentieth century.

Reference

Air Quality Guidelines: global update 2005, World Health Organisation (Europe).

Health and noise

Non-auditory effects include, most commonly, annoyance (if such an effect can truly be called a 'health' effect), sleep disturbance, interruption of speech and social interaction, disturbance of concentration (and hence of learning and long-term memory), and hormonal and cardiovascular effects, though it is not clear to what extent these effects are actually harmful.

Reference

Berglund, B., Lindvall, T. and Schwela, D. (1999) Community Noise, World Health Organisation (Europe).

Public transport overcrowding and stress levels

Failure to provide an efficient public transport system means that employers are faced with staff who are tired, stressed and uncomfortable on arrival at the workplace. Lateness at work, loss of productivity, sickness absence, missed and rescheduled meetings and lost business due to public transport overcrowding and delays all impose real and significant costs. The report from Oxford Economic Forecasting found that cost of public transport delays to the City of London "is conservatively estimated to be about £230 million a year". There is also concern that transport difficulties have an impact on the recruitment and retention of staff. Overcrowding on public transport reduces the attractiveness of the City as a place in which to make investments.

Reference

House of Commons Transport Committee: Over crowding on public transport. Seventh report, session 2002-3. TSO 2003

Access to cars and health

Housing tenure and car access have been shown to be associated with mortality and morbidity. It is often suggested that this is just because tenure and car ownership reflect income or psychological traits. However, it has been found that car access is still related to a range of health measures after controlling for income and self esteem.

Reference

Der, G., Ellaway, A., Ford, G., Hunt, K. and Macintyre, S. Do housing tenure and car access predict health because they are simply markers of income or self esteem? A Scottish study. Journal of Epidemiol Community Health, 1998; 52: 657-664

Extreme weather events and health

The discussion on health effects in different countries of the heat-wave and of the cold-waves occurred in 2003, as well as of the flooding in 2002, can be summarized as follows:

- 1) During the severe heat-wave that affected much of western Europe in summer 2003, women 75 years of age and older were at highest risk.
- 2) Winter mortality is still higher than summer mortality. While some of this wintertime excess relates to hypothermia, the greatest component is due to respiratory and cardiovascular diseases.
- 3)Flooding in 2002 caused serious re-organization of health care services and required advice on hygiene and immunization by health authorities.

A review of the health effects showed that fatalities are often caused by entrapment in vehicles and behaviours that clearly disregard dangers. Other health effects included gastrointestinal infections due to contamination of food and water, and psychological effects.

Reference

Extreme weather and climate events and public health responses, World Health Organisation, 2004.

Income levels / inequalities and psychological health

Income inequality affects health through perceptions of place in the social hierarchy based on relative position according to income. Such perceptions produce negative emotions such as shame and distrust that are translated "inside" the body into poorer health via psycho-neuro-endocrine mechanisms and stress induced behaviours such as smoking. Simultaneously, perceptions of relative position and the negative emotions they foster are translated "outside" the individual into antisocial behaviour, reduced civic participation, and less social capital and cohesion within the community.

Reference

Wilkinson RG. *Unhealthy societies: the afflictions of inequality*. London: Routledge, 1996, writing in House, J. S., Kaplan, G. A., Lynch, J. W. and Smith, G. D. *Income inequality and mortality: importance to health of individual income, psychosocial environment, or material conditions*. BMJ 29 April 2000, volume 320

Traffic calming and discomfort for drivers / passengers

The DfT's traffic advisory leaflet 10/00 (December 2000) demonstrates that there is a directly proportional relationship between discomfort and vehicle speed over traffic calming obstacles.

Reference

Traffic Advisory Leaflet 10/00 Department of Transport. 2000

Appendix F: Strategic environmental assessment

Transport Plan: SEA Environmental Report

Draft for consultation with the Transport Plan

www.southwark.gov.uk

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Acronyms

AQSAP Air Quality Strategy and Action Plan AQMA Air quality management area BAP Biodiversity Action Plan CPZ Controlled parking zone DDA Disability Discrimination Act Defra Department for Food and Rural Affairs DfT Department of Transport DoH Department of Health EqlA Equalities Impact Assessment EU European Union GLA Greater London Authority HIA Health Impact Assessment HRA Habitats Regulations Assessment KSI Killed and seriously injured (casualties) LCA Landscape Character Assessment LDF Local Development Framework Lip Local implementation plan LTDS London Travel Demand Survey MTS Mayor's Transport Strategy NHT National Highways & Transport ODPM Office of the Deputy Prime Minister SCS Sustainable Communities Strategy SEA Strategic Environmental Assessment SMOT Sustainable Modes of Travel Strategy SRTP Sub Regional Transport Plan SSDM Streetscape Design Manual (draft) SSP Safer Southwark partnership SUDS Sustainable Urban Drainage TfL Transport for London USA Update and Screening Assessments	APZ	Archaeological Priority Zones
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SSP Safer Southwark partnership SUDS Sustainable Urban Drainage TfL Transport for London	SRTP	Sub Regional Transport Plan
SUDS Sustainable Urban Drainage TfL Transport for London	SSDM	Streetscape Design Manual (draft)
TfL Transport for London	SSP	Safer Southwark partnership
	SUDS	Sustainable Urban Drainage
USA Update and Screening Assessments	TfL	Transport for London
	USA	Update and Screening Assessments

Glossary

Term	Meaning
Air Quality Management Area (AQMA)	An area designated for action where it is predicted that the Air Quality Objectives in the Council's AQMA Plan will be exceeded.
Archaeological Priority Zones	These are areas where there is potential for significant archaeological remains and planning applications within these areas must be accompanied by an archaeological assessment and evaluation of the site, including the impact of the proposed development.
Baseline	Data supporting a description of the present and future state of an area.
Biodiversity	Biodiversity is the diversity or variety of plants and animals and other living things in a particular area or region. The term encompasses the diversity of landscapes, eco-systems, species, habitats and genetics.
Conservation Area	An area of special architectural or historic interest designated by the local planning authority under the provisions of the Planning (Listed Buildings and Conservation areas) Act 1990, the character or appearance of which it is desirable to preserve or enhance.
Equality Impact Assessment	These assessments are intended to examine the aims, implementation and effects of policies, practices and services to check that no groups are receiving or are likely to receive differential treatment or outcomes that are discriminatory or unfair in nature.
Health Impact Assessment	A combination of procedures, methods and tools by which a policy, programme or project may be judged as to its potential effects on the health of a population, and the distribution of those effects within the population ¹
Indicator	Data which provides information about or predicts the health of the environment.
Local Development Framework	A portfolio of local development documents, which will provide the framework for delivering the spatial planning strategy for the area.
SEA scoping	The process of deciding the scope and level of detail of an SEA. This includes the environmental effects which should be considered, the assessment methods to be used, and the structure and contents of the Environmental Report.
Strategic Environmental Assessment	SEA is a systematic and interactive process undertaken during the preparation of a plan or strategy, which identifies and reports on the extent to which the implementation of the plan or strategy would achieve environmental, economic and social objectives by which sustainable development can be defined, in order that the performance of the strategy and policies is improved.

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¹ Lehto & Ritsatakis, 1999

Non technical summary of the Environmental Report

Tackling long term sustainability, climate change and wider environmental issues are important to help Southwark in setting an example to the rest of London. The ultimate aim of an SEA is to help protect the environment and to promote sustainability. It is crucial that our plans and policies are assessed for their impact on the environment, so that any adverse impacts can be identified and mitigated against or adapted to promote a positive environmental impact.

The SEA was undertaken to identify the potential cumulative environmental effects of the different Transport Plan strategy options that were considered. It also details possible mitigation measures that can be carried out alongside the final preferred strategy, in order to alleviate or avoid any adverse environmental effects arising from the implementation of the preferred strategy.

Introduction and policy context

A review is provided of all other relevant plans including International, European, National, London wide and Southwark Council documents. This section also details how the document has been considered in the assessment of the environmental impacts of the Transport Plan.

It is important to consider these documents to ensure that the measures included within the Transport Plan are not opposing other areas of policy. In the circumstance that a conflict does occur, an assessment of impacts are highlighted and the positives and negatives are considered.

This also sets the scope of the SEA and focuses on the following environmental areas for further investigation:

- Biodiversity;
- Population and human health;
- Air quality;
- · Climate:
- Noise
- Culture & heritage (added following concerns from English Heritage)

State of the environment in Southwark - the baseline

The environment baseline section looks at the current state of the environment in Southwark and defines the key environmental issues for consideration in the future.

As well as reviewing the current state of the environment, this section also considers how the quality of Southwark's environment may change or be influenced as a result of the implementation of the Transport Plan.

Significant effects

The SEA identifies that the Transport Plan would not have a significantly adverse affect on the present and future state of the environment within Southwark and is largely compatible with the strategic environmental assessment objectives, and where possible objectives have been amended so that they mirror those of the Transport Plan. The Transport Plan policies were found to be generally beneficial and that without the plan there was potential for environmental degradation.

Some of the adverse effects can be effectively managed and adequately mitigated with proper planning, design and implementation on a project level. Where possible, the Strategic Environmental Assessment has highlighted these issues.

Assessment of alternative options

It is normal practice when developing a plan to propose alternative ways of fulfilling its objectives. However, as the Transport Plan is an implementation plan of the Mayor's Transport Strategy we must respond to the key priorities and policies set out in this plan. This provides little flexibility to develop strategic alternative proposals for the Transport Plan. The key measures contained within the Transport Plan for each Transport Plan objective have been assessed against each environment topic area and where possible alternatives to these measures discussed.

Although the Transport Plan will have a positive effect on the environment overall, it is thought that some schemes could have negative effects particularly during physical works. Measures envisaged to prevent, reduce or offset any significant adverse effects should be provided on a scheme by scheme basis with larger projects requiring an Environmental Impact Assessment.

Mitigation

This section sets out identified opportunities and proposed mitigation measures that have arisen as part of the Strategic Environmental Assessment process. The assessment of the Transport Plan did not identify any significant negative impacts and as such no mitigation measures are proposed within this document.

Monitoring

The Strategic Environmental Assessment requires the borough to monitor the significant environmental effects of the implementation of plans and programmes in order to identify, at an early stage, unforeseen adverse effects, and to be able to undertake appropriate remedial action.

The council has established a series of measures or performance indicators to monitor the impact of the plan.

Conclusion

The SEA process has to date demonstrated that no major adverse environmental effects will result from Southwark's Transport Plan and that appropriate measures have been put in place to prevent or reduce the impacts of the measures included within the plan.

1. Introduction

The Southwark Transport Plan illustrates how the council intends to apply policies, strategies and programmes to implement the objectives of the Mayor's Transport Strategy in the borough. The Transport Plan will also guide transport improvements in Southwark and closely considers the borough's overarching policy document, the Sustainable Community Strategy.

The Transport Plan provides the framework for making transport decisions in the borough for the next five years. This Environmental Report summarises the findings and results of the SEA process carried out alongside the development of the Transport Plan.

1.1 Strategic Environmental Assessment and the regulations

The Strategic Environmental Assessment (SEA) directive was approved by the European Parliament in 2001 (2001/42/EC) and was incorporated into UK law on 20 July 2004 through The Environmental Assessment of Plans and Programmes Regulations (the SEA regulations).

SEA is defined by the European Commission as "an important tool for integrating environmental considerations into the preparation and adoption of certain plans and programmes which are likely to have significant effects on the environment... because it ensures that such effects of implementing plans and programmes are taken into account during their preparation and before their adoption."

1.2 The SEA process

The SEA has been developed in parallel to the Transport Plan. The SEA process can be broken down into five distinctive stages as detailed in the following table. The SEA will be reported in two stages, a scoping report (consisting of stages A and B) and an environmental report (consisting of stages C, D and E).

The scoping report formed the basis of consultation with the relevant environmental bodies (Environment Agency, Natural England and English Heritage) to ratify the scope, level of detail proposed and to gain any additional specialist knowledge or information.

This Environmental Report completes stages C, D, and begins stage E, providing the framework for the environmental analysis of all transport proposals and the ongoing monitoring as well as setting the current baseline information.

More information on how this report relates to previous development stages is discussed in further detail within this document.

Table 1: SEA stages

	SEA stage	What does it involve?
Scoping report	Stage A	Set the context, establish the environmental baseline, identify problems and decide objectives
Scoping	Stage B	Decide the scope of the SEA, develop alternatives and consult with the environmental bodies
	Stage C	Assess the effects of the plan
port		Produce the Environmental Report
Environmental report		Main consultation on the draft Transport Plan and the Environmental Report
onme		Produce statement to accompany final Transport Plan
Envir	Stage E	Decide what needs to be monitored
	Judgo L	Monitor the significant effects of implementing the plan on the environment

1.3 SEA scope

The SEA regulations apply to the production or modification of a wide range of plans and programmes, which are likely to have significant effects on the environment. As the projects and initiatives to be included in the Transport Plan may potentially affect the environment, an SEA is required to be prepared in conjunction with it.

The SEA is centred on the following environmental topics and whether the plan will significant affect any of them:

- Biodiversity;
- Population;
- · Human health (including effect of noise);
- · Flora and fauna;
- Soil;
- Water;
- Air;
- Climate;
- Material assets;
- Cultural heritage (including archaeological and architectural heritage);
- · Landscape;
- And the interrelationship between these factors.

The SEA of Southwark's Transport Plan focuses on significant impacts only and is not intended to cover all environmental impacts, nor all environmental issues. Nor is it a replacement for the various Southwark Council reports that publish data, targets and monitoring information.

The SEA process is not designed to carry out an Environmental Impact Assessment of individual projects and initiatives. It is a strategic assessment of the significant impacts of the Transport Plan in its entirety.

The SEA of the Transport Plan only considers the extent of the London Borough of Southwark and its immediate surrounds and mirrors the Transport Plan timeframe, which is from 2011 until 2014 and beyond.

1.4 The Environmental Report and its aims

The SEA directive states that "An Environmental Report shall be prepared in which the likely significant effects on the environment of implementing the plan or programme, and reasonable alternatives taking into account the objectives and the geographical scope of the plan or programme, are identified, described and evaluated."

This Environmental Report is the main document produced as part of the SEA process and accompanies the Transport Plan for public consultation.

