London Borough of Lewisham

Deptford and New Cross

Transport Infrastructure Study

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TRANSPORT INFRASTRUCTURE

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REPORT 11/2007

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Introduction

Deptford and New Cross is an area characterised by a mix of Victorian and mid-20th Century development, including housing, employment, waste transfer and incineration activities and river-based warehousing. The area has a mixture of street pattern typologies and is bisected by a large number of railway viaducts. Remnants of long-closed railway lines and the Surrey Canal provide indicators of the area's industrial history; these remnants include disused canal bridges, sections of viaduct and areas of vacant and recently developed land that give away their former functions.

Deptford and New Cross Masterplan identifies six large development opportunity sites, and more have followed including the largest of all—Canons Wharf—for which there are long-standing proposals for mixed use development including housing, retail, leisure and employment. All of these developments will generate more demand for travel that needs to be accommodated or managed in a sustainable way on the existing network.

Despite the large amount of railway infrastructure and relatively low car ownership in the area, it is relatively poorly served by public transport, with a lack of east-west and north-south connections. Public transport is made less accessible by overcrowding to the extent that from Lewisham station, it is often not possible for passengers to board London-bound trains in the morning peak. Conditions for driving, cycling and bus use are also poor at times, with a congested network producing significant journey delays. The situation is likely to become worse as a result of background and development-generated travel growth: the only modes for which there is acknowledged capacity are walking and cycling, buses (with significant bus priority) and riverbus services.

The London Borough of Lewisham has commissioned Urban Initiatives to prepare this transport study for the area of Deptford and New Cross, bounded by the A2 (TLRN) through New Cross and Deptford, Deptford Creek and the borough boundaries with Greenwich and Southwark. The study is written in the context of the Deptford and New Cross Masterplan and is intended to guide investment in transport and provide a co-ordinating strategic baseline for forthcoming development site.

The project is divided into two stages and six tasks, which together provide the structure of this document. In essence, the report provides details of what infrastructure exists and an indication of future travel demand with commentary on the capacity of the public transport network, and sets out a series of proposals for the area that can be funded through TfL, Lewisham Council, regeneration programmes and developer contributions.

Stage 1: Baseline data collection, initial identification of existing and potential opportunities

- **Task 1:** Strategic Transport networks
- **Task 2:** Local Accessibility
- **Task 3:** Quality of Accessibility (walk audit)
- **Task 4:** Development Impacts (TRAVL, TRICS and Census (Nomis) data)

Stage 2: Investment Priorities

- **Task 5:** Investment Priorities incorporating funding opportunities (new proposals, with links, if any, to wider investment priorities—task 6)
- **Task 6:** Wider Investment Priorities (adjacent boroughs and strategic planned local investment)

Scope

Deptford and New Cross Masterplan

HKR Architects and the Landscape Partnership were jointly commissioned in 2006 by the London Borough of Lewisham to undertake a masterplanning exercise for the area of the borough known as Deptford and New Cross. This study feeds additional information into the plan to confirm its strategy objectives and assist its implementation.

The masterplanning objectives were to provide:

- Guidance on the future development of the public realm and area-wide placemaking strategies;
- A strategic masterplan for the coherent and linked development of six mixed-use sites
- Spatial and placemaking strategies for each site, developed in co-ordination with site owners
- Urban capacity and land use information for each site.
- Information on the prioritisation of investment in the public realm through strategic projects including Lewisham Links, a strategy for improving key walking routes.

The masterplan comments on the 'challenging' network of routes through the study area, many of which, it says, confuse orientation and fail to meet users' expectations. Some key streets, such as Surrey Canal Road, fail to communicate their importance as routes through the area due to its poor public realm treatment. Public transport is good in places—but poor in others, notably in the east-central area.

From its study baseline, which includes work by Space Syntax, the report identifies a range of strategic proposals to create or restore linkages in a loose grid pattern, and to use this network as a means of establishing a memorable and sustainable area and a place of streets, spaces and open spaces.

Study response to the masterplan

This study is intended to build on the proposals that are set out in the masterplan and continued in the subsequent North Lewisham Links Strategy (described in section 7.1.1), which focuses on the Deptford and New Cross area. These form part of the London Borough of Lewisham's strategy for investment in the public realm and the promotion of strategic development sites. The study confirms or changes the priorities set out in the masterplan and adds further local and strategic proposals to produce the following recommendations:

- A prioritised list of local public realm investment schemes, based on a comprehensive walking audit of the study area and taking into account existing programmes and proposals
- Proposals for improving public transport service coverage in the area, tested against potential PTAL performance
- Proposals for introducing changes to existing local traffic management arrangements and parking
- Broad proposals for the strategic transport networks, with reference to local investment in rail station access and town centre regeneration.

The study also provides an understanding of the likely travel impacts of new development in the study area and gives commentary on the justification for new investment and a general approach to travel strategies.