2. Consultation

The SEA Regulations identify three organisations to act as statutory consultation authorities: the Environment Agency, Natural England and English Heritage.

2.1 Consultation on the scoping report

The SEA directive and regulations require authorities to consult with environmental authorities on the scoping report. Consultation is seen as an integral component of the SEA and responses from consultation will be used to refine and improve the plan.

The scoping report serves four main aims;

- 1. To identify the main issues to be addressed within the SEA;
- 2. The level of detail of analysis to be included within the Environmental Report;
- 3. To summarise the findings of the SEA, to date;
- 4. To identify what remains to be done and details the main tasks for the remainder of the SEA.

The statutory authorities include the Environment Agency, Natural England, and English Heritage were consulted on the scope and level of detail of the information to be included in the environmental report.

The consultation on the scoping report took place between 14 June 2010 and 19 July 2010 and all three main statutory bodies were consulted. This consultation was early as at this time the Transport Plan was only at a development stage.

Details of the comments received from the three statutory consultees as well as our response to each point can be found in appendix A.

2.2 Relationship to the EqIA and HIA

Southwark has a duty under race, disability and gender legislation to carry out an Equalities Impact Assessment (EqIA) of the Transport Plan. This should identify whether or not (and to what extent) the Transport Plan has an impact (positive or negative) on a particular equality target group, or whether any adverse impacts identified have been appropriately mitigated.

An EqIA has been carried out separately to the SEA. While broadly positive, the EqIA of Southwark's Transport Plan has identified a number of areas where planned policies could have an unequal impact across different sections of the community. Measures to reduce any resulting inequalities have been incorporated into the plan and delivery programme.

In addition to the SEA a Health Impact Assessment (HIA) has been carried out. This considers the impacts (positive and negative) of the Transport Plan on health. It also contains an analysis of whether the health of the whole borough's population or just certain sections of the population will be affected. The health impact assessment concludes that there will be no significant negative health impacts as a result of the Transport Plan. Some minor issues are identified as well as the potential for an uneven spread of positive impacts across the community. These issues mainly relate to delivery of the plan and are addressed in the delivery programme.

2.3 Consultation on the Transport Plan and SEA

In Southwark, the involvement of the local community is considered to be of great importance for the identification and prioritisation of transport related issues. Furthermore, there are many other bodies and organisations, as well as regional partnerships that influence the ability to implement transport improvements that have a tangible benefit for the residents and businesses within the borough.

The Transport Plan external consultation is due to be held from January 2011 for a 12 week period. This will include consultation on the SEA Environmental Report.

A stakeholder workshop will be held where technical questions may be asked and related documents may be discussed.

Two public workshops will also be held during the consultation period. There will also be a questionnaire available online and in hard copy format.

The Transport Plan will be presented to each of the eight community councils and questionnaires will be sent to all borough public libraries and relevant meetings proved useful in creating awareness and disseminating information.

3. Southwark's Transport Plan

Under Section 145 of the Greater London Authority Act 1999 ('the GLA Act'), all London boroughs are required to prepare a Local Implementation Plan (Lip) or Transport Plan as it is called in Southwark. The Transport Plan should illustrate how the authority intends to apply policies, strategies and programmes to implement the objectives of the Mayor's Transport Strategy (MTS) in their locality.

The development of the Transport Plan also provides the council an opportunity to develop a coordinated range of transport initiatives and projects and to show how and when they will address identified issues.

3.1 Outline of the Transport Plan

Southwark's Transport Plan is to be the main transport policy document for the borough and sets out how travel will be improved to, within and from the borough. It sets out long term goals and transport objectives for the borough (up to 20 years), a three year programme of investment, and the targets and outcomes which will be sought. Southwark's Transport Plan responds to the revised Mayor's Transport Strategy, the emerging Sub Regional Transport Plans (SRTPs), Southwark's Sustainable Community Strategy, and other relevant policies.

The temporal scope of the SEA will be aligned with that of the Transport Plan. Our Transport Plan covers the period 2011 to 2014 and beyond. Transport for London (TfL) requires that boroughs prepare a new Delivery Plan in 2013 for the period 2014/15 to 2016/17, or longer for proposed Major Schemes. Boroughs are also required to update their targets to cover the period to 2016/17.

3.2 Transport Plan objectives

The SEA guidance states that the objectives of the Transport Plan should be in accordance with the SEA objectives. An assessment of the compatibility of the two sets of objectives was undertaken. This assessment demonstrated that overall, the Transport Plan objectives are broadly compatible with the SEA objectives. The Transport Plan objectives have been put together so that they reflect Mayoral, sub regional and local priorities. The Transport Plan objectives are to:

- 1. Manage demand for travel and increase sustainable transport capacity
- 2. Encourage sustainable travel choices
- 3. Ensure the transport system helps people to achieve their economic and social potential
- 4. Improve the health and wellbeing of all by making the borough a better place
- 5. Ensure the transport network is safe and secure for all and improve perceptions of safety
- 6. Improve travel opportunities and maximise independence for all
- 7. Ensure that the quality, efficiency and reliability of the highway network is maintained
- 8. Reduce the impact of transport on Southwark's air quality
- 9. Reduce transport's contribution to climate change

3.3 Transport Plan targets

The following table shows the mandatory indicators for the Transport Plan and the corresponding chosen targets for each.

Table 2: Transport Plan targets

Indicator	Target	Baseline	Transport Plan objectives
Bus journey time reliability	Excess wait times for high frequency services from 1.0 minute to 0.9 of a minute in 2013/14.	2009/10	1, 3
Road condition	Maintain the proportion of principal road length in need of repair at 11% by 2013/14	2009/10	7, 3
CO ₂ emissions	Reduce CO ₂ emissions from road based transport from 227kt CO ₂ in 2008 to 190kt CO ₂ in 2013	2008	1, 2 , 9
	Reduce traffic levels in Southwark by 3% by 2013	2010	1, 2, 8, 9
Road safety	Reduce the number of killed and seriously injured by 16% to 2014	2004/2008 baseline	4, 5
	Reduce the total number of slight casualties by 17% by 2014	2004/2008 baseline	4, 5
	Reduce all cyclist collisions by 40% by 2014	2004/2008 baseline	4, 5
Mode share	Increase the proportion of those cycling in Southwark from 3% to 4% by 2013/14	2007/09 average	2, 4, 8, 9
	Increase the walking mode share in Southwark to 33% by 2013	2006/2008	2, 4, 8, 9

3.4 Mayor's high level outputs

The following list shows the Mayor's high level outputs which boroughs are expected to monitor and report upon.

- Cycle parking
- Cycle superhighways
- Electric vehicle charging points
- Better streets
- Cleaner local authority fleets
- Street trees

4. Review of other relevant plans and programmes

A key task in the SEA process is the identification of other relevant plans, policies and programmes. These are laid out in the table below.

Table 3: Plans and programmes relevant to the SEA

Policy/ Plan	Summary of objectives/ targets	Relevance to SEA
	International	
The Convention on Biological Diversity. Rio de Janeiro, 1992	Article 6A requires each contracting party to develop national strategies, plans or programmes for the conservation and sustainable use of biological diversity.	The borough biodiversity action plan considers protection of key species and habitat. This will ensure that actions will be integrated into policies and programmes.
		The SEA considers biodiversity in accordance with guidance on this issue.
Kyoto Protocol on Climate Change (1997)	Contains obligations requiring reduced CO ₂ emissions to 5% below 1990 levels by 2012.	Ensure all reasonable opportunities are taken forward to encourage residents and visitors to reduce dependence on private cars, and travel by most sustainable means available.
		Commitment to traffic reduction and demand management.
		Collate information on emissions of CO ₂ from transport.
		Ensure consistency with Southwark's Air Quality Strategy and Action Plan.
	European	
EU Air Quality Framework Directive (1996)	Introduces air quality standards and limit values for a range of pollutants.	Monitor levels of key pollutants.
and Daughter Directives 96/62/EC, (2000/69EC), (2002/3EC)	The directives aim to standardise monitoring methods across Europe and provide public information on air quality.	Improve public information on a local level through travel awareness campaigns.
International EU Habitats Directive [Directive 92/43/EC]	Main aims are to conserve and enhance species and habitats through Natura 2000 sites.	Ensure consistency with Southwark's biodiversity action plan.

Policy/ Plan	Summary of objectives/ targets	Relevance to SEA
(European Union 1992)		
International EU Birds Directive [Directive		Ensure that local key sites, habitats and species are taken into account.
79/409/EC] (European Union 1979)		Reduce local environmental impacts of transport.
EU Directive 2002/49/EC on assessment and management of environmental noise programme.	The Directive places requirements on Member States to assess and manage environmental noise from various sources, including roads.	The Transport Plan has a target to reduce traffic volumes in the borough, this should have a corresponding benefit of reducing noise.
EU Sixth Action Plan (Sustainable Development Strategy) (2002)	The Sixth EAP identifies four priority areas: -Climate change -Nature and biodiversity -Environment and health -Natural resources and waste	These areas are considered in the SEA.
EC Landfill Directive 1999/31/EC	The objective of the Directive is to prevent or reduce as far as possible negative effects on the environment from the landfilling of waste, by introducing stringent technical requirements for waste and landfills. The Directive is intended to prevent or reduce the adverse effects of the landfill of waste on the environment, in particular on surface water, groundwater, soil, air and human health.	Ensure that waste materials from transport improvement projects are reused and recycled where possible

Policy/ Plan	Summary of objectives/ targets	Relevance to SEA
EU Floods Directive (2007/60/EC)	This Directive requires Member States to assess if all water course and coast lines are at risk from flooding, to map the flood extent and assets and humans at risk in these areas and to take adequate and coordinated measures to reduce this flood risk. This Directive also reinforces the rights of the public to access this information and to have a say in the planning process.	Areas at risk of flooding have been identified in the SEA
European Directive 2003/30/EC on the promotion of the use of biofuels or other renewable fuels for transport	Objective to promote the use of bio-fuels or other renewable fuels to replace diesel or petrol for transport purposes in each Member State, with a view to contributing to objectives such as meeting climate change commitments, environmentally friendly security of supply and promoting renewable energy sources	Pilot scheme for electric vehicle recharging proposed within the borough.
EU Biodiversity Strategy (1998)	This strategy lays down a general framework for developing community policies and instruments to fulfil the community's obligations under the Rio de Janeiro Convention on Biological Diversity. It is developed around four major themes, with specific objectives being determined and implemented for each by means of action plans.	Southwark's biodiversity action plan considers protection of key species and habitat. This will ensure that actions will be integrated into policies and programmes.
EU Biodiversity Action Plan (2006)	The EU Biodiversity Action Plan addresses the challenge of integrating biodiversity concerns into other policy sectors in a unified way. It specifies a comprehensive plan of priority actions and outlines the responsibility of community institutions and Member Sates in relation to each. It also contains indicators to monitor progress and a timetable for evaluations. The European Commission has undertaken to provide annual reporting on progress in delivery of the Biodiversity Action Plan.	

Policy/ Plan	Summary of objectives/ targets	Relevance to SEA
	National	'
Department for Transport: Towards a Sustainable Transport System (2007)	Confirms the Government's commitment to a transport policy which delivers economic growth and lower carbon emissions. It summarises the policy and investment plans over the period to 2014; and describes how the Government will implement a new approach to strategic transport planning for the period 2014-19 and beyond.	The SEA objectives include improvements to transport infrastructure, road safety, accessibility and the promotion of sustainable modes of transport such as walking and cycling.
Wildlife and Countryside Act 1981 (as amended)	Addresses species protection and habitat loss by setting out the protection that is afforded to wild animals and places in Britain.	Southwark's biodiversity action plan (BAP) considers protection of key species and habitat. This will ensure that actions are integrated into policies and programmes. The SEA considers the effects of the Transport Plan on wildlife.
Active Travel Strategy (10) DfT and DoH	Sets out the Governments vision and existing programme for promoting active travel and supporting better local delivery of active travel with the aim of making walking and cycling the natural choice for many short journeys.	The SEA includes objectives relating to human health.
	Planning policy guida	ance
PPS1: Delivering sustainable development	PPS1 sets out the Government's vision for planning. The main aims are promoting regeneration, regional, subregional and local economies, healthy, safe and crime free places, encouraging land to come forward for development, giving priority to ensuring access for all to jobs, health, education, shops, leisure and community facilities, putting developments that attract a large number of people, promoting more efficient use of land with higher densities and reducing the need to travel.	The SEA includes objectives relating to accessibility, health, conservation and biodiversity.

Policy/ Plan	Summary of objectives/ targets	Relevance to SEA
PPS 9: Biodiversity and Geological Conservation	PPS 9 sets out that planning, construction, development and regeneration should have the least impacts on biodiversity and they should improve it wherever possible. The objectives are to: Sustain, maintain, restore and enhance biodiversity and environmental resources. To Ensure appropriate assessment is made to protected sites of biological importance. And to accommodate biodiversity within new development, recognising the link between nature conservation and a sense of well-being in the community.	The SEA includes objectives relating to cultural heritage, conservation and biodiversity.
PPG13: Transport	PPG13 sets out objectives to promote sustainable transport choices for both people and for moving freight; promote accessibility to jobs, shopping, leisure facilities and services by public transport, walking and cycling; and to reduce the need to travel, especially by car.	The SEA includes objectives to improve accessibility and more sustainable transport choices.
PPS5: Planning for the Historic Environment	This document retains the principles set out in PPG 15 & 16 with concern to the historic environment and archaeological remains. PPS5 defines those parts of the historic environment that have significance because of their historic, archaeological, architectural or artistic interest as heritage assets. PPS5 covers heritage assets that are both designated (particular procedures apply to decisions that involve them) and those which are not designated but which are of heritage interest nonetheless.	The SEA includes objectives relating to conservation and heritage.
PPG17: Planning for open space, sport and recreation ODPM	Promotes more sustainable development by ensuring that open space, sports and leisure facilities are accessible by walking and cycling	The SEA includes objectives designed to improve the accessibility of transport for all.