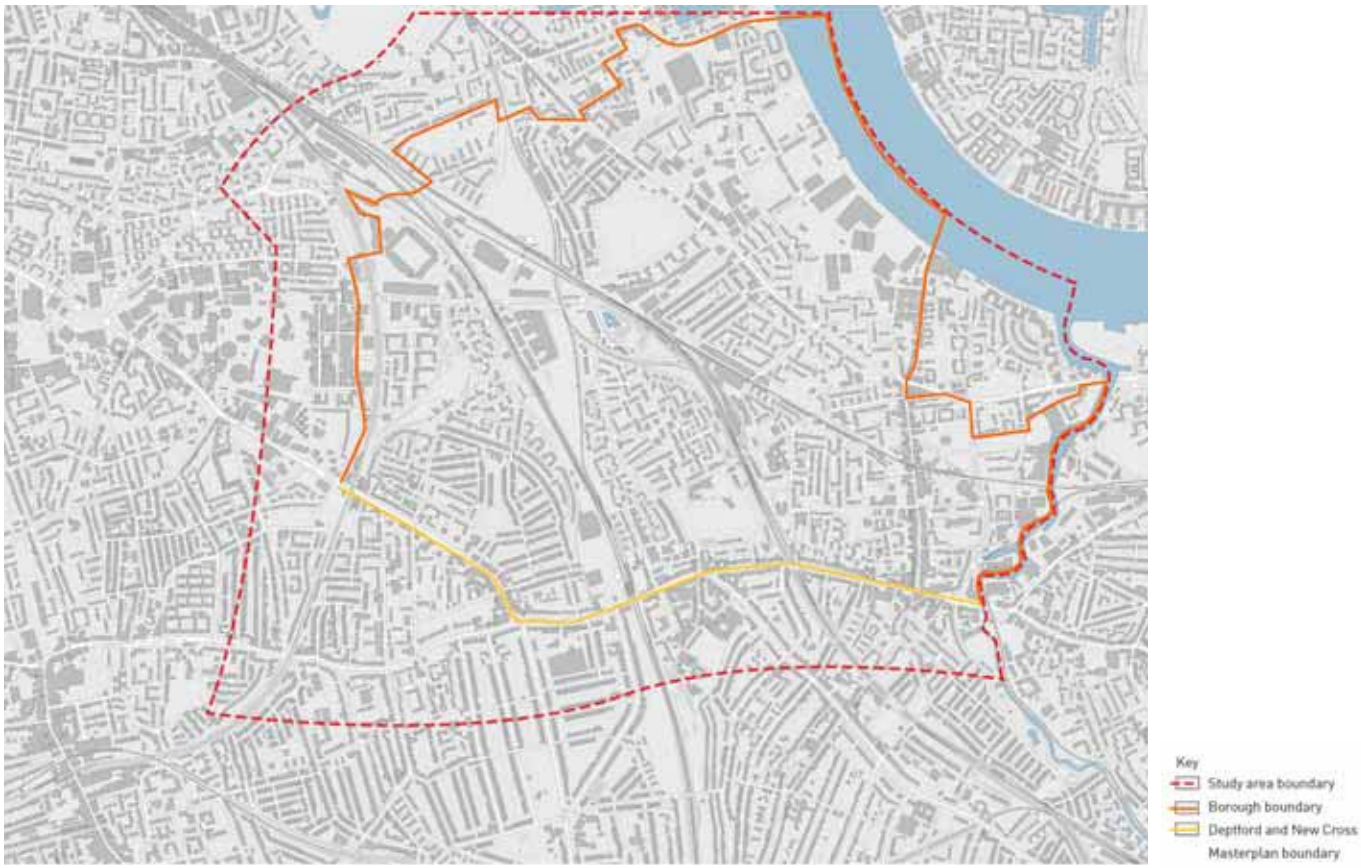


Fig. 1: Study Area

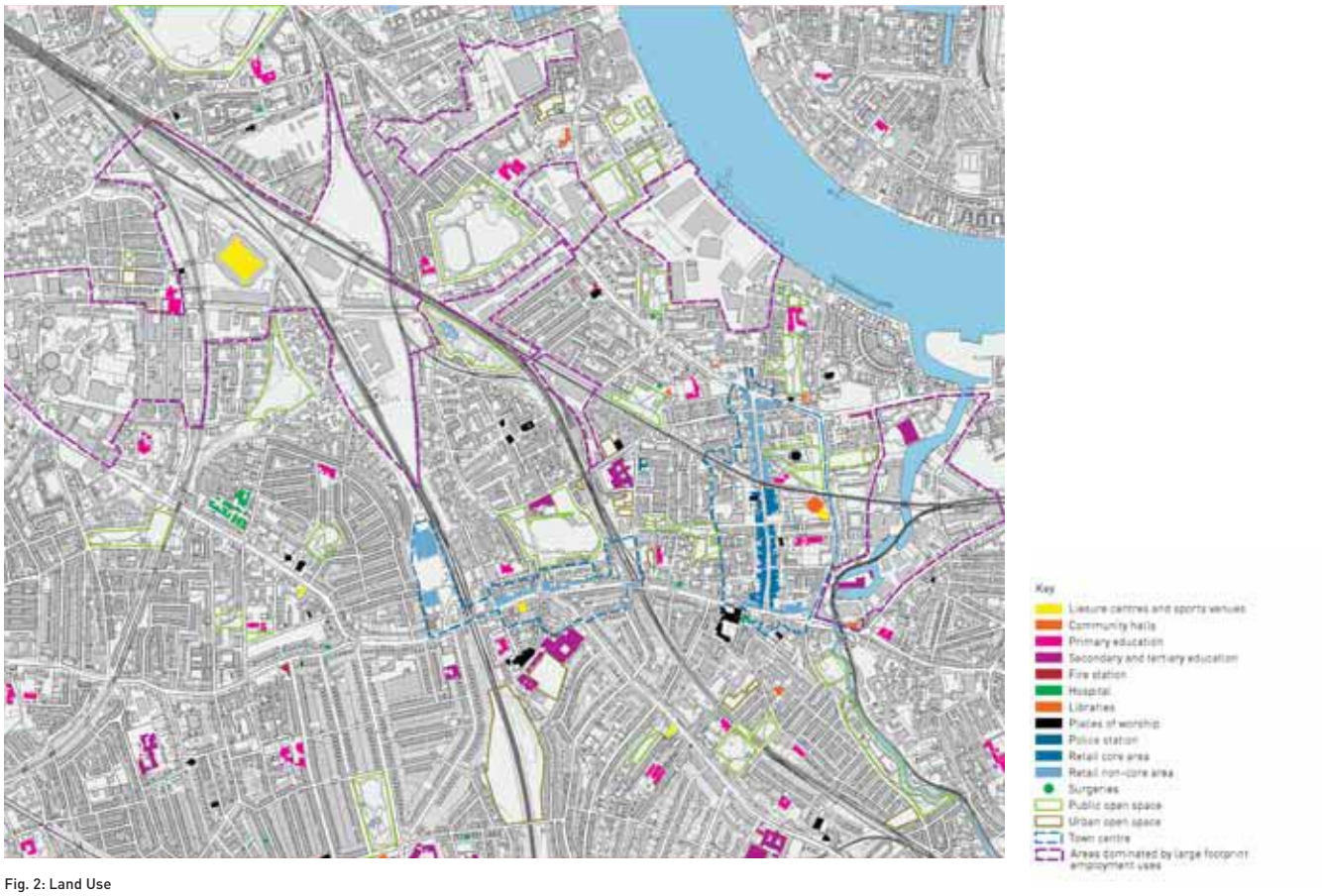


Fig. 2: Land Use

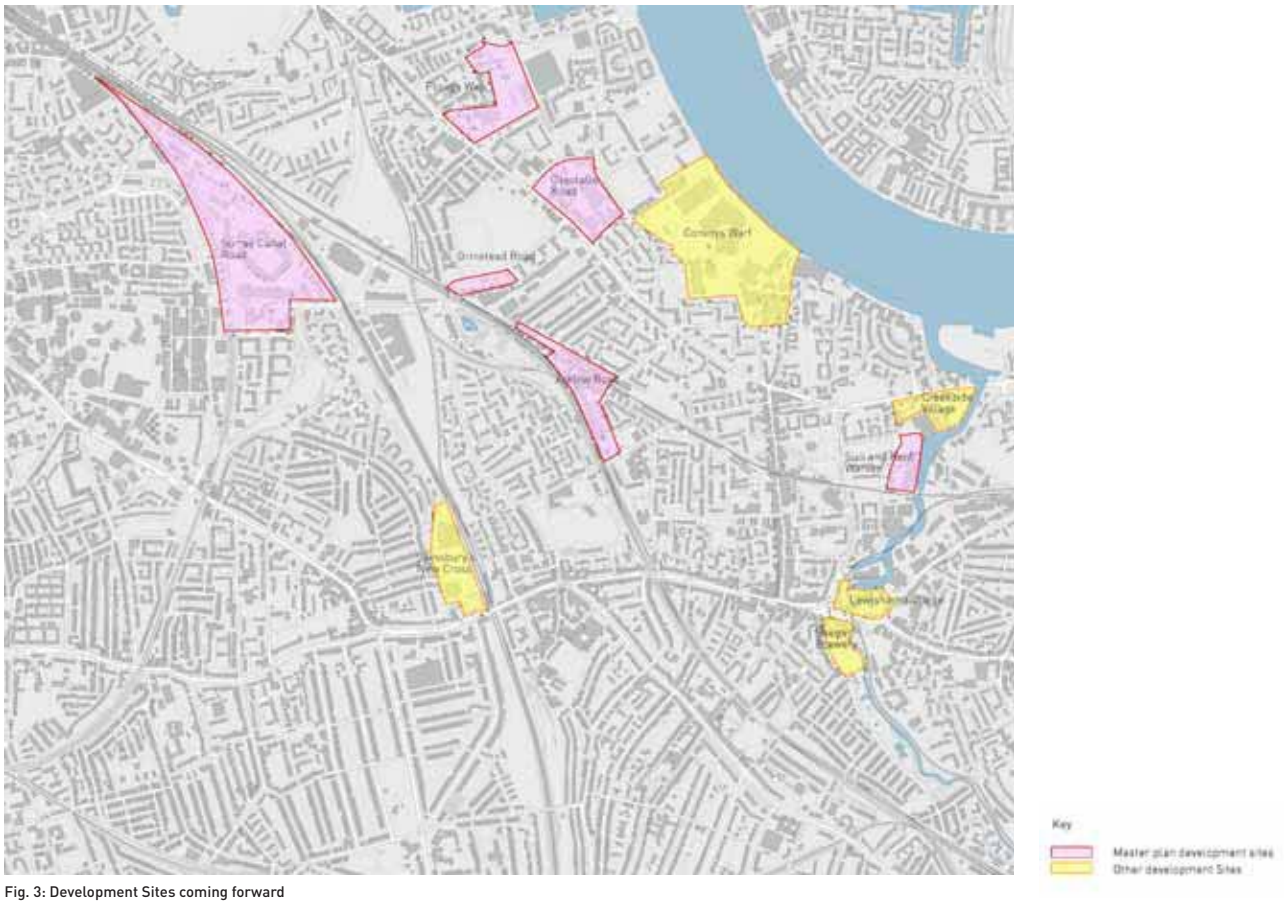


Fig. 3: Development Sites coming forward

01 Context: Main Policy Drivers

Development and transport investment in Lewisham are guided by a number of contextual and local policy documents. This chapter describes each of these, demonstrating that investment in sustainable development and transport are supported in policy terms.

1.1 Mayor's Transport Strategy

The Mayor's Transport Strategy was published in 2001. It sets out London-wide policies for all modes of transport, and establishes key principles relating to accessibility, equality and environment. The London-wide strategy forms the basis upon which the Boroughs are required to develop Local Implementation Plans; it also guides TfL investment in major or strategic transport infrastructure and borough transport funding, as reflected in the TfL Business Plan. The relevant strategy and implementation context for Lewisham is provided by the Local Implementation Plan.

Consultation is expected on the second Mayor's Transport Strategy in 2009.

1.2 Lewisham Local Implementation Plan (LIP) 2007

Lewisham's approved Local Implementation Plan (LIP) provides the context for the boroughs' annual transport settlement. It sets out a number of proposals strategic and existing works. Whilst the accompanying 'LIP Form1s' set provide a guide to potential investment in the area, the most relevant information is that set out in the LIP Annual Progress Report, which takes into account any changes in local priorities.

Key proposals in the LIP support the growth requirements of the Zones of Change identified in the East London Sub-regional Development Framework; proposals include the rebuilding of Deptford Station, the creation of the 'Deptford Links' pedestrian network and the 'Lewisham Gateway'. The LIP also encourages the extension of the Greenwich Waterfront Transit project towards Surrey Quays. This project has since been cancelled by the Mayor of London.

1.3 London Plan – Revised 2008

Lewisham is counted in as part of the East London Sub-Region and is therefore subject to the East London Sub-Regional Development Framework. The London Plan introduces the Thames Gateway zone of change and sets out housing allocations for the Lewisham area, identifying an area for intensification at Surrey Quays, an opportunity area in Deptford and an area for regeneration in the middle of the study site. The plan also identifies a preferred industrial location on the Southwark side of the borough boundary, west of the study area.

Housing and employment targets are set out as follows, revised in February 2008:

	Area (ha)	Indicative employment capacity 2001-2026	Minimum homes 2001-2026
Deptford Creek / Greenwich Riverside	165	4,000	8,000
Canada Water / Surrey Quays	47	2,000	2,000

Section 3C of the London Plan sets out the planning framework for transport in the Capital. The Mayor's transport strategy sets out the policies and proposals to achieve the major improvements to public transport, tackling traffic congestion and improving conditions for pedestrians. The Plan was updated in early 2008 to reflect the 2012 Olympics and other changes since 2004.

Map 3C.1 in the Plan sets out major London-wide transport improvements. For the south east of London, these include Thameslink and the East London Line Extension and the Silvertown road tunnel for crossing the Thames.

More generally, the plan recognises the need to prioritise sustainable accessibility on foot and cycle and to use maximum parking standards.

1.3 Local Development Framework

Lewisham Local Development Framework (LDF) is the borough's emerging development plan that, when adopted, will replace the existing Unitary Development Plan.

The suite of documents that form the framework hang from an over arching Core Strategy. The Council has prepared a Core Strategy Options Report outlining two options for the borough's regeneration and growth.

Option 1 proposes a borough-wide regeneration and growth corridor, while Option 2 proposes a more moderate approach to growth.

Option 1 implements the Thames Gateway and London Plan Opportunity Area objectives of more homes and jobs. It creates a regeneration and growth corridor focused on Catford, Lewisham, Deptford and New Cross.

This growth corridor will capitalise on the public transport accessibility of the area and the need to maximise the use of land through intensification of land uses in town centres and on newly created Mixed Use Employment Locations in Deptford and New Cross, using the Deptford New Cross Masterplan proposals that are set out elsewhere in this study. This will see mixed development, including housing, to meet and exceed London Plan required targets and employment to promote local living.

As the mixed use sites in Deptford and New Cross are large areas it is possible to design place shaping schemes that can transform the physical shape of the area and address deprivation issues. Deptford and New Cross will be the main foci for retail and town centre uses in the north of the borough; significant new retail development elsewhere will be discouraged where it would threaten their viability and vitality.

Strategic Spatial Option 2 proposes a more modest approach to borough wide regeneration and growth. It is based upon the objective of meeting the standards and requirements of national and regional policy.

Housing targets would be met by allocating sites in the major town centres of Catford and Lewisham and the London Plan opportunity area in Deptford. However, Mixed Use Employment Locations would be limited and the opportunities for physical, environmental and social regeneration in Deptford and New Cross Wards would be significantly reduced.

With regard to transport, the Core Strategy's strategic objectives include the promotion of sustainable movement to minimise the need to use the private car and provide high levels of accessibility for all in the community, particularly on foot, cycle and public transport, facilitating sustainable growth.