Policy/ Plan	Summary of objectives/ targets	Relevance to SEA
PPS: 22 Renewable Energy ODPM	PPS 22 sets out objectives to reduce carbon dioxide emissions by 60% by 2050, and to keep reliable and efficient energy supplies. The development of renewable energy sources needs to be linked to improvements in energy efficiency.	The SEA includes objectives relating to energy efficiency and climate protection.
PPG 24 Planning and Noise ODPM	To give consideration to noise in planning development so as to ensure that sensitive developments are separated from noise sources.	Transport is one of the main sources of noise pollution; accordingly the SEA includes objectives to reduce noise from transport.
	London	
Mayor of London's Transport Strategy (10)	Sets out the vision for transport in the Capital over the next 20 years. It prepares for London's predicted growth of 1.3 million more people and 0.75 million more jobs by 2031 and supports sustainable growth across central, inner and outer London.	The SEA assesses the extent to which the Transport Plan takes into account the transport strategy's guiding principles.

Policy/ Plan	Summary of objectives/ targets	Relevance to SEA
Mayor of London's draft London Plan (09)	Sets out an integrated economic, environmental, transport and social framework for the development of the capital over the next 20 to 25 years. The new London Plan sets out to: • Meet the needs of a growing population with policy on new homes, including affordable housing, housing design and quality, and social infrastructure, which will promote diverse, happy and safe local communities.	The SEA includes objectives relating to conservation, climate change and accessibility. The Transport Plan recognises the importance of integrating development with public transport interchanges to ensure improved transport links.
	• Support an increase in London's development and employment with policy on: outer London, inner and central London; finding the best locations for development and regeneration, and protecting town centres; encouraging a connected economy and improving job opportunities for everyone, so that London maintains its success and competitiveness.	
	• Improve the environment and tackle climate change by: reducing CO ₂ emissions and heat loss from new developments; increasing renewable energy; managing flood risk, ensuring water supply and quality; improving sewerage systems; improving London's recycling performance and waste management; and protecting our open spaces making London a green and more pleasant place to live and visit.	
	• Ensure that London's transport is easy, safe and convenient for everyone and encourage cycling, walking and electric vehicles.	
Mayor of London's draft Air Quality Strategy (10)	The strategy sets out a framework for delivering improvements to London's air quality and includes measures aimed at reducing emissions from transport, homes, offices and new developments,	The SEA contains objectives relating to air quality and will monitor traffic volumes and air quality through two new monitoring stations.

Policy/ Plan	Summary of objectives/ targets	Relevance to SEA
	as well as raising awareness of air quality issues.	
Mayor of London's ambient noise strategy (04)	The strategy sets out proposals for reducing noise through improved management of transport systems, better town planning and better design of buildings The strategy aims to minimise adverse impacts of noise using the best available practices and technology within a sustainable development framework.	The SEA takes into account the strategy's proposals for reducing noise.
Mayor of London's Biodiversity Strategy (02)	Objectives to conserve London's wildlife and its habitats.	The SEA includes objectives relating to biodiversity flora and fauna.
Mayor of London's draft Climate Change Mitigation and Energy Strategy (10)	Considers a change to how energy is produced and commits to the target of reducing CO ₂ emissions by 60% by 2025.	The SEA includes objectives relating to climate change
Mayor of London's draft Climate Change Adaptation Strategy (10)	This strategy details how London can best prepare for a changing climate by adapting homes, communities and lifestyles. The key actions proposed are to improve our understanding and management of surface water flood risk, an urban greening programme to increase the quality and quantity of greenspace and vegetation in London to create a buffer from floods and hot weather, and to retro-fit up to 1.2m homes by 2015 to improve the water and energy efficiency of London homes.	The SEA includes objectives relating to climate change
Local		

Policy/ Plan	Summary of objectives/ targets	Relevance to SEA
Local Development Framework (LDF).	This sets out planning policies and proposals to guide development in the borough.	The SEA includes objectives for quality public realm as well as the promotion of sustainable transport in land use planning and development.
Sustainable Community Strategy	The sustainable community strategy sets out the council's and its partner's vision and priorities for the borough to 2016. The vision set by this strategy is to make Southwark a better place to live, work, learn and have fun. It was developed in consultation with the local community.	The SEA objectives were written whilst considering the SCS objectives.
Draft Air Quality Strategy and Action Plan (10)	Southwark's draft air quality strategy and action plan describes the responsibilities and actions that need to be taken by the council in partnership with residents, businesses and visitors to improve air quality in Southwark.	The SEA includes measures to reduce vehicles emissions.
Sustainable Modes of Travel Strategy (SMOT)	The strategy outlines the borough's existing sustainable school travel options and sets out how these options are going to be developed in the future to assist parent's/ carers when choosing schools they would like their children to attend.	The SEA contains objectives to promote sustainable modes of travel.
Biodiversity Action Plan	The Southwark Biodiversity Action Plan - Work for Wildlife - outlines how Southwark Council will work with its partners to conserve, enhance and promote biodiversity in the London Borough of Southwark for the benefit of residents, visitors and future generations. Work for Wildlife is designed to be a valuable toolkit that provides a unified strategic framework for managing the Borough's natural resources.	The SEA contains objectives to minimise impacts and enhance biodiversity where possible.
Towards a low carbon Southwark (Climate change strategy)	The document aims to achieve an 80% reduction in overall emissions in the borough by 2050.	The SEA contains an objective to promote and enable carbon free modes of transport.

Policy/ Plan	Summary of objectives/ targets	Relevance to SEA
Southwark Streetscape Design Manual	The Southwark Streetscape Design Manual (SSDM) sets out the council's requirements for the design of streets and provides advice on how to configure these to deliver the vision set out in our Sustainable Community Strategy.	The SEA makes reference to sections of the SSDM where appropriate – particularly relating to Culture and Heritage.
Southwark Tree Strategy	A tree management strategy is a policy framework for the trees owned, managed and/or protected by an organisation. Southwark Council's tree management strategy sets out a vision for the next five years and explains how we will achieve this vision. It is a reference document for anyone with an interest in Southwark's trees.	The SEA contains an objective to "Ensure that existing trees on the highway are retained or replaced if removed for Transport schemes".

5. Southwark Today

The borough occupies a key position within the heart of London bordering the river Thames, with the City and West End to the north and is heavily developed.

The built environment is varied, from the dense and historical riverside, through its central area of social housing, extensive Victorian and Georgian housing to the leafier areas in the south, 20% of the borough is green open space. Key green spaces include Dulwich Park, Peckham Rye and Burgess Park located in the centre of the borough.

A total of 274, 000 people live in Southwark, which includes a rise of well over 50,000 since 1981. New residents are mainly in their 20s and 30s, with household size getting smaller. Southwark's population profile is characterised by a high percentage of working age residents, 66% compared to 60% in London.

There were around 157,900 economically active residents in Southwark in 2009, a common measure of the available labour supply of an area. The proportion of the working age population who were economically active stood at 76% marginally above Inner London (75%) and London (75%); and below the GB average (77%). There were 12,800 unemployed people in Southwark in 2009, an unemployment rate of 9% of the economically active population. This rate was above the Inner London (8%) and London averages (8%). However, over the previous five years Southwark has managed to reduce the gap with the London average. In line with the rest of the country unemployment is increasing as a result of recession and an increasingly competitive job market.

Environment

The Borough of Southwark, 2,886 hectares in area, occupies a key position within the heart of London bordering the River Thames, with the City and West End to the north. Its immediate neighbours are Lambeth to the west and Lewisham to the east, to the south are the outer London boroughs of Bromley and Croydon.

Southwark has a hugely varied physical environment, from the dense and historical riverside, through its central area of social housing, extensive Victorian and Georgian housing to the leafier areas in the south, 20% of the borough is green open space.

Southwark has a rich heritage including 2,200 listed buildings and 40 Conservation areas that comprise some 23% of the borough. It should also refer to the nine archaeological priority zones, registered parks and gardens, scheduled monuments and the wider historic environment. Together these assets provide a range of cultural, social and economic benefits to the local community and make a significant contribution to the Borough's local distinctiveness. All cultural and historic assets could be vulnerable to potential damage and destruction as a result of increased pressure from development and regeneration within the Borough.

Population

Southwark's population is growing from 244,900 in 2001 (last Census year) to a projected 282,900 in 2011. The government has projected that the population will rise to 305,600 by 2016 and 329,300 by 2026. Population density across the borough as a whole averages around 84 persons per hectare. This figure is nearly double the Greater London average of 46. The borough was identified in the draft London Plan (2009) as having the fifth highest target for new homes by 2021 (20,050 homes) of all London boroughs.

Socio-economic characteristics

Southwark is ranked as the 26th most deprived local authority area (1 being the most deprived) in England out of a total of 354 Local Authorities. Levels of deprivation in the borough vary significantly between areas with Peckham, Walworth and Camberwell being among the most deprived areas. The least deprived areas tend to be in the north and south of the borough such as Bankside and Dulwich.

The working age employment rate for Southwark is 73%, lower than both the London and UK averages with 75% for London and 79% for the UK. The employment rate also varies by area generally being lowest in the more deprived areas of the borough.

Travel in Southwark

Walking

Nearly all trips to and within the borough will have a walking element and for most, walking is something that is done everyday, whether it be walking to the train or bus stop, walking to school or work or even to get some last minute groceries. Currently 12% of Southwark residents walk to work², which is similar to other inner London boroughs. Given the business centre in the north of the borough this area borough experiences a high proportion of commuter walking as well as multi modal trips which incorporate walking.

Cycling

Cycling has increased dramatically over the last 10 years. Many areas in central London have seen significant increases in cyclists, particularly those commuting. In recent years the council has invested in cyclist training for adults and children, green cycle routes (greenways), the London Cycle Network, as well as its ongoing programme of cycle parking; all to increase the uptake of this sustainable mode of transport.

Bus services

Bus services in Southwark are quite extensive, particularly in the northern half of the borough, which is served by 60 bus services (including 11 24-hour services), and 15 night buses that run through Southwark. These are run on behalf of TfL by 11 different companies, run on 42km of bus lanes and serve 650 bus stops.

The Elephant & Castle is a major transport interchange and has more bus routes passing through it than anywhere else in Southwark. It also has both underground and mainline stations nearby, making it a vital, albeit poorly designed transport interchange for the borough, and a focal point for redevelopment.

Rail services

There are 11 railway stations in Southwark providing services between Central London and the South East. However, there are two areas, the Burgess Park area (from Camberwell to Bermondsey), and between Peckham Rye Park and Dulwich Park that are not close to a station, making it difficult for people living and working in these areas to use them.

There are nine underground stations on four different tube lines, all in the northern part of the borough, providing access to Central London and Docklands.

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² ONS Census Data 2001

River transport

River passenger transport has been under-developed for many decades, however there has been resurgence with TfL taking management of some piers and introducing new services targeting both commuters and tourists. There are eight piers in the borough.

Road network

The road network comprises two major east-west routes: the A2 Old Kent Road/New Kent Roads and the A202 Peckham Road/Camberwell New Road. There are a number of other important east-west routes, particularly along the River Thames in the north and the South Circular across Dulwich in the south.

North-south routes are less obvious; the main route is from the Elephant and Castle south along Walworth Road following the borough boundary with Lambeth through Herne Hill and Dulwich.

Vehicle journeys

Southwark suffers some of the disadvantages that its central position brings, the most substantial being heavy congestion. As would be expected the highest daily traffic flows generally occur in the northern section of the borough due to convergence of traffic seeking river crossings.

The roads with the largest amount of traffic are in the north including Kennington Lane, Elephant and Castle, New Kent Road and Tower Bridge Road; Jamaica Road, the Rotherhithe tunnel; Blackfriars Road and London Bridge.

LTDS data³ indicated that up to 31% of all journeys originating in Southwark were carried out by private car or motorcycle, 34% were carried out by public transport and 35% by non-motorised means.

London's projected population growth will add extra pressure to the highway network and the limited capacity in central London. Congestion levels are predicted to worsen across London and this may lead to more congestion for central London.

Road freight

Road haulage from coastal ports and light goods vans traverse through the borough to service the City and West-End retail, hotel and restaurant trades and commercial offices. The high volume of through freight traffic on the borough's roads has an adverse effect on the road network in particular the local bus services.

³ LTDS London Travel Demand Survey is an annual sample survey of 8,000 randomly selected households in London and the surrounding area. 2006/07 to 2008/09 average, seven-day week.

6. State of the environment

6.1 SEA objectives

The objectives detailed in the following table are derived from a number of existing sources, including both Southwark Council and Mayoral objectives and are aimed to deliver consistency to the borough's transport investment and the council and mayoral policies.

Table 4: Proposed SEA objectives and indicators

SEA Topic Area	SEA Objectives	Indicator
Biodiversity and flora & fauna	Improve local biodiversity / Conserve and enhance habitats and species in Southwark	Maintaining status quo of protected sites close to Transport schemes. Sites of importance for nature conservation (Annual Monitoring Report)
nora & rauna	Ensure that existing trees on the highway are retained or replaced if removed for Transport schemes	No. new street trees planted No. replacement street trees planted
	Ensure the transport network is safe and secure for all and improve perceptions of safety	Numbers or % of incidents of crime against the person at transport interchanges.
	ior all and improve perceptions of salety	No. of KSIs, and no. of slight injuries.
Human health		Reduction in rates of childhood obesity
	Improve physical fitness, by encouraging walking and cycling particularly for short journeys.	% children walking or cycling to school (NI198) Annual borough cycle counts (baseline data 2010). LTDS data – proportion of travel by main mode
Population	Improve travel opportunities and maximise independence for all	No. fully accessible bus stops in the borough.
Soil and water	To protect the soil and water environment by reducing contamination from transport activities.	No. of pollution incidents to water courses from transport
		% reduction in NOx and primary PM10 emissions through local authority's estate and operations (NI 194)
Air	Reduce the impact of transport on Southwark's air quality	Monitor air quality through permanent monitoring stations
	an quanty	Traffic volumes across screen line
		No. fleet vehicles complying with Euro II-V standards No. electric/ hybrid vehicles
	Encourage sustainable travel choices	Number or % of journeys made by sustainable modes.
Climatic factors	Encourage the take up of alternative fuels and cleaner vehicles and lobby national and London Government to provide incentives their use	No. of electric vehicle charging points Planning to adapt to climate change (NI188)
	Reduce negative effects of noise from transport infrastructure	Traffic volumes across screen line (baseline expected 2010)
Noise	To protect parks / potential quiet areas in the borough from traffic noise	No. of parks impacted by transport schemes
Material assets	Increased sustainable use of resources when implementing transport schemes and enhance the public realm	Improvement in the quality rating for streets and estates (SCS indicator)
Landscape	Enhance the streetscape / public realm	No. new resting places provided New NHT Network Public Satisfaction Survey (sample size 4500)

	• •	
Culture & heritage	Conserve and enhance all cultural and heritage assets and the wider historic environment and increase enjoyment of the historic environment.	Maintain or increase archaeological priority zones and conservation areas (AMR)

It should be noted that the SEA objectives for soil and water have been merged together as the SEA objectives for each of these listed in the scoping report were thought to be very similar.