Specific options are provided giving general support for the safeguarding and provision of facilities for public transport and expresses support for various external proposals including the East London Line extension, three-car DLR operation, London Bus Priority Network, physical improvements to railway stations, rail capacity enhancements, the use of the River Thames as a transport corridor, and the removal of the Kender Triangle gyratory system.

Development in the Evelyn and New Cross wards should improve public transport accessibility and the walking and cycling environment. The Council is also committed to extending the borough's cycle network including Waterlink Way, the Thames footpath and connections throughout Deptford and New Cross.

For traffic management and parking, the Council would adopt a managed and restrained approach to car parking provision to contribute to the objectives of traffic reduction. The application of the restraint based parking standards within the London Plan would require a coordinated and parallel approach to the management of on-street parking supply if development and intensification are not to lead to an increase in on-street parking stress and an undermining of the effectiveness of those standards.

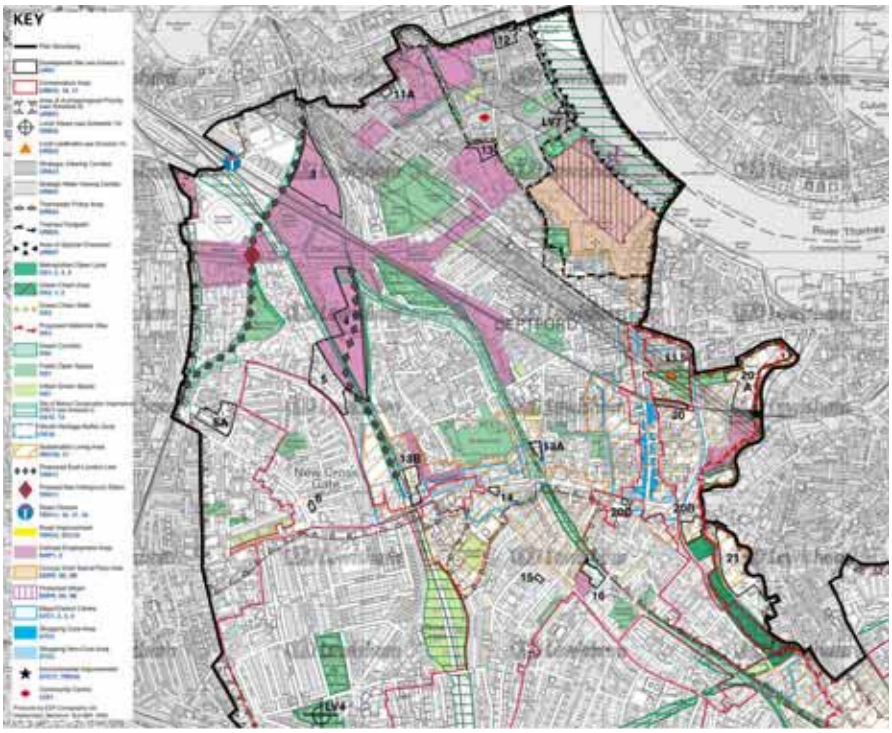


Fig. 1.1: UDP saved designations

1.4 Unitary Development Plan

The Lewisham Unitary Development Plan (UDP) is the development plan for the borough until the Core Strategy is adopted. The UDP Proposals Map illustrates relevant policies and land use designations. Land use proposals for the study and surrounding areas have been extracted in Fig. 1.1. A summary of existing 'social' land uses is provided in Fig.2.

1.5 Lewisham Air Quality Management Strategy: Annual Monitoring Assessment

Lewisham's Air Quality Action Plan provides the context for transport measures that seek to reduce emissions to air from road transport.

The principal source of Nitrogen Dioxide is road traffic and is most associated with effects on human health. Road traffic is responsible for some 45% of emissions; this has fallen nationally over time; however in Lewisham, it is suggested that concentrations continue to rise, and exceedences of the standards have occurred every year since a monitoring unit was introduced at New Cross, resulting in the imposition of an air quality management area.

Particulates (particle size less than PM10) are associated with a range of health effects, including effects on the respiratory and cardiovascular systems, asthma and mortality. The links between exposure to particulates and mortality are becoming better known. The primary source of PM10s is road transport (diesel emissions in the main), stationary combustion and industrial processes. Particulate emissions standards were exceeded in 2002 and 2003 and have declined since, although levels are likely to exceed the 2010 target.

Whilst emission standards from motor vehicles are likely to improve over time (leading to national, if not local, improvements in air quality), the most effective way of reducing emissions will be to reduce the number of vehicles emitting the pollutants.

If possible, new development in the study area should not lead to an increase in nitrogen or particulate emissions since exceedences are already judged to be very likely.

Delivery of improved air quality will depend partly on ensuring that in new development, car travel demand is minimised as far as possible through stricter controls on parking provision, providing a mix of development and facilitating and encouraging walking, cycling and public transport use. The recommendations in this study are all geared towards achieving air quality improvement objectives.

1.6 Rail White Paper

The Rail White Paper (DfT July 2007, CMD 7176) sets out a strategy for investment in Britain's railways. It provides for a High Level Output Specification (HLOS) for consideration by the Office of the Rail Regulator, including proposed improvements in safety, reliability and capacity, specific programmes for investment until 2014 and funding. The Office of the Rail Regulator's role will be to decide whether or not the programme is a fair one in the context of a privatised railway, and then ensure that it is delivered.

The White Paper's investment priority to 2014 is to increase capacity so that the railways can accommodate a further 22.5 per cent increase in demand. At the same time, it requires average load factors in major cities to reduce during the morning peak period. On some links, new infrastructure will be provided—South London will benefit from its share of £5.5bn of investment in Thameslink, with indirect benefits arising from the expansion of Blackfriars Station and the interim introduction of additional through trains to St Pancras. Other relevant schemes will be the lengthening of platforms and provision of additional carriages.

Beyond 2014, Thameslink is intended to be complete by 2015, delivering 12-carriage trains with a frequency of 24 trains per hour and some 14,500 additional seats.

1.7 Rail 2025

Rail 2025 is Transport for London's proposals for railway development in the capital in the context of the more strategic Transport 2025 policy. It establishes the importance of rail to the London region and discusses the implications of population and employment growth upon the rail network. The report states that the popularity of London's railways has little to do with their quality—it highlights a growing gap in quality between rail and other modes, a problem that is reflected in levels of customer satisfaction. For proposals, the most relevant document is the South London Rail Utilisation Strategy discussed below.

1.8 'Way to Go' and Transport for London Business Plan 2009/10 – 2017/18

In November 2008, the Mayor of London, Boris Johnson, published his personal transport strategy for London. The subsequently published TfL business plan incorporates key policies and proposals of relevance to the study area, relating to the expenditure of £39.2bn + fare and third party revenue of transport expenditure during the period. Headline programmes include:

- An expansion of public transport capacity
- Smoothing of traffic flows
- A 'revolution' in cycling
- Delivery of (existing) 2012 transport projects
- Improved safety and security and
- Improved travel experience.