6.2 Relationship of the Transport Plan objectives to the SEA objectives

The following table shows the results of the SEA objectives mapped against the Transport Plan objectives:

Table 5: SEA objectives mapped against Transport Plan objectives

SEA topic area	SEA objectives	Transport plan objective
Biodiversity and flora & fauna	Improve local biodiversity / Conserve and enhance habitats and species in Southwark	Improve the health and wellbeing of all by making the borough a better place
	Ensure that existing trees on the highway are retained or replaced if removed for Transport schemes	Improve the health and wellbeing of all by making the borough a better place
Human health	Ensure the transport network is safe and secure for all and improve perceptions of safety	Ensure the transport network is safe and secure for all and improve perceptions of safety
	Improve physical fitness, by encouraging walking and cycling particularly for short journeys.	Encourage sustainable travel choices Improve the health and wellbeing of all by making the borough a
		better place
Population	Improve travel opportunities and maximise independence for all	Improve travel opportunities and maximise independence for all
Soil and water	To protect the soil and water environment by reducing contamination from transport activities	Improve the health and wellbeing of all by making the borough a better place
Air	Reduce the impact of transport on Southwark's air quality	Reduce the impact of transport on Southwark's air quality
Climatic factors	Encourage sustainable travel choices	Encourage sustainable travel choices
	Encourage the take up of alternative fuels and cleaner vehicles and lobby national and London Government to provide incentives their use	Reduce transport's contribution to climate change
Noise	Reduce negative effects of noise from transport infrastructure	Improve the health and wellbeing of all by making the borough a
	To protect parks / potential quiet areas in the	better place

	borough from traffic noise	
Material assets	Increased sustainable use of resources when implementing transport schemes and enhance the public realm	Improve the health and wellbeing of all by making the borough a better place
Landscape	Enhance the streetscape / public realm	
Culture & heritage	Conserve and enhance all cultural and heritage assets and the wider historic environment and increase enjoyment of the historic environment	Improve the health and wellbeing of all by making the borough a better place

In some cases the draft SEA objectives laid out in the scoping paper have been amended so that they take on the same wording as the Transport Plan objectives. This has only been done in cases where objectives were consistent in meaning.

6.3 The environmental baseline

The SEA directive requires that the current state of the environment and the likely evolution of the environment without implementation of the plan be considered. The collection of baseline data draws upon a number of existing sources and an overview of the baseline information collected to date for each SEA topic is set out in the following section.

Baseline information provides the basis for the prediction and monitoring of the effects of the implementation of the Transport Plan and helps to identify environmental problems and alternative ways of dealing with them.

Several overarching issues exist for multiple SEA topics. For example, the issues of traffic levels, modal split and traffic composition are relevant to: air quality, noise, population and human health and this should be considered when reading the following.

Human health, population, air quality, climate change and traffic generated noise were identified in the scoping assessment as areas likely to be significantly impacted by the Transport Plan or likely to worsen without the implementation of the plan. Cultural heritage and archaeology has been added to this list and the balance of the environmental topic areas are shown in appendix B. These are biodiversity, soil, water, material assets, and landscape; they are not likely to have significant adverse impacts as a result of implementation of the Transport Plan.

Human health

Personal safety and security

Crime and fear of crime can affect a person's transport choice, reducing their accessibility and mobility to certain areas or restricting travel at certain times of the day. This can subsequently affect their health and well being.

Between 2004 and 2007, 29% of areas in the borough had a decrease in the number of crimes. During 2009/10 Southwark made good percentage reductions against many of our crime indicators and performed at, or better than, the London average in many areas. In all, the recorded number of total notifiable offences in Southwark fell by 6%, compared to a 2% reduction across London. This equates to approximately 2,000 fewer recorded offences in 2009/10 compared to the previous financial year.

Although the actual crime rate on public transport has declined in recent years, it is the perceived risk that has the most direct impact on people's choices. The perceived rate may also be affected by experiences such as vandalism and graffiti, or the need to use poorly lit or lonely passageways, which may add to a sense of unease or vulnerability. Over the last year, residents have told us they find Southwark a safer place to live with 92% of residents now feeling safe in the day time. Night time safety has also seen a significant improvement; increasing from 46% in 2006 to 54% in 2008.

The Safer Southwark Partnership (SSP) is a statutory partnership body with responsibility for reduction of crime and disorder. The lead bodies of the partnership are Southwark Police and Southwark Council along with various representatives of the Emergency Services. The partnership is responsible for the development and delivery of the local crime and disorder strategy on a three year cycle, the annual crime and disorder audit and the quarterly data reports.

The issue of safety and providing safe journeys is increasingly important. In addition, Community Safety are to take a central role in the development of new transport infrastructure to ensure that they are not used as gateways to crime and in particular drugs markets. The partnership review concluded that issues around transport and safe journeys should be considered in the context of all our priorities, particularly around preventing youth crime.⁴

The council's land use policies set the ambition for the borough's town centres in particular Peckham, Canada Water, Bankside and Elephant and Castle to be economically vibrant, lively, welcoming places. Where large scale regeneration is proposed it provides the opportunity to design out crime, improve accessibility and interchange and determine appropriate servicing and loading arrangements. This supports the Transport Plan objective "Ensure the transport system helps people to achieve their economic and social potential".

Road safety

The council seeks to achieve measurable reductions in road casualties and to help make all modes of transport safer and more accessible. Fewer pedestrians, children, drivers and their passengers were injured in Southwark during 2009 than in the previous year. The group to benefit most from casualty reductions are car occupants and while the council is pleased with this decline, it is also of concern that the rates of decline are not equitable amongst all road users.

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⁴ Safer Southwark Partnership Plan (2008-2012, revised 2009)

Figure 1: Collision and casualty trends in Southwark 1

Casualty totals

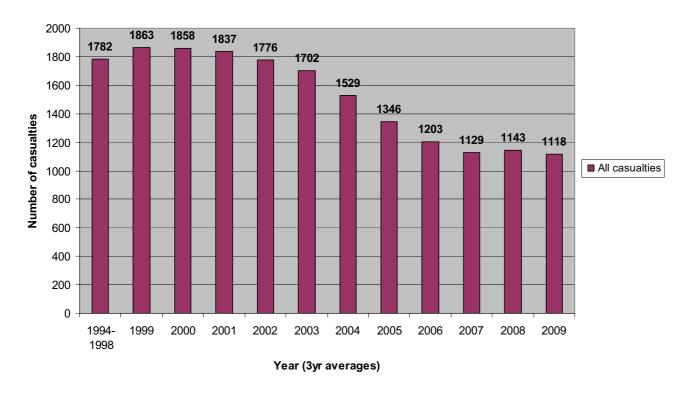
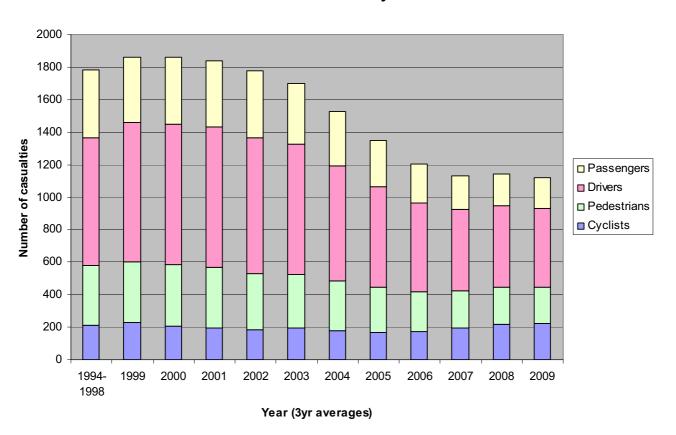


Figure 2 - Collision and casualty trends in Southwark 2

Breakdown of casualty totals



Unfortunately injuries to cyclists have increased for the fifth year running. This is a major concern for the council, but should be viewed in the context of the rising number of people that have taken up cycling. Of all people injured on Southwark's roads, 18% are cyclists and the vast majority of them are males aged between 25 and 59.

Pedestrians make up 20% of all casualties on our roads and the majority of these are aged 25 to 59. Sadly, collisions involving pedestrians tend to be more severe than other modes and 50% of people killed on London roads are pedestrians. Many of these collisions are located on busy roads near town centres.

The Transport Plan contains specific road safety measures and as such is likely to improve safety on our roads. The plan contains two new road safety targets as follows:

- Reduce the number of killed and seriously injured from 140 (2004/2008 baseline) to 117 (16% reduction) by 2014 (as a 3yr average 2012/2014).
- Reduce the total number of slight casualties on within the borough from 1,030 to 858 (17% decrease) by 2014 compared with a 2004/2008 baseline.

Improve physical fitness and health by encouraging walking and cycling

Levels of child obesity have doubled in the past decade and obesity is arguably the biggest issue facing general public health today. High on the government's agenda is investment in changing people's eating habits and increasing their levels of activity. The built environment is a fundamental part of this and by encouraging more people to walk and cycle, daily activity levels will be increased and some of these issues addressed.⁵

The Southwark Housing Requirements Study found that 53,500 (20%) of people living in Southwark said they had health problems. 25% of households contained at least one member with a health problem. Cardiovascular disease accounts for nearly a third of all deaths in Southwark and over a quarter of premature deaths under 75 years of age.

Driving or riding in motor vehicles is often associated with a sedentary lifestyle, one of the most important risk factors for non-communicable diseases and early mortality in western populations. By increasing the number of people choosing to walk or cycle over private transport, physical fitness and health will be improved while reducing traffic demand on the road network and as a result decreasing congestion.

There is currently limited meaningful assessment of borough wide walking and cycling levels. However, as part of the monitoring of the Transport Plan, limited pedestrian and cyclist counts are planned for 2010 (baseline) to continue annually. In addition to this some London wide analysis has been conducted through the London Travel Demand Survey⁶ and this will be utilised for the "mode share" indicator.

As previously mentioned a Health Impact Assessment of the Transport Plan has also been carried out. A number of positive health themes were identified in this assessment as a result of the implementation of the Transport Plan.

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⁵ Southwark Road Safety Plan 2009

⁶ The London Travel Demand Survey (LTDS) sample is based on London residents only, therefore any potentially walkable trips by non-Londoners are not included – this could leave a gap in the analysis for central London as many people who enter the region are based outside of the survey catchment area

The mode share targets for the Transport Plan are to:

- Increase the walking mode share in Southwark from 29% in 2008 (2006-2008 3 year average) to 33% by 2013 (2011-2013 3 year average)
- Increase the proportion of those cycling in Southwark from 3% in 2009 (2007-2009 average) to 4% by 2013/14

Population

Accessibility and the physical environment

The main environmental concerns in regards to population are related to access to work and to community facilities. One of the priorities in Southwark's Sustainable Community Strategy is for public services to be "accessible and integrated".

The borough has a good record of providing bus stops which are fully accessible. The vast majority of the 578 bus stops in the borough are now fully accessible. We will continue to ensure that any remaining bus stops on borough roads be made fully accessible where this is possible. It may be the case that due to issues such as gradient a small number of stops may not be able to be made fully accessible.

The number and quality of crossing points on both major and minor roads also affects accessibility especially for those who may have impaired mobility and continuing improvement projects are being undertaken.

Management and maintenance of the street environment can also affect accessibility. The condition of the pavement, poor design or construction, crossing points and obstacles, such as poorly located street furniture can all affect accessibility. The council is currently preparing streetscape design guidance, which will discuss and address these issues.

Accessibility and social exclusion

The main environmental concern in regard to population is related to access to work and to community and health facilities.

Previously, accessibility has been focussed on trying to meet the requirements of the Disability Discrimination Act, however it is becoming more widely recognised that accessibility to employment, health and childcare services is a key factor in reducing social exclusion.

The journey to work represents 20% of travel in the borough and it is important that we encourage people to consider sustainable travel when deciding on their mode of travel. One of the groups with higher than average levels of worklessness is the disabled. So there is also an opportunity to build upon the independent travel training currently offered to young people in the borough to be extended to adults with disabilities if travel is thought to be a barrier to accessing jobs.

Population and social exclusion is considered to be a potential issue in terms of the SEA of the Transport Plan proposals. Transport is an important factor in the lives of all people and is a key factor in social exclusion particularly in respect of employment. How measures proposed in the plan affect the access which socially excluded people have to transport and the ability to move around is critical.

The Transport Plan objective relating to this area is: "To improve travel opportunities and maximise independence for all."

Air

The Environment Act 1995 placed responsibilities onto local authorities to review and assess air quality within its district and determine whether the national air quality objectives are likely to be met for the relevant year. Local Air Quality Management, as this process is known, has been delivered in Southwark through the establishment of an Air Quality Management Area (AQMA) and the draft Air Quality Strategy and Action Plan. The majority of Southwark as been designated an air quality management area (AQMA). Southwark is required to periodically review and assess the effectiveness of the Air Quality Strategy and Action Plan and do this through regular Update and Screening Assessments (USA). The latest Southwark USA was undertaken in 2006 and identified that only two of the national air quality objectives would not be met by the relevant due date, the annual mean objectives for NO₂ and PM₁₀.

Emissions from road transport are the primary source of both NO₂ and PM₁₀ in Southwark and London as a whole, although fixed sources such as domestic gas boilers contribute significantly. In 2007 Southwark's last monitoring station closed, however planning permission has been secured to relocate this equipment on the Elephant and Castle. Planning permission has also been sought to locate another monitoring station on the Old Kent Road.