The business plan states that it will deliver 'unprecedented levels' of investment in walking and cycling, and tangible levels of improvement for public transport travellers, including the creation of a London cycle hire system, cycle highways, Outer London orbital buses and delivery of Phase 1 (at least) of the London Overground.


BUS STOP
New Cross Gate
Station
towards Peckham,
Walworth and Camberwell
21
53
136
171
172
177
321
436
453
N21
N89
N171
N136
National
Express
Buy tickets before
boarding on routes
436 & 453

02 Overview: Transport Networks

This chapter provides a series of diagrammatic plans showing the main transport networks in the study area. More detail is added in subsequent chapters.

Figure 2.1 provides a comprehensive overview of the public transport network, showing Rail, Overground, Riverbus and London Buses services.

Figure 2.2 shows the rail and river based connections, and Figure 2.3 provides a conventional hierarchy of streets.

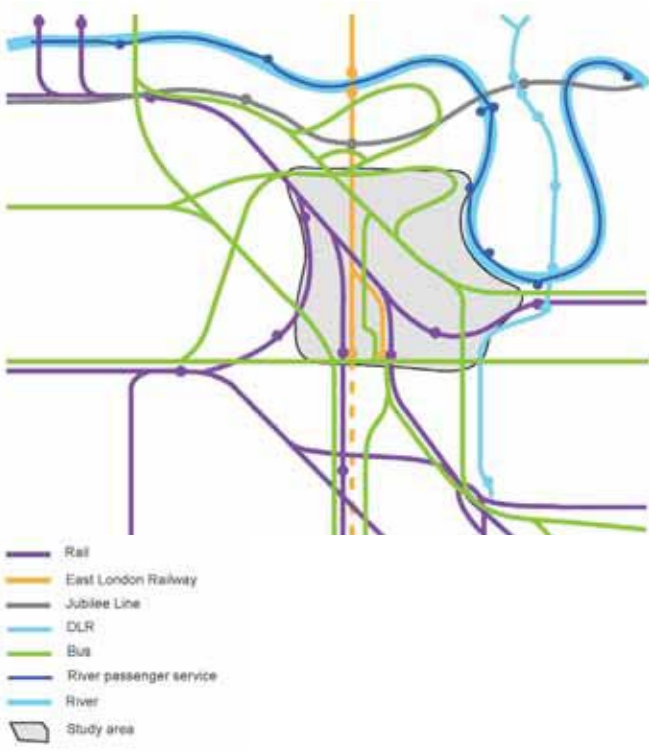


Fig. 2.1: All public transport

Fig. 2. 2: Rail and river-based connections

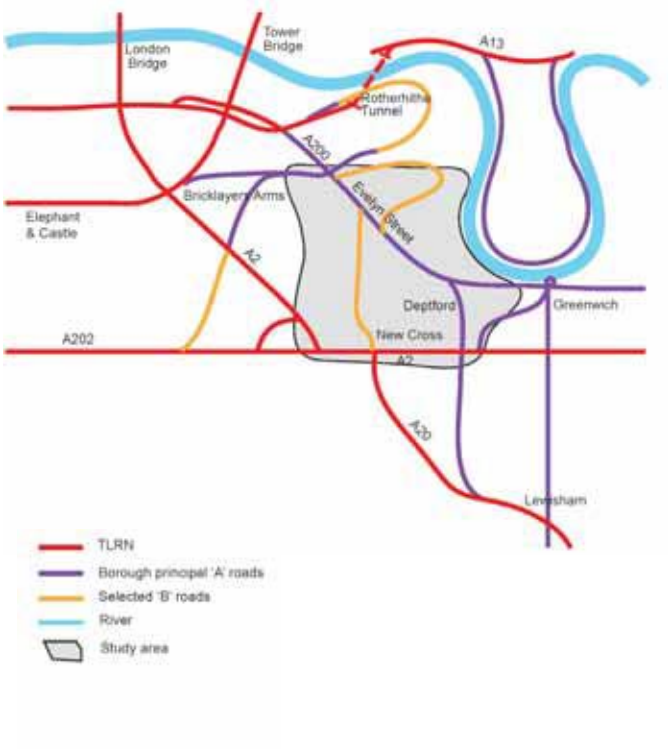


Fig. 2. 3: All principal road routes

03 Strategic Transport Networks

Deptford and New Cross is situated at the confluence of major transport links from the south east of London, Kent and East Sussex. This chapter describes the strategic transport network in the context of local accessibility and movement.

3.1 Rail

Information in this section has been sourced from the Rail Utilisation Strategy for the south eastern area and the London Borough of Lewisham (officer contacts). Further information on rail capacity and planning is provided in Chapter 07.

Deptford and New Cross has a dense rail infrastructure and some of the busiest and most crowded passenger networks in the capital, but poor local accessibility to stations. At the same time, the rail network presents some of the most obvious linear barriers to local movement in the area and frames some of its poorest quality public realm. Investment is bringing some improvements, both programmed and proposed. However, no new stations are planned for the area, and only one is proposed but uncertain, at Surrey Canal Road, meaning that the central part of the area is poorly served by rail.

The main limitation on the potential for increased use of the rail network is its ability to absorb additional demand. Even with new investment coming forward as part of Network Rail's Rail Utilisation Strategy, Thameslink and the reopening of the East London Railway, some routes are expected to continue to operate at uncomfortable levels of overcrowding at peak times.

3.3.1 Network and operators

Lewisham has an extensive rail network emanating from London Bridge and inner London terminus stations. Thameslink (operated by First Capital Connect) is the only rail route to pass all the way through the capital, linking Brighton and Sutton with Bedford and Luton via St Pancras International Station.

Four operators run rail services through Lewisham. Southern and Southeastern are both subsidiaries of the Go-Ahead group, so effectively operate as one train operating franchise for all lines. First Capital Connect runs the Thameslink 2000 service through London, which is the subject of major investment including new platforms at London Bridge and Blackfriars. Transport for London will run the East London Line from 2010 and operates (through a contract) the Docklands Light Railway.

3.3.2 Density of rail infrastructure

Rail infrastructure is very densely arranged in the study area. It is characterised by long viaducts constructed by competing rail firms in the late 19th Century. Over time, the viaducts were expanded to accommodate increasing demand and additional routes in an area that, because of the density of rail infrastructure and its alluvial geology, was not suitable for the development of an Underground network.

The rail network remains dense, even with the loss of goods sidings around South Bermondsey and the closure of freight lines to the Thames wharves in the 1960s. Substantial remnants of former rail infrastructure still remain today, largely as undeveloped brownfield land—these contribute to the presence of barriers to pedestrian movement.