The analysis for the central London Sub Regional Transport Plan identified 7 air quality focus areas within Southwark. All road transport modes are important contributors to emissions of NOx in the focus areas but in many cases buses contribute the highest proportion of emissions reflecting the level of bus provision in these areas. Overall however, the contribution of all different modes including HGVs/LGVs, cars and taxis cannot be ignored as together these tend to contribute more than 50% towards road transport NOx emissions, so reducing their contributions over time will play an important role in improving air quality.

Air quality can be improved through encouraging the use of cleaner vehicles, the London low emission zone, tree planting and washing streets to reduce dust.

Traffic volumes in the borough will be monitored throughout the life of the Transport Plan. This will enable us to monitor progress on our plan target to reduce traffic volumes in the borough by 3% from 2010 to 2013.

Climatic factors

 CO_2 is a primary cause of climate change and transport represents 28% of the UK's carbon emissions. The Mayor of London has committed to reduce the capital's CO_2 emissions by 60 % from their 1990 levels by 2025^{17} . This is supported by the Climate Change Act 2008 which seeks an 80% reduction in the UK's CO_2 emissions over 1990 levels by 2050 and the binding commitment to generate 15% of the UK's total energy from renewable sources by 2020.

In Southwark, the borough's CO₂ emissions from road transport represent 11% of the borough's total emissions. Of this, the main emitter is road traffic, and the borough has more influence to reduce this than to reduce emissions from aviation, shipping and rail; therefore initiatives to reduce CO₂ emissions contained within the Transport Plan are focussed on road traffic.

The most straightforward way to reduce carbon dioxide emissions from transport is for people to reduce their use of the car and to use sustainable modes of transport such as walking and cycling. It is important

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⁷ Mayor's Climate Change Action Plan (GLA, 2007)

that we focus on tackling short journeys because these can give quicker results than long journeys as cars are least fuel efficient for short journeys. Over 50% of journeys to work within Southwark are under five kms and it is reducing the use of the private car for these journeys that will achieve the greatest results. As well as benefits in reducing carbon dioxide emissions, encouraging walking and cycling promotes healthier lifestyles and people's sense of well being.

There are a variety of new technologies in the market including electric vehicles. Electric vehicles offer a clean and green alternative to petrol and diesel powered transport. Electric power gives us a promising opportunity to cut our Carbon dioxide (CO₂) emissions, air pollutants and noise from road vehicles and should reduce our dependence on fossil fuels.

Whilst electric vehicles do not directly produce any emissions, this does not mean that they are 100% carbon neutral, as the electricity used is mostly produced in the traditional manner, with fossil fuels. When these are taken into account, most impacts are still significantly reduced - for example the life cycle CO₂ for a mains-powered electric car is typically 40% less than for a petrol equivalent.

Electric vehicles are currently 100% exempt from the congestion charge and the council already encourages electric vehicles by way of a 75% discount for resident's parking permits.

The Transport Plan reflects the SEA objectives to promote and enable carbon free modes of transport and to encourage the take up of alternative fuelled vehicles. A key objective of the Transport Plan is to "reduce transport's contribution to climate change".

Noise

Noise can have detrimental impacts on human health, leading to reduced quality of life as well as negative impacts on biodiversity, fauna and flora and reduced amenity in the local landscape and townscape.

Traffic noise comes primarily from engines and exhaust systems, and from tyres running over the road surface. Noise levels vary depending on vehicle speed, the road surface and whether the surface is wet or dry. There are other factors which are also important, such as distance from the noise source, and whether or not there are obstructions between the road and the location affected.

Residents in areas that are within close proximity to major transport routes are likely to be affected most by noise from transport. It is anticipated that traffic related ambient noise will be an issue of significance.

The impact of noise from transport such as noise from busy roads or aircraft it can have a detrimental impact on peoples' lives and impact on people's health and well being. Department of the Environment, Food and Rural Affairs (Defra) has recently produced noise maps and action plans. The action plans identify the most important areas, those with noise over a certain level, which are designated as areas of first priority. London does contain many areas of first priority – some of these are located in Southwark⁸.

Presently noise monitoring is not undertaken by the borough on a routine basis. However, Defra has produced strategic noise maps based on estimated noise levels from major roads, railways, airports and urban areas.

Through the council's land use policies we promote the improved planning of new developments this coupled with the better management of transport systems can have a positive effect in reducing noise

⁸http://www.defra.gov.uk/environment/quality/noise/environment/documents/actionplan/firstpriority/london-agglomeration-south-east.pdf

impact. However it should be noted that in many areas (red routes and aircraft) the council has limited ability to control these noise generators.

Most of the borough is overflown by aircraft going to and from City and Heathrow airports. The noise caused by these aircrafts is particularly noticeable and more disturbing at night. The council strongly objects to the proposal for a third runway at Heathrow on the grounds of noise, air quality, the impact on health and the contribution to increased CO_2 emissions.

Southwark is on the flight path for City and Heathrow airports, therefore the council would be concerned were there to be any changes to flight paths which may have a detrimental impact on noise quality in the borough. Any growth in air traffic would lead to an increase in noise and changes to flight paths could change those locations affected by aircraft noise.

A strategic policy of the Transport Plan is to reduce noise from transport. This aligns with the SEA objective to "reduce negative effects of noise from transport infrastructure".

Cultural heritage and archaeology

Southwark has an immensely rich and important archaeological heritage dating from 10,000 years ago to the industrial remains of the last century. The Romans set up their provincial capital of Britain at a settlement near London Bridge and Borough High Street. This area was also the location of the medieval settlement of Long Southwark, famed for its fairs and inns.

The main environmental concerns in regard to archaeology and cultural heritage are related to development of infrastructure and the resulting adverse effects that this can have on listed buildings, conservation areas, areas of local historic value and the overall sense of community.

Archaeological and historical information has enabled the council to establish the following archaeological priority zones:

- Borough/ Bermondsey / Riverside
- Old Kent Road
- Elephant and Castle / Kennington Park Road
- Walworth
- Camberwell
- Peckham
- Dulwich

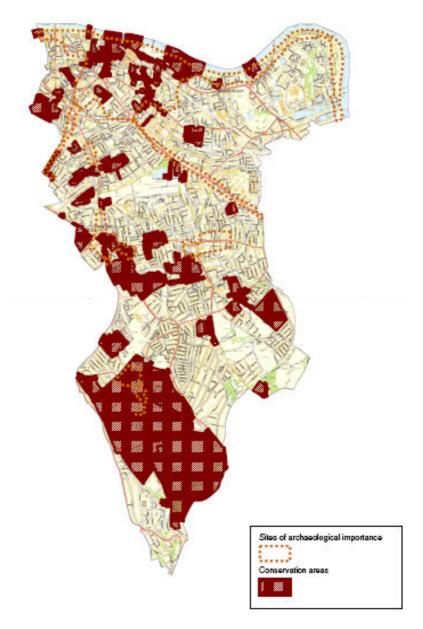
The enjoyment of the built environment and setting of the historic environment can be curtailed by unnecessary signs and guardrailing that restrict pedestrian movement. The MTS states that The Mayor, through TfL, and working with the London boroughs and other stakeholders, will use the principles of 'better streets' to seek to improve town centres, in particular: removing clutter and improving the layout and design of streets; enhancing and protecting the built and historic environment; increasing the permeability of streets; and creating clear and easily understandable routes and spaces to make it easier for cyclists, pedestrians and disabled people to get about. The Transport Plan fully supports the Mayor's better streets agenda.

Transport can affect the quality of street environments and consideration should be given to enhancing this wherever possible. Increasing levels of congestion can have an impact as they detract from historic areas and buildings. New transport infrastructure can present a greater, and often irreversible, threat to the historic environment as development can affect historic landscapes and may cause direct damage to archaeological sites, monuments and buildings. Change should be managed in such a way that it enhances the historic environment and does not harm it. For example, the relatively new stations on the Jubilee line have enhanced the environment in which they have been placed⁹.

National acts and local planning guidance recommend the highest level of protection to historic and archaeological areas, sites and monuments of international, national and regional importance. They also recommend account of the landscape context and setting of buildings be considered.

The protection of Listing Buildings and Conservation Area designation is afforded by Section 69 of the Planning (Listed Buildings and Conservation Areas) Act 1990 and Archaeological sites under the Ancient Monuments and Archaeological Areas Act 1979. A map of conservation areas and archaeological sites within the borough is shown below:

Map 1: Conservation areas and sites of archaeological importance

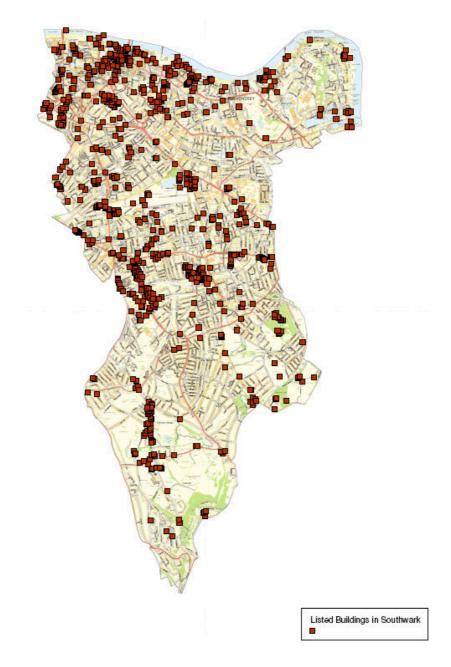


⁹ For more information see Transport and the Historic Environment, English Heritage, 2004.

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Throughout the borough there are many attractive and historic buildings, monuments and sites that reflect Southwark's rich history and add to the unique character and identity of places. We currently have 40 conservation areas covering 686ha (23% of the borough) and around 2,500 listed buildings and monuments. There are also nine Archaeological Priority Zones (APZs) covering 679ha (23% of the borough).

Map 2: Listed buildings in Southwark



The Heritage "at risk" register includes 29 buildings, one registered park and garden, two scheduled monuments and one Conservation Area at risk (see appendix for list). A map showing the listed buildings in the borough is shown above:

Potential transport impacts on the historic environment are:

 Harm to the significance and value of the historic environment and designated heritage assets and their settings from traffic impacts, for example through noise or poor air quality.

- Accelerated weathering of historic fabric through poor air quality in areas of traffic congestion.
- Potential harm to historic structure and loss of character through insensitive improvements, for example, access improvements to transport interchanges, poorly located signage or cycle infrastructure.

The council's emerging Streetscape Design Manual (SSDM) proposes that a standardised materials palette be used for all projects and that;

- Heritage areas (designated conservation areas) will have higher visual quality/value elements, with a focus on sourcing those with a heritage character first and foremost.
- The strategic cultural area (key international commercial and cultural area along the Thames designated in the LDF) will have the highest visual quality/ value and most sustainable elements used. The character may be modern or heritage based dependant upon the context.

The SSDM also proposes that vivid coloured road surfaces no long be used as it is deemed to be visually intrusive.

One of the proposed SSDM's strategic design aims is SDA14: Enhancing sense of place. This states that improvements should be configured so that buildings, landscapes and the social activities that take place in or around them appear as the most noticeable elements of the street – not traffic infrastructure, signs or road markings – and there is a clear unobstructed visual relationship between these areas and the carriageway.

7. Development of options and alternatives

The SEA Directive states that the Environmental Report should consider "reasonable alternatives taking into account the objectives and the geographical scope of the plan or programme' and give 'an outline of the reasons for selecting the alternatives dealt with' (Article 5.1 and Annex Ih)."

Southwark has prepared its Transport Plan containing objectives and targets which consider the MTS, the emerging Sub Regional Transport Plans as well as council policy such as the Sustainable Community Strategy. The alternatives (including doing nothing) listed below alongside some of the measures from the Transport Plan could be considered to be "academic" as the Transport Plan (or Lip) is a requirement of the 1999 GLA act and is subject to rigorous guidance issued the Mayor of London.

8. Assessment of alternatives by Transport Plan objective

Alternative strategies were developed for all nine Transport Plan objectives, as shown in the following table. When determining these alternatives the following issues were considered, that the alternative strategies would:

- Alleviate the problems in the plan area;
- Meet the objective;
- Highlight links to strategic goals.

topic area. This has been split into positive and negative, long and short term. Short term is defined as the life of the Transport Plan delivery plan – until Each of the proposed measures and alternatives for achieving the Transport Plan objectives have been assessed for their effect on each environmental 2014, and long term is defined as being until 2030, the duration of the Mayor's Transport Strategy

Table 6: Proposed measures and alternative measures to meet the Transport Plan objectives

+ positive short term impact - negative short term impact

++ positive long term impact -- negative long term impact

		SEA considerations	nsider	ations					
Transport Plan objective	Possible pool of measures for achieving Transport Plan objectives / MTS priorities	Biodiversity, flora & fauna	Population	Soil & water	Aiلا	Climate	Material assets	Culture & heritage	Landscape & townscape
	Ongoing parking management	ı	ı		ı	ı	ı	ı	'
Do nothing	Minimal traffic programme	ı	ı		ı	ı	ı	ı	1
	Basic highway and bridge maintenance	ı	ı		ı	ı		ı	1

		SEA C	onside	SEA considerations	S				
Transport Plan objective	Possible pool of measures for achieving Transport Plan objectives / MTS priorities	ersity, k fauna	noita	water			9	дe	csbe &
			Popul	& lio2	λiA	Climat	Materi assets	Cultur heritag	spuez Fands
I. Manage deman	I. Manage demand for travel and increase sustainable transport capacity								
	Supporting car free developments	++	++	++	+ +	‡	+++	++	++
	Expansion of car clubs	++	++	++	‡	‡			++
Measures proposed as part	CPZ reviews in town centres		+		+	+			+
of Transport Plan	of Transport Plan Expansion of cycle parking at housing estates	++	‡		‡	‡			++
	Complementary measures for cycle superhighways	+	+		+	+	+	+	+
Alternatives	Significantly higher parking charges	+	ı	+	+	+			+
meet objective		-	l	-	-	•			•
2. Encourage sus	2. Encourage sustainable travel choices								
	Supporting travel planning – business and schools	++	++		+	‡			
Measures proposed as part	Reducing vehicular demand through travel awareness initiatives	++	++	++	+	‡		++	++
of Transport Plan	of Transport Plan Supporting road safety training – cyclist, pedestrian and independent travel	+ +	+ +		+	+ +			