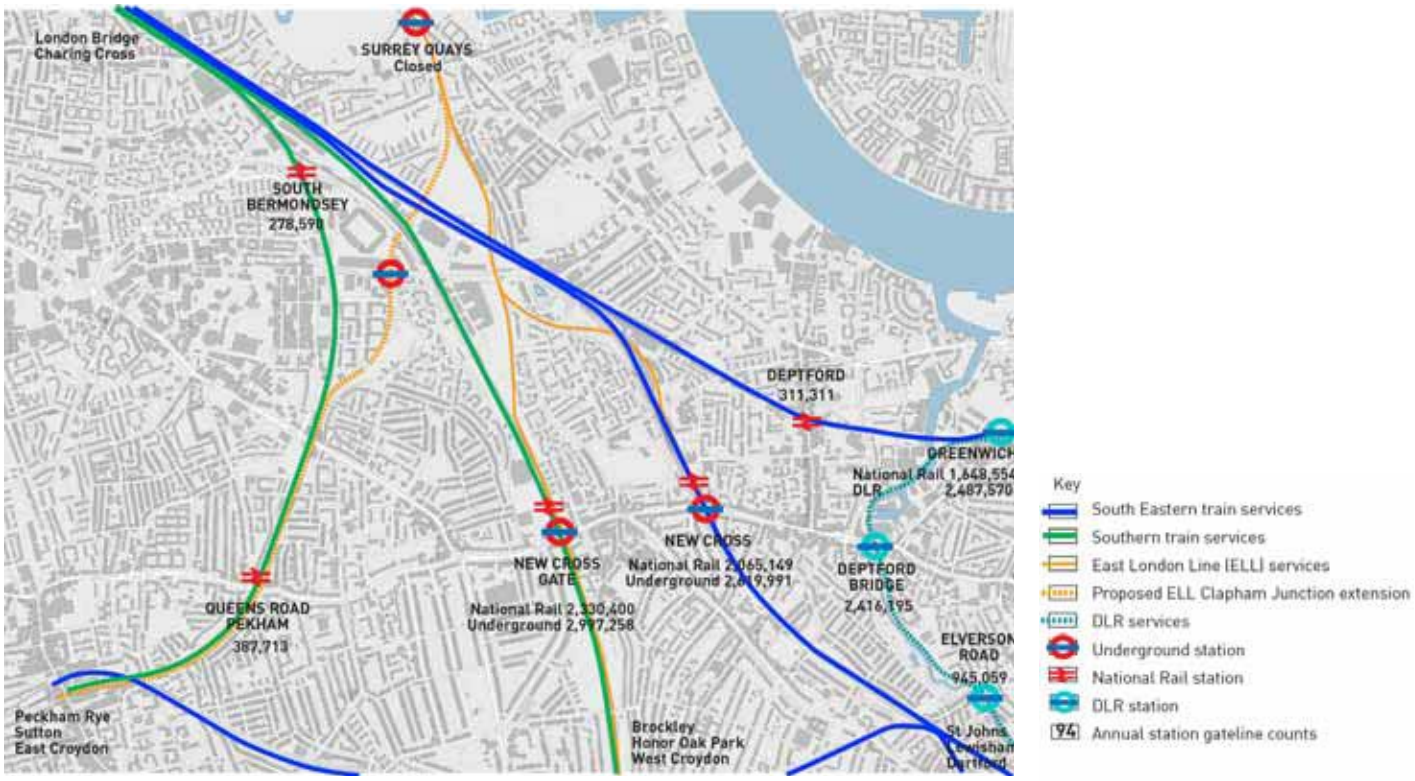


Fig. 3.1: Rail network

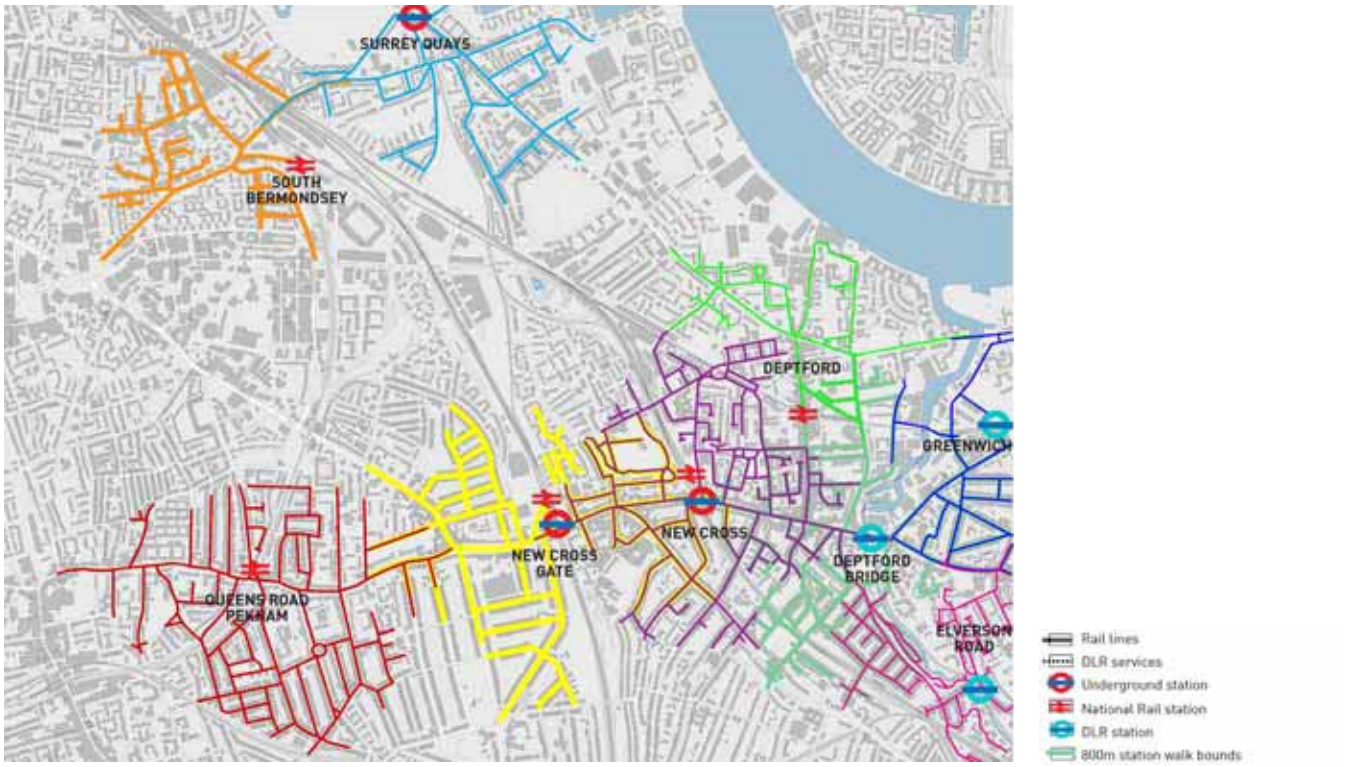


Fig. 3.2: 800m walking distances to stations, showing significant gap in accessibility in centre of study area.

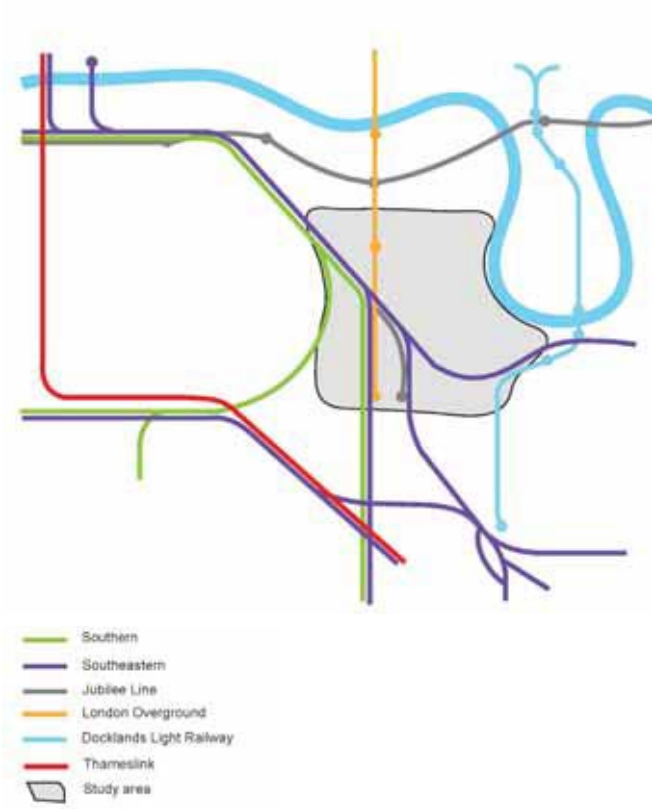


Fig. 3.3: Rail network and train operating companies

3.3.3 Stations and frequencies

Whilst there is a high density of rail infrastructure, the study area is relatively poorly served by this mode with stations only on the periphery—at New Cross and New Cross Gate, South Bermondsey, Deptford, Deptford Bridge and Surrey Quays. A new station is proposed on the East London Railway, at Surrey Canal Road. Delivery of this station is dependent upon the railway being extended to Clapham Junction and on funding for building station infrastructure at this location.

Service frequencies are set out in the accompanying table and map. They illustrate a high 'turn up and go' service with at least five trains per hour from all stations in the study area. East London Railway services are anticipated to run on a 'turn up and go' basis from New Cross Gate and Surrey Quays 2010, with four trains per hour from New Cross and the proposed future Surrey Canal Road, using new standard heavy rail rolling stock.

Other rail-based services are provided by the Docklands Light Railway (DLR) and East London Line. Development work is proceeding on both routes, extending lines and services on the East London Line and extending trains on the DLR.

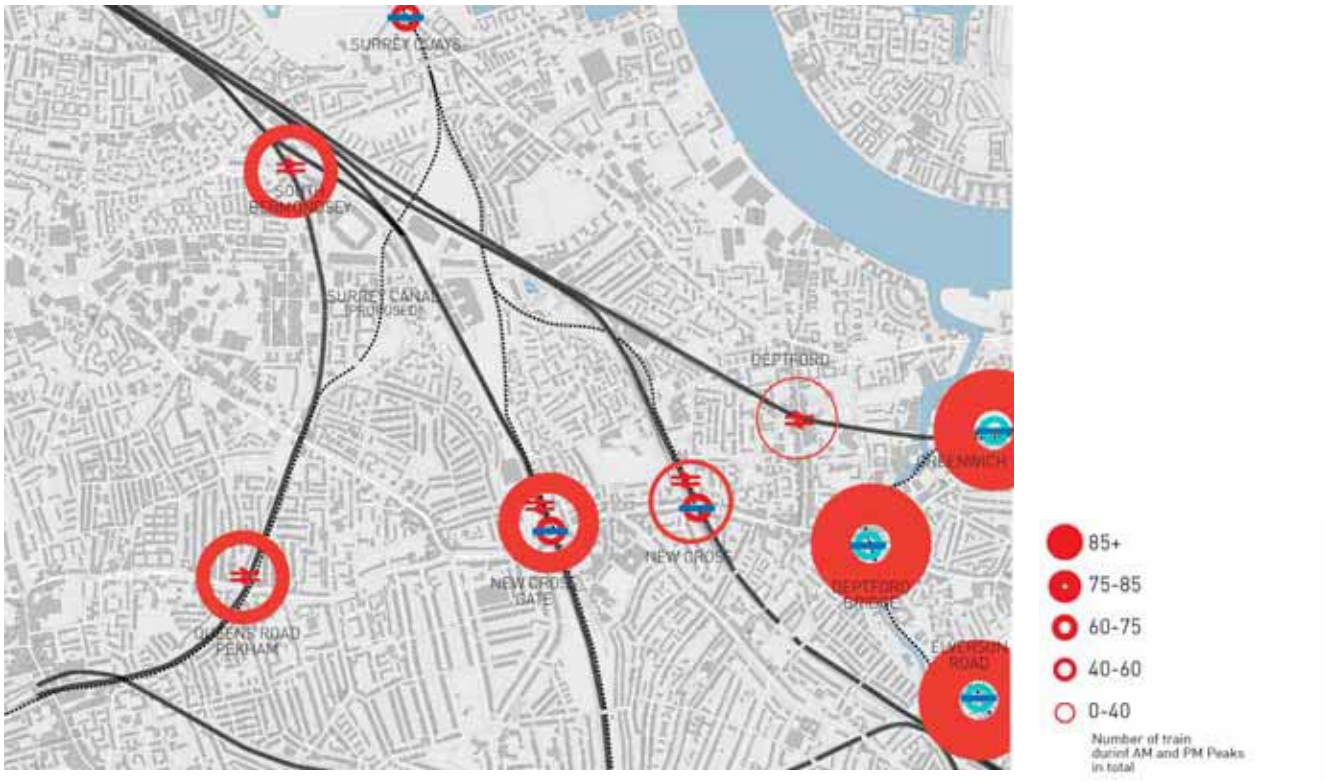


Fig. 3.4: Peak hour frequencies from timetables

3.2 Ferry

Thames Clippers are a private company operating ferry services both along and across the River Thames, from a number of piers with different ownerships. The ferry services run every 20 minutes through the day between Woolwich and Waterloo Pier, calling at Greenland Pier, with their first service at approximately 0600 and their last service at approximately 0100. Each ferry has capacity for 220 passengers.

3.3 Major Streets

3.3.1 Borough and GLA street network

The study area is bounded to the south by the A2, which is part of the Transport for London Road Network. Within the site area, Evelyn Street provides north-south linkages, and Surrey Canal Road and Rotherhithe New Road provide the principal east-west links. Limited traffic management measures exist—prominent among these are the one-way gyratories at Kender Triangle and south of Surrey Quays station. The Kender gyratory is due for restoration to two-way working and, following that, the implementation of a planned 'Streets for People' scheme.

The strategic GLA street network is defined in the Local Implementation Plan, as follows:

Transport for London Road Network

- A2 New Cross Road to Shooters Hill and the Old Kent Road
- A202 west of New Cross Gate (in LB Southwark).