		SEA CO	onside	SEA considerations	(0				
Transport Plan objective	Possible pool of measures for achieving Transport Plan objectives / MTS priorities	ersity, f fauna	noite	nater			,	əß	csbe &
			Popul	& lio2	۸iA	smil)	Materi assets Gter	Cultur heritag Legal	Suwoj
	Improved signage and wayfinding initiatives throughout the borough		+ +		+ +	+ +	+ +	++	++
Alternatives	Further incentives (e.g. financial) for those who travel sustainably	+	+	+	+	+			
considered	Personalised travel planning		++		‡	‡			
3. Ensure the trar	3. Ensure the transport system helps people to achieve their economic and social potential	ıl poter	ıtial						
Measures	Supporting access to employment		+ +		‡	+			+ +
proposed as part	proposed as part Increase reliability of buses		++		‡	‡		++	+++
or Iransport Plan	Improvements to Camberwell Town Centre	+	+		ţ	+		‡	++
	Improved walking and cycling links to town centres – e.g. Walworth green links	+ +	++	+ +	++	+			++
Alternatives considered	Run free shuttle buses from housing estates to main employment centres		++	ŀ	ŀ	ŀ			
4. Improve the he	4. Improve the health and wellbeing of all by making the borough a better place								
Measures	Improved access to green spaces		++		++	++		++	++

		SEA C	SEA considerations	ration	10				
Transport Plan objective	Possible pool of measures for achieving Transport Plan objectives / MTS priorities	ersity, f fauna	noita	water			,	Эß	csbe &
			Popul	& lio2	λiA	Climat	Materi assets	Cultur heritag	sumoj
proposed as part	Promoting the best use of our streets – public realm improvements		+				+	+	++
or Iransport Plan	Greening the streets	‡	+	++	+	+	‡	++	++
	Promoting active travel	+	‡	‡	‡	‡			
Alternatives considered	Noise barriers	I	+ +				I	ŀ	ł
5. Ensure the tran	5. Ensure the transport network is safe and secure for all and improve perceptions of safety	s of sa	ıfety						
Measures	Programme of pedestrian phases at signals requiring them		++		‡	‡			
proposed as part of Transport Plan	of Transport Plan		+						++
	Supporting road safety training – cyclist, pedestrian and independent travel	+ +	+ +		‡	+++	+ +	+	
	Segregation of road users e.g. using pedestrian barriers		†				ı	ı	ı
Alternatives	Off road cycle paths	++	++		++	++	ı		
considered	Increased levels of enforcement		+		++	+ +			++

		SEA C	SEA considerations	rations	40				
Transport Plan objective	Possible pool of measures for achieving Transport Plan objectives / MTS priorities	ersity, fauna	noita	water			•		csbe &
			Sluqoq	& lio2	۸iA	Climat Motori	Materi assets	Cultur heritag	spue rgune
6. Improve travel	6. Improve travel opportunities and maximise independence for all								
Measures	Dropped kerb programme		++		‡	‡			++
proposed as part of Transport Plan	proposed as part Provide DDA compliant improvements to the streetscape of Transport Plan		++				+	++	++
	Street clutter removal	++	+				‡	++	++
	Provision of disable parking at origin and destination locations	+	+		+	+	+		
Alternatives	Provide shared space streets		++/		+ +	++	+	++	+
considered	Provide private transport		++		1	1			
7. Ensure that the	7. Ensure that the quality, efficiency and reliability of the highway network is maintained	intained	-						
Measures	Principal road renewal programme		++		+ +	+	+++		++
proposed as part of Transport Plan	proposed as part of Transport Plan		‡		++	+	+++		++
	Bridge strengthening programme		‡		++	+	+++		++
	Continued investment in maintenance programme		++		+ +	++	+++		
Alternatives	Restrict access to the network for maintenance and construction	1	+	1	1	1			

		SEA C	SEA considerations	rations	10					
Transport Plan objective	Possible pool of measures for achieving Transport Plan objectives / MTS priorities	ersity,	noita	water					cspe &	csbe
		-	Popul	& lio2	۸iA	Climat	Materi assets	Sultur heritag		sumoj
considered	works									
8. Reduce the imp	8. Reduce the impact of transport on Southwark's air quality					-		-		
	Supporting low emission technologies and alternative fuel vehicles	+	+		+	+				
Measures proposed as part	Measures proposed as part Implementation of EV charging points	++	++		+	+				
of Transport Plan	of Transport Plan Pilot scheme to identify and implement air quality improvements close to schools in conjunction with air quality improvement plan		+		+	+				
Alternatives considered	Enforcement action on idling engines	++	++/-		+	++				
9. Reduce transpo	9. Reduce transport's contribution to climate change									
	Greening the council's fleet		‡		‡	+				
Measures proposed as part	Eco driver training	+++	++		++	+++				
of Transport Plan	of Transport Plan Greening the streets	+ +	‡	++	‡	+	+ +	++	+	+
Alternatives considered	Emissions based parking tariffs	+ +	++		++	‡				
]

9. Assessment of significant environmental effects

Manage demand for travel and increase sustainable transport capacity

By managing the demand for travel we will relieve pressure on the public transport system as well as the road network. Whilst Southwark Council is not directly responsible for some areas of sustainable travel (such as bus and rail) we will work hard to campaign and lobby for increases in capacity on those as well as increasing the transport capacity for walking and cycling. We will also continue to work towards promoting and enabling car clubs in the borough.

The alternative of significantly higher parking charges is not currently supported.

Encourage sustainable travel choices

Southwark is committed to encouraging people to use more sustainable and active modes, i.e. walking, cycling and public transport.

Our transport improvement programme will make sustainable travel choices easier to make by creating the conditions in which more people will feel attracted to walking, cycling and public transport. This will be achieved through school travel plans, workplace travel plans, ensuring people have the skills to travel sustainably, and support for Cycle Superhighways and the Cycle Hire scheme.

The alternatives are not supported as they are not financially viable.

Ensure the transport system helps people to achieve their economic and social potential

The council aims to increase the number of people who both live and work in the borough. Achievement of this will mean that these people are not travelling great distances to work and they will have greater sustainable travel options such as walking and cycling.

The alternative here is not supported for financial and practical reasons.

Improve the health and wellbeing of all by making the borough a better place

Encouraging more cycling and walking is a key priority for Southwark and will also help us to achieve a number of our other Transport Plan objectives. This objective will be achieved by continuing work with the community and in particular young people, helping to improve health and physical activity in the borough. We recognise that our roads are public spaces are shared by all those who use them (residents, workers, shoppers etc.), and have a key role to play in delivering our transport objectives and so we will improve our public realm.

The alternative suggested of introducing noise barriers is not supported for the many disbenefits it would bring such as aesthetic impacts on the townscape, social segregation as well as increased maintenance and installation costs.

Ensure the transport network is safe and secure for all and improve perceptions of safety Improving the safety of roads within Southwark is a key priority area and the proposed method is through speed reduction, and improved infrastructure, such as pedestrian crossings. Proposed methods include road safety campaigns, designing out crime, community wardens, making the borough a 20 mph zone, safety audits and support for the roll out of a new countdown system for London Buses.

Alternatives to these measures include the increased segregation of road users, which is not currently considered to be suitable and could conflict with the findings of our EqIA which advocates increased

social inclusion for all. Other alternatives include increased levels of enforcement which is considered to be uneconomical.

Improve travel opportunities and maximise independence for all

Pavements, parks and other public places often have obstacles and hazards which make life difficult for everyone but particularly those with impaired mobility. Transport services will need to continue to improve to meet the needs of people such as wheelchair users. Some things just need minor adjustment like installing dropped kerbs or correct tactile paving. Other improvements need major investment which needs to be planned over the long term, such as making stations fully accessible.

Provision of shared spaces is not currently supported as they are in conflict with the aims of the SSDM.

Ensure that the quality, efficiency and reliability of the highway network is maintained Southwark currently seeks to work towards reducing and controlling congestion through traffic management, and encouraging a modal shift towards forms of transport other than the car.

The alternative of restricting access to the network for maintenance and construction works is not supported due to its negative environmental effects.

Reduce the impact of transport on Southwark's air quality

Air pollution is one of the most pressing environmental concerns for people living in London. Emissions from road transport are the primary source of both NO_2 and PM_{10} in Southwark and London as a whole. Encouraging sustainable travel choices will help to increase air quality as modal shift away from the car occurs in the borough.

The borough currently has no alternative schemes proposed, however adopted policies are not anticipated to have a significant environmental impact.

Reduce transport's contribution to climate change

Southwark is committed to reduce its climate change impact, particularly through transport. Our Transport Plan target for CO₂ reduction from road based transport has been set so that it is consistent with the Mayor's 2025 CO₂ reduction target. Southwark's Transport Plan delivery actions focus on:

- Southwark staff travel plan
- Electric vehicle charging points pilot
- Increasing the number of street trees
- Parking provision: As part of the parking contract renewal we will seek to implement emission based parking permit charges

The alternative of emission based parking charges is currently being investigated and cannot be ruled out as an option.

10. Evolution of the environment without the Transport Plan

SEA regulations require that we consider the evolution of the environmental baseline over the plan period must also be assessed in the absence of the plan, or a do nothing option, in order to understand how the plan will contribute to changes environment in the future.

Whilst the future scenario forecasts the evolution of the environment in the absence of the Transport Plan, it does assume that existing council documents would remain in place. In considering this option, it is worth noting that this is somewhat of an artificial situation and change is likely to occur over a longer period of time, than that of the Transport Plan.

One of the major impacts would be the steady increase in traffic on the network which would in turn lead to increases in congestion, air pollution and greenhouse gas emissions and noise from traffic. However, on balance, there is scope for technological improvements in vehicles and the more widespread use of alternative fuels to reduce harmful emissions and noise from transport as newer, more efficient vehicles replace older vehicles in the fleet.

Air pollution issues would become increasingly difficult to challenge with increases in traffic growth, as the regulations are reactive and not preventative. This would also correlate to the delivery of substantial emissions reductions. Without a substantial reduction in greenhouse gas emissions, local and global climates may continue to change. Therefore, climate change will most likely continue in the absence of the Transport Plan, and the overall effect will most likely be adverse.

In terms of human health, obesity and health related issues are on the rise and may be further exacerbated by increases in sedentary modes of transport. Traffic growth may lead to increases in congestion and have the ancillary effect of increasing the number of road traffic accidents and injuries.

The townscape is likely to experience benefits and adverse effects in the absence of the Transport Plan. Cultural heritage, particularly in the historic city centre is likely to continue to be persevered and restored. However, traffic growth will lead to increases in congestion in the city centre and traffic will dominate the townscape. This will cause harm and degradation to historic buildings from emissions and reduce the ambience of the townscape.

11. Mitigation

This section sets out identified opportunities and proposed mitigation measures that have arisen as part of the SEA process. Some short term adverse effects were identified in the assessment of the Transport Plan which are generally related to the construction phase. Therefore for mitigation purposes it is recommended that works are completed with good practice on site to reduce any adverse effects. Consideration and preference should be given to the sourcing of local and recycled materials.

12. Monitoring

The SEA requires the borough to monitor the significant environmental effects of the implementation of plans and programmes in order to identify, at an early stage, unforeseen adverse effects, and to be able to undertake appropriate remedial action.

We have identified a number of targets to monitor our performance and ensure delivery of outcomes of the Transport Plan. These targets are both ambitious and realistic given anticipated funding levels.

Table 7: Performance monitoring of the Transport Plan

Target/ Indicator	Baseline	Data source
Excess wait times for high frequency services from 1.0 minute to 0.9 of a minute in 2013/14.	2009/10	TfL
Maintain the proportion of principal road length in need of repair at 11% by 2013/14	2009/10	DVI survey data
Reduce CO_2 emissions from road based transport from 227kt CO_2 in 2008 to 190kt CO_2 in 2013	2008	LEGGI data
Reduce traffic levels in Southwark by 3% by 2013	2010	Borough screenline traffic counts
Reduce the number of killed and seriously injured by 16% to 2014	2004/2008 baseline	London Road Safety Unit
Reduce the total number of slight casualties by 17% by 2014	2004/2008 baseline	London Road Safety Unit
Reduce all cyclist collisions by 40% by 2014	2004/2008 baseline	London Road Safety Unit
Increase the proportion of those cycling in Southwark from 3% to 4% by 2013/14	2007/09 average	London Travel Demand Survey (LTDS)
Increase the walking mode share in Southwark to 33% by 2013	2006/2008	LTDS

In addition to the monitoring for our Transport Plan targets we will also be collecting data for TfL through their output reporting sheet shown below.

Table 8: Output reporting sheet, information required annually by TfL

Output reporting sheet		v1.0
Borough:		
Year:		
Description	Unit of data	Number
Note: Outputs from individual schemes or packages of schereported using this form. Where applicable, values reported parking spaces were removed, but 75 added, the value repvalues are required for distances (for example if 1km of bus	I should relate to the net number of in orted should be 50 spaces). This also	terventions (for example, if 25 cycle applies to interventions where
Cycling		
Cycle parking facilities	Number of on-street spaces	
	Number of off-street spaces	
Cycle training	Number of adults	

A	ppendix A
	Number of children
Commentary on other interventions to assist cyclists (eg measures to improve permeability)	Example - Throughout the past year the Council has reviewed the scope for improving permeability for cyclists by permitting contra-flow cycling on key one-way streets. Following this review and the undertaking of safety audits, 4 one-way streets have been opened up for two-way cycling.
Walking	
Protected crossing facilities (eg refuges, zebra crossings,	Number
pelican crossings etc)	
Guardrail removal	Metres
Commentary on other interventions to assist pedestrians (eg way-finding measures such as Legible London)	Example - Following the completion of a walking audit of Ridgeway Hatch neighbourhood centre using PERS software, a total of 12 dropped kerbs were implemented in the local vicinity to improve pedestrian access to the area.
Road safety and personal security	
Education and training interventions (eg theatre in education or pedestrian training)	Number
20 mph zones / limits	Number
Commentary on other interventions to improve road safety or personal security (eg lighting and signing on key routs to stations)	Example - Improved lighting has been installed and graffiti removed at the pedestrian subway leading to Morris Green Station to improve the personal security of those travelling to the station by foot.
Buses	
Bus lanes	Kilometres
Accessible bus stops	Number
Commentary on other interventions to assist buses (eg bus gates)	Example - A 25 metre stretch of bus-only road was opened in June 2009 at the new Hale Brook retail park to faciliate bus access to / from Lee Way.
Smarter travel	
Development of workplace travel plans and review of existing plans	Number of workplaces
Annual monitoring of school travel plans	Number of achools
Walking promotions (eg Number of schools participating	Number of schools Number of schools
in 'Walk on Wednesdays'	Number of schools Number of workplaces
	Number of events
Cycling promotions (eg Number of events during Bike	Number of schools
Week)	Number of workplaces
0	Number of events
Smarter driving (ie Eco-driving), greener vehicles, liftshare and car club promotions	Number of events
Public transport promotions (eg Freedom Pass promotions)	Number of events
Commentary on other smater travel interventions	Example - A Supplementary Planning Document has been adopted on the development of residential and workplace travel plans.
Environment	
	Number on-street
Electric vehicle charging points	Number on-street
Electric vehicle charging points	Number off-street
Electric vehicle charging points Car club bays implemented or secured by the borough	

A	ppendix A
	Number off-street
Street trees	Number of new trees planted
	Number of replacement trees planted
	Number felled for natural / safety reasons
	Number felled for other reasons
Commentary on other environmental interventions	Example - The Council installed a new air quality monitoring station adjacent to Colne Gyratory to supplement the four existing monitoring stations in the borough.
Local area accessibility	
Shopmobility or scootability	Number of schemes implemented
Commentary on other interventions to improve accessibility	Example - Five new personal electric vehicles were purchased to support the continued growth of the Scootability scheme operating from Cabin Walk Shopping Centre.
Controlled parking and freight	
New zones implemented	Number
Waiting and loading reviews	Number
Commentary on other interventions to review parking or freight issues and smoothing traffic flow	Example - The hours of operation of Wingate Park and Hammond Green CPZs have been extended on matchdays to deal with parking overspill generated by Wadham Rovers Football Club.
Cleaner local authority fleets	
European emmission standard of fleet for heavy duty	Number of Euro II vehicles
diesel-engined vehicles (all vehicles with a gross vehicle weight of 8,800kg or over, including lorries and buses)	Number of Euro III vehicles
	Number of Euro IV vehicles
	Number of Euro V vehicles
Electric vehicles in fleet	Number fully electric
	Number hybrid electric
Commentary on other interventions to improve the efficiency of vehicle fleets	Example - In appropriate circumstances contractor vehicle type and fleet composition is now included as part of the assessment criterion when major new contracts are procured.

Additional information the council will monitor

To support the information collected and reported as part of the target monitoring, the council also collects the following information to track performance.

Table 8: Annual information collated

Transport	Hands up surveys
Plan outcomes	Annual school census data
	School travel plan progress reports
	% development that has been built complying with UDP car parking standards
	% development that has been built complying with bicycle parking standards

Amount of approved development in controlled parking zones restricted from having on street parking permits
Amount of approved development subject to a travel plan
Funding gained from planning (S106) agreements for transport
Travel plan monitoring
Bus and tube patronage data
Ofsted reports and school self evaluations

13. Next Steps

This Environmental Report has been produced as a result of the consultation and comments received from the scoping report. It is anticipated that the Transport Plan (including this Environmental Report) will be submitted to TfL in on 20 December 2010.

Once TfL have assessed the document and approved its contents it will be passed to the Mayor's office for final approval.

SEA Statement

The SEA regulations 16.3c (iii) and 16.4 require that an Environmental Statement be made available to accompany the Transport Plan, as soon as possible upon its adoption. The statement is to include the following information:

- How environmental considerations have been integrated into the Transport Plan;
- How the Environmental Report has been taken into account;
- How consultation responses have been taken into account;
- Reasons for choosing the policies in the Transport Plan, in the light of other reasonable alternatives;
- Measures that are to be taken to monitor the significant environmental effects of the implementation of the Transport Plan.

Once the Transport Plan has been approved, the Environmental Statement will be published and made available to the statutory bodies and the public.

14. Contact details

Strategic Environmental Assessment

Transport Planning

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Any enquiries relating to this Strategic Environmental Report for Southwark's Transport Plan can be directed to Linda Webb on 020 7525 5625 or Sally Crew on 020 7525 5564.

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15. References

International

European Directive 79/409/EEC Conservation of wild birds

European Directive 92/43/EEC Habitats

European Directive 2002/49/EC Environmental Noise

European Directive 2001/142/EC SEA

European Directive 96/62/EC Air Quality Framework

National

Department for Transport: Low Carbon Transport Innovation Strategy (2007)

Department for Transport: A Safer Way: Consultation on Making Britain's Roads the Safest in the World (2009)

The Department for Heath: Foresight – Tackling Obesities – Future Choices Project (2007)

The Department for Health: Healthy Lives, Brighter Futures – The Strategy for children and young people's health (2009)

Department for Environment, Food and Rural Affairs – Environmental noise – action plans and mapping (2010)

Department for Environment, Food and Rural Affairs – Noise Policy Statement for England (2010)

Regional (London)

Mayor's Transport Strategy (2010)

Mayor's draft London Plan (2009)

Mayor's 2nd draft Air Quality Strategy (2010)

Mayor's Transport Strategy Integrated Impact Assessment: Scoping report (2009)

Mayor's Electric Vehicle Delivery Plan (2009)

Mayor's draft Climate Change Mitigation and Energy Strategy (2010)

Mayor's draft Climate Change Adaptation Strategy (2010)

Sounder City – The Mayor's Ambient Noise Strategy (2004)

Connecting with London's Nature – The Mayor's Biodiversity Strategy (2002)

Local

London Borough of Southwark: Transport Plan (2010 consultation draft)

London Borough of Southwark: Biodiversity Action Plan (2006-2010)

London Borough of Southwark: Annual Monitoring Report (2008-2009)

London Borough of Southwark: Southwark 2016, Sustainable Community Strategy (2006)

London Borough of Southwark: Contaminated land - Southwark's strategic approach to inspecting its

area (2001)

London Borough of Southwark: Local Area Agreement Southwark (2008-2011)

London Borough of Southwark: Towards a low carbon Southwark: Climate Change Strategy (2006)

London Borough of Southwark: Local Development Framework core strategy (2010)

London Borough of Southwark: Safer Southwark Partnership Plan (2008-2012, revised 2009)

London Borough of Southwark: Road Safety Plan (2009)

London Borough of Southwark: Conservation areas (updated 2010)

London Borough of Southwark: Air Quality Strategy and Action Plan (2010 consultation draft)

London Borough of Southwark: Streetscape Design Manual (2010 consultation draft)

Appendices

Appendix A

The following table summarises the main comments from the statutory bodies on the scoping report and indicates how these comments have been addressed in the preparation of this environmental report.

Summary of comments	Action taken			
Natural England				
Detailed comments were received as follows:				
General comment: would like to see stronger connections in relation to climate change and the natural environment. For example through flood storage, reducing rainwater runoff and ameliorating the urban heat island effect.	No further action: This may be difficult for us to quantify, other than the planting of street trees as part of transport schemes. We do practice Sustainable Urban Drainage (SUDS) and the SSDM proposes that we try to design grassed or planted areas (including around street trees) into footways wherever possible so that surface water can soak into these to mitigate flooding risks.			
Monitoring: suggest we add to our SEA objectives and indicators and included: "Targets for securing at least no net significant adverse effect on the character or quality of protected landscapes and nature conservation sites". Recommend using data from Landscape character assessment and Countryside Quality Counts for landscape and townscape.	No further action: There is no evidence of any LCA's having been carried out previously in the borough – this seems to be more commonly carried out as part of the LTP process outside of London. Will monitor the no. of conservation areas - as already mentioned.			
Would like links made between the SEA and the Habitats Regulations Assessment (HRA)	No further action: There is no requirement to carry out a HRA on the Transport Plan. Natural England refer to guidance by the DfT for LTPs but this is not relevant to London boroughs as advice is given by TfL on LIPs2.			
Would like the SEA to show how well the Transport Plan will: - conserve and enhance landscape (and townscape) character and quality - conserve and enhance biodiversity and geo-diversity - conserve and enhance opportunities for sustainable public access to the natural environment - adopt a strategic approach to planning and provision of multi functional green infrastructure - Ensure the natural environment can adapt to and mitigate for the effects of climate change.	No further action: Planning and provision of multi functional green infrastructure is a land use planning function The Council has an emerging Tree Strategy which sets out a vision until 2015, describes the current tree stock and how it is managed, identifies the organisations and individuals who have an interest in trees and specifies the actions which will be taken to realise the vision.			
Specifically want a target on km of new access routes for walkers and cyclists to be created as a result of the Transport Plan	No further action: No new access routes planned as part of the Transport Plan although improvements will be made to existing walking and cycling links. The draft Streetscape Design Manual (SSDM) proposes that cycle lanes would not be provided on existing 20mph streets and would be removed upon resurfacing from such streets where they already exist. Although short lengths of lane would continue to be provided if necessary at road closures (cycle gaps) and other features that provide permeability for cyclists through the street network.			

To the second se			
Targets for increasing quality parks & accessible green spaces	No further action: Accessibility to parks and open spaces is discussed in the Transport Plan.		
Targets for delivering health benefits through green exercise and active travel on the transport network.	No further action: We have the following SEA objective which covers this: "Improve physical fitness, by encouraging walking and cycling particularly for short journeys"		
Targets indentifying the contribution the Transport Plan will make to national indicators (186, 188 and 197) and health indicators	No further action: The Transport Plan does include a target for the reduction of CO ₂ emissions from road based transport as required by TfL. The SEA also contains an indicator for biodiversity to maintain the status quo of protected sites close to transport schemes. We have carried out a health impact assessment (HIA) of the Transport Plan.		
Would like information on key environmental assets to be included where not already	Action: Include map on parks, open spaces and the greenways network.		
Environment A	Agency		
No specific comments received - only a general guidance note relating to Local Transport Plans (LTPs)	No further action required		
English Her	itage		
Detailed comments were received as follows:			
Potential transport impacts on the historic environment should be judged using PPS5 (Planning for the historic environment 2010) along with the Government's Statement on the Historic Environment (2010)	No further action required		
Want further information presented on the heritage assets within the borough.	Action: Include map of conservation areas and sites of archaeological importance as well as the Heritage at risk register.		
Want the objective to "enhance the streetscape/ public realm" to have an additional indicator to monitor resident satisfaction with the quality of the public realm, including heritage assets and the wider historic environment.	Action: To investigate if this indicator can be monitored. Can have an indicator which draws on info from the NHT survey- satisfaction with condition of highway - but not possible to link this with the historic environment.		
Consider that the Cultural and heritage objective is too narrow and suggest that it is reworded to their specification. Also suggest additional indicators	No further action: An amendment has been made to the culture and heritage objective but this does not take the exact wording as suggested by English Heritage as this is too detailed for an objective.		
Environment baseline - do not agree that the Transport Plan will have no significant impacts on cultural heritage and archaeology. Suggest we develop a baseline of designated and undesignated heritage assets (e.g. locally listed buildings)	Action: Consider revising initial statement about significance and developing baseline as suggested. The SSDM proposes that a standardised materials palette be used for all projects and that • Heritage areas (designated conservation areas) will have higher visual quality/value elements, with a focus on sourcing those with a heritage character		

first and foremost.

The strategic cultural area (key international commercial and cultural area along the Thames – designated in the LDF) will have the highest visual quality/value and most sustainable elements used. The character may be modern or heritage based dependant upon the context.

The SSDM also proposes that vivid coloured road surfaces no long be used as it is deemed to be visually intrusive.

One of the proposed SSDM's strategic design aims is SDA14: Enhancing sense of place. This states that improvements should be configured so that buildings, landscapes and the social activities that take place in or around them appear as the most noticeable elements of the street – not traffic infrastructure, signs or road markings – and there is a clear unobstructed visual relationship between these areas and the carriageway.

Appendix B

Environmental baseline information on areas which are not considered to be significantly affected by the Transport Plan and are not considered in the main body of this report.

Biodiversity, flora and fauna

Biodiversity encompasses all living things. The distribution and population of protected and characteristic species is an indicator of the healthy functioning ecosystem and a measure of the plans activities upon it.

Southwark contains 85 sites of classed as of metropolitan importance, 102 of borough importance, 39 other sites of local importance and 61 sites of nature conservation importance

Southwark's Biodiversity Action Plan outlines how the council is working with its partners to conserve, enhance and promote biodiversity.¹⁰

An important aspect of wildlife sites is their size and the links between them. The ability for wildlife to disperse and move between appropriate sites is often as important as the quality of the sites themselves. Roads and rail lines can act both as green corridors that allow wildlife to move in one direction and as barriers that sever movement across them, particularly where traffic is heavy. It must be noted that wildlife movement is not restricted to these corridors.

Areas where the plan could potentially impact on biodiversity, flora and fauna are traffic generated air and noise pollution, lighting, street trees and rail side land. Nocturnal animals, notably bats are sensitive to light pollution. Air pollution does appear to be detrimental to woodland birds particularly the house sparrow. Rail side vegetation currently only accounts for 1% of the land area in Southwark³ but the majority are designated Sites of Importance for Nature Conservation and are of high importance to the borough's wildlife.

Traffic reduction and modal shift policy in the Transport Plan may contribute to the reduction air pollution in the borough and negate the impacts on biodiversity.

Southwark Council is responsible for the direct management, maintenance and care of over half (57,000) of the borough's tree population as follows:

Housing Estates	20,000
Parks & Open Spaces	20,000
Highways	15,000
Schools	2,000

The remaining trees within Southwark include those managed by Transport for London, trees located within residential gardens and those on other private land.

The following table shows the numbers of street trees replaced and new street trees planted over the last four years in the borough.

Table 9: Replacement and new street trees on the highway in Southwark

¹⁰ Southwark Biodiversity Action Plan (2006-2010)

	2006-7	2007-8	2008-9	2009-10
Replacement street				
trees	523	433	271	215
New street trees	100	56	201	345

Street trees are a valued part of people's everyday environment and present an opportunity to improve environmental quality and biodiversity. They are an essential element of the streetscape reducing and filtering atmospheric and particulate pollution, providing wildlife refuge, habitats and connectivity with green spaces and as such the council seeks to retain and maintain all street trees. Street trees offer a good opportunity for wildlife to move along the streetscape, as do hedges and other landscaping.

The emerging Southwark Tree Strategy states that the majority of council owned trees are inspected every three to five years. A comprehensive re-survey of all council managed trees is planned over the next three years, commencing with highways trees in 2010-11. The results of the highway tree survey will be available from April 2011.

There are over 300 species of trees in Southwark including both native and species. Details of these species can be found in the Southwark Tree Strategy.

It is anticipated that the Transport Plan will not significantly affect biodiversity, flora and fauna.

Water

Water run-off from the road pavement carries contamination of oil and other hydrocarbons and metals from tyre rubber, exhausts and catalysts and can potentially affect adjacent watercourses.

The majority of surface water discharges receive no treatment before entering rivers or streams, and the passage of water from the hard surfaces of the urban environment into watercourses is rapid. This means that there may be little dilution in urban rivers to reduce the impact of these pollutants. Poor water quality has potentially adverse impacts on biodiversity, habitats and the recreational use of water resources.

During heavy rain, given Southwark's proximity to the Thames storm-water overflows directly into the Thames and road run-off would make up part of the pollution burden. Water quality is monitoring in the docks, including Greenland dock and Surrey Water. Water quality testing is also carried out on a periodic basis by the Environmental Agency. This data will be utilised to assess the ongoing water quality within the borough and will be further analysed within the Environmental Report.

Flooding issues are relevant to all travel modes and infrastructure.

A Strategic Flood Risk Assessment was prepared in 2008 to understand flood risk in Southwark. The northern half of the borough is within the Thames flood plain, which contains over two thirds of Southwark's properties in well established communities. The area also contains major regeneration and growth areas of importance to Southwark and London including: the Central Activities Zone; Elephant and Castle Opportunity Area; Borough, Bankside and London Bridge Opportunity Area; and Canada Water Action Area.

The Thames Catchment Flood Management Plan and Thames Estuary 2100 Project being prepared by the Environment Agency will help manage flood risk from the Thames over then next 50 to 100

years. Whilst the Thames Barrier and flood walls along the riverside provide a degree of protection, consideration needs to be given to their potential failure or inability to contain very high floods as a result of climate change.

The Environment Agency has identified areas that are particularly vulnerable to localised flooding in heavy rainfall as a result of old water mains; poorly designed and maintained drainage; and too many hard surfaces. The areas include Herne Hill, Camberwell, Peckham and pockets in the north of the borough. Thames Water has a programme to replace old Victorian Water mains and they are planning to build the Thames Tunnel which will help stop sewerage overflowing into the River.

However the likelihood of tidal flooding is low due to the presence of the Thames tidal defences, including the Thames Barrier.

As with soil, transport projects proposed as part of the Transport Plan are likely to have only minimal impact on water. Although it should be noted that run-off from roads can contain a number of chemicals which can cause harm such as oil, hydrocarbons and metals.

Water quality as a whole is unlikely to be significantly impacted by the plan, in fact our target to reduce traffic volumes by 3% from 2010 to 2013 should marginally reduce pollution through run-off.

Soil

Soil and the underlying geology play an important part in determining the environmental character of an area. However soil quality is considered to be of marginal importance in terms of the SEA of the proposals unless there are major transport infrastructure proposals that cross contaminated land. The plan is unlikely to include any such proposals.

Contaminated land - Southwark's strategic approach to inspecting its area (2001) is Southwark's current contaminated land strategy. This document has been reviewed and there are currently four known sites in the borough still requiring remediation. Three of these are former gas works and one is a former Ministry of Defence site.

Another strategic impact is likely to be where contaminants from roads are washed onto other land but this is likely to be much less significant than direct impacts to water quality. Furthermore the change in the level of contaminants that fall onto road surfaces following implementation of transport measures is likely to be very small.

Transport projects proposed as part of the Transport Plan are likely to have only minimal impact on soil. Although it should be noted that run-off from roads can contain a number of chemicals which can cause harm such as oil, hydrocarbons and metals.

Soil quality as a whole is unlikely to be significantly impacted by the plan, in fact our target to reduce traffic volumes by 3% from 2010 to 2013 should marginally reduce pollution through run-off.

Material assets

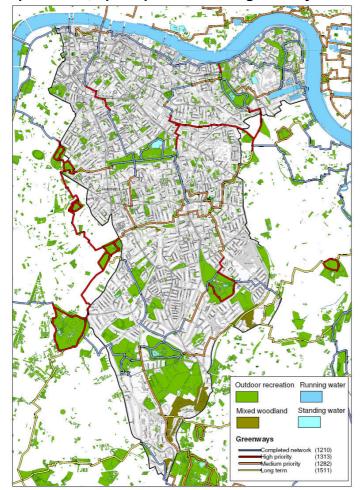
As they relate to transport, material assets include the boroughs streets, highways, highway structures and materials used.

On an annual basis the council monitor and report on the National Indicator set for the Audit Commission. These indicators include 168 and 169: Principal and non principal roads where maintenance should be considered. These are also included in the Local Area Agreement.

Landscape

Landscape areas include open spaces in Southwark such as Burgess Park, Dulwich Park, Peckham Rye Park and Southwark Park. These are also important in terms of recreation and health as well as for biodiversity. Approximately 20% of the borough is made up of open spaces.

The Greenways network is a network that connects and runs through parks, forests and other open spaces also travelling along quieter streets where necessary. The network was identified by Sustrans in 2008/09 and spans across all but one of the central London boroughs. Some elements of this network already exist; the remainder of the network is broken down by priority for delivery. The Greenways network serves many of Southwark's parks including some of the smaller, more local parks.



Map 3: Parks, open spaces and the greenways network

There are two London strategic walking routes that pass through Southwark

- The Jubilee Walkway, which follows the River Thames from the borough boundary in the west to Tower Bridge
- The Thames Path National Trail, which follows on from the Jubilee Walkway along the River
 Thames to Surrey Docks before continuing onto the London borough of Lewisham

The Thames Path is a National Trail footpath running for 180 miles along the banks of the river Thames. Starting at the Thames Flood Barrier at Woolwich in South East London it runs along the banks of the Thames to Kemble in Gloucestershire. A section of the Thames Path in the borough has recently been upgraded to be accessible for those in wheelchairs.



occurrence Part occupied F (E)

Religious organisation

PRONTY

Contact: Aine McDonagh (LA) 020 7525 5583



PROPER

Religious organisation

Contact: Áine McDonagh (LA) 020 7525 5583



and the	SITE NAME	123-131 London Road SEI	Terrace of three and four storey late Georgian houses with shops on the ground floors. Formed part of a larger site assembled by South Bank University. Stabilisation
AND AND STREET, AND	DESIGNATION	Listed Building Grade II, CA	programme completed. Buildings weather tight and drying. South Bank University reviewing options.
	CONDITION	Very bad	South Cark Officeracy Testerning Options.
	OCCURANCE:	Part occupied	
Second Divining Man	PRONTY	E (E)	
	OWNERSHIR	Educational Body	Contact: Aine McDonagh (LA) 020 7525 5583
	SITE NAME	The Duke of Clarence Public House, 132 London Road SEI	Part of the formal composition of St George's Circus on the approach to Blackfriars Bridge. Four storey late Georgian brick and stucco composition with later C19
THE RESIDENCE OF STREET	DESIGNATION	Listed Building Grade II, CA	pub front. Formed part of a larger site assembled by South Bank University. Stabilisation programme completed.
	сомретом	Poor	Buildings weathertight and drying South Bank University
	OCCURANCE.		reviewing options.
	PROBTY	E (E)	
		Educational Body	Contact: Aine McDonagh (LA) 020 7525 5583
	SITE NAME	549 Lordship Lane SE22	House built in 1873 by Charles Drake of the Patent Concrete Building Company. Serious structural problems. Compulsory Purchase Order taking place. Building
22 9	DESIGNATION	Listed Building Grade II	preservation trust have consent for conversion to five flats.
	CONDITION	TO COLO DE COL	
	OCCURANC!	Vacant	
	PNONTY	A (A)	
	OWNERSHIP	Private	Contact: Áine McDonagh (LA) 020 7525 5583
	SITE MAME	St Peter's Church Hall, 522 Lordship Lane, East Dulwich SE22	Situated adjacent to St Peter's Church, the hall was constructed in 1899. Both buildings are believed to be by Charles Barry Junior. The building is currently vacant and is
	DISTIGNATION	Listed Building Grade II, CA	suffering from structural movement and lack of maintenance.
-	CONDITION	Poor	mantenance.
	OCCURANCE:		
	PRORTY	A (A)	
	OWNERSHIR	Religious organisation	Contact: Aine McDonagh (LA) 020 7525 5583
	SITE NAME	Fire station (former), 306-312 (even) Old Kent Road SEI	Fire station built between I 903-4 by the London County Council Architects Department. Red brick with Portland stone dressings. Roof has recently been
	DESIGNATION	Listed Building Grade II	repaired. No suitable scheme has been submitted.
	сомретом		
O NAME OF			
		Part occupied	
	OCCURANCE PROSTS:		Contact: Aine McDonagh (LA) 020 7525 5583
	OCCURANCE PROSTS:	Part occupied C (C)	Mid C19 public house. The mural over painting has been removed. Enforcement pending on unauthorised alterations to fabric and UPVC windows and investigation
	OCCURANCE PROPERTY: CHANGESHIP: SITE NAME	Part occupied C (C) Company The Kentish Drovers Public House, 720 Old Kent Road,	Mid C19 public house. The mural over painting has been removed. Enforcement pending on unauthorised
	OCCURANCE PROPERTY: CHANGESHIP: SITE NAME	Part occupied C (C) Company The Kentish Drovers Public House, 720 Old Kent Road, Peckham SEI5 Listed Building Grade II	Mid C19 public house. The mural over painting has been removed. Enforcement pending on unauthorised alterations to fabric and UPVC windows and investigation
	OCCURANCE PROPERS CONNERSHIP SITE NAME DESIGNATION CONDITION	Part occupied C (C) Company The Kentish Drovers Public House, 720 Old Kent Road, Peckham SEI5 Listed Building Grade II	Mid C19 public house. The mural over painting has been removed. Enforcement pending on unauthorised alterations to fabric and UPVC windows and investigation
	OCCURANCE PROPERS CONNERSHIP SITE NAME DESIGNATION CONDITION	Part occupied C (C) Company The Kentish Drovers Public House, 720 Old Kent Road, Peckham SEI5 Listed Building Grade II Poor	Mid C19 public house. The mural over painting has been removed. Enforcement pending on unauthorised alterations to fabric and UPVC windows and investigation

1	SITE NAME	Appendix A Henry Wood Hall, Trinity Church Square SEI	design of Fr	urch of the Holy Trinity built 1823-4 to the rancis Bedford. Gutted by fire and rebuilt inside al hall 1973-5 by Arup Associates. The Hall is in
	DESIGNATION	Listed Building Grade II, CA	regular use	but the clock tower requires extensive repair.
	CONDITION			
建一种	DODURANCE	Occupied		
	PROMITY	c (c)		
	OWNEADAIR	Trust	Contact Ái	në McDonagh (LA) 020 7525 5583
That will	SITE NAME	62 and 64 Union Street SEI	poor condi consent an	aced houses built circa 1835.Vacant and in very tion. Network Rail have received listed building d have commenced work on site to make the
THE STATE OF THE S	DISTRIBUTION	Listed Building Grade II, CA		eatherproof. Further discussion with the Local ire taking place for the re-use through grants
		Very bad		regenerate this prominent group of buildings.
No. of Lot, House, etc., in such such such such such such such such	DODURNOS			regardings and protein group of bordings
	PROPER	A (A)		
		Company	Contact Ái	në McDonagh (LA) 020 7525 5583
4		2 . 2		
	SITE NAME	Boundary wall at site rear of 19 Village Way (on Red Post Hill), 19 Village Way, Dulwich SE21	Village Way This section	molished remains of the original wall to 19 , which is a grade I listed CT8 property. n of wall now forms the boundary to a site of 19 Village Way, Appeal upheld for an opening
	DESIGNATION	Listed Building Grade II, CA		Enforcement Notice served to rebuild the wall
	CONDITION	Poor		09). Work has commenced on site (February
	DODURANCE	Not applicable		build the defective wall which has suffered from
	PNONTY:	F (A)	further coll	apse.
	OWNERSHIP	Private	Contact: Ái	në McDonagh (LA) 020 7525 5583
44	SITE NAME	Denmark Hill Station, Windsor Walk SES	The main p hand rear e	tion circa 1864-66. Gutted by fire in 1980. art of the station is in good repair but the left extension is in poor condition. Listed building d planning permission granted for its repair and
	DESIGNATION	Listed Building Grade II		n information office for Kings College Hospital.
	CONDITION	Fair		ently on site and due for completion
STATE OF BUILDING	DCCURANCE	Part occupied	Summer 20	J10.
	PNONTY	F(C)		
	OWNERSHIR	Trust	Contact: Aine McDonagh (LA) 020 7525 5583	
STS NAME	Roman bo	oat at New Guy's House, Bermondsey	8	
DESCRIPTION	Scheduled	Monument (No. LO157)	CONDITION	Generally satisfactory
				but with significant localised problems
PNNCPALVULNEPABLITY:	Drainage/	dewatering	TASHO:	Declining
DWNSRSHR	Other		CONTACT:	Jane Sidell 020 7973 3761
STE NAME	The Rose	Theatre, Rose Court		
DESIGNATION	Scheduled	Monument (No 20851)	CONDITION	Extensive significant problems
	Scheduled Monument (No. 20851)		CONTRACT LINE	i.e. under plough, collapse
PANCEAL VULNERABILITY:	Drainage/dewatering		TREND:	Unknown
OWNERSHE	Other		CONTACT	Jane Sidell 020 7973 3738
		E#1004		
STE NAME	St George	s's Circus		
STENANE DESIGNATION:	St George Conservat		CONDITION	Very bad
			CONDITION:	Very bad Expected to show some improvement