Street hierarchy

The street hierarchy for Deptford and New Cross is illustrated in Figure 2.3.

3.3.2 Rotherhithe Multi-modal study

Rotherhithe Multi-Modal study was commissioned by the London Borough of Southwark and completed by Mouchel Parkman. The study provides a modelling tool for assessing the impact of future development on infrastructure in the vicinity of Rotherhithe, and sets out 'do nothing' and 'do something' scenarios for improving capacity on the road network.

The study found that overall transport growth would be 5% and 15% in the morning peak, respectively for 2011 and 2021; and 9% and 23% in the evening peak to 2011 and 2021. The main findings were that Rotherhithe Tunnel will become severely congested with worsening future predictions. Capacity improvements on the local road network would be undermined by worsening conditions on Lower Road, although in the short term, some capacity improvements may be helpful.

04 LOCAL ACCCESSIBILITY

Deptford and New Cross' street and path network provides the focus for local accessibility. This chapter describes the local network for walking, cycling and motorised transport. More information on the public realm (relating to walking and cycling) can be found in Chapter 05, which also provides the basis for prioritising investment in the public realm (Chapter 08).

4.1 Streets / Walking

4.1.1 Character of the area's streets

Deptford and New Cross' major street infrastructure provides a framework for its local streets, which exhibit varying levels of connectedness, quality and character. In the Victorian residential areas fragments exist of a relatively well-defined street pattern. Other than where there is heavy traffic demand, the quality of these streets is generally higher than in the more recently developed areas, which are characterised by poorly connected streets, pedestrian-only routes and cul-de-sacs. Other parts of the 'street' network comprise local alleyways and pedestrian only linking routes, some of which are also open to cycling.

4.1.2 Deptford: Baseline Analysis of urban structure and layout of public realm

Thames Gateway London Partnership (TGLP) commissioned Space Syntax to draw together a baseline and spatial planning assessment of the urban layout structure of the Deptford area. The objective of the study was to provide an evidence-based framework to be taken forward to developing design options that are aimed at improving the functioning of the study area, whilst also ranking impact and priorities for investment.

To this end, the study looked at the degree of spatial accessibility in the environment that enables people to walk and cycle. It incorporated in its scope, accessibility through semi-public spaces, for example shopping centres and transport interchanges.

The research informed the development of the strategic pedestrian network as set out in the Deptford and New Cross Masterplan and North Lewisham Links Strategy.

4.1.3 More detailed analysis

A more detailed analysis of the Deptford and New Cross area's public realm and conditions for walking can be found in Chapter 05 (Quality of Accessibility).

In addition, Figure 4.1 shows the location of crossing points by type and Figures 5.8 and 5.9 show local connectivity and road danger.

Fig. 4.1: Local walking routes, including crossings by type

4.2 Cycling

4.2.1 Lewisham Cyclists' Network

Lewisham has a well-developed and comprehensive formal network for cycling that features some high quality infrastructure, notably Waterlink Way, although in places the quality and completeness of links may be considered to be awaiting programmed investment, and therefore below reasonable standards.

London Cycle Network Plus (LCN+) has been funded by Transport for London and comprises most of the borough's investment planning. In 2006, CRISP studies were completed with stakeholders for all of Lewisham's cycle routes; key proposals arising from these studies are given in Task 6 and require completion by 2010 to meet TfL's LCN+ completion targets. The London Borough of Lewisham is one of the best London Borough performers for spending LCN+ allocations and making use of Section 106 funding to deliver local improvements.

There are a number of 'high risk' physical barriers to the completion of the LCN+; these are set out in the High Risk Barriers report, published by Camden Consultancy Service for TfL in November 2006. Barriers found on LCN+ routes affect their usefulness and accessibility for cyclists, and undermine the value of having the route in the first place. Boroughs have been given the task of addressing the barriers by 2010, although other priorities including capacity for general traffic (often identified by other bodies, such as TfL) put this target at some risk.

Deptford Bridge junction is identified as a barrier to route completion, although this now has a toucan crossing enabling cyclists to follow the Waterlink Way north-south, utilising a footway cycle track to reach Creekside Road.

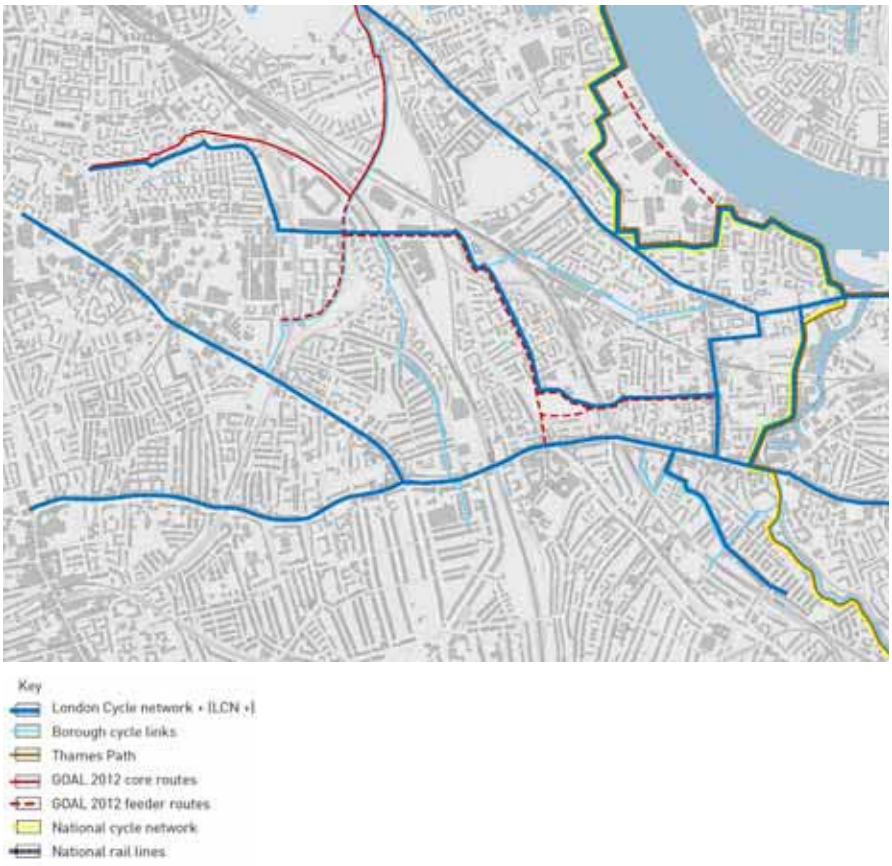


Fig. 4.2: Lewisham cycle network including LCN+ and GOAL

Other 'high-risk' barriers are identified at Rotherhithe New Road (junction with Ilderton Road), Deptford Bridge and the apex of Kender Triangle. Beyond the site boundary, the main barrier identified is at the roundabout junction of Jamaica Road and Evelyn Street.

Lewisham's cycle network is increasingly used. A recent count showed over 150 cyclists per peak hour passing through the location of the proposed Toucan crossing at the eastern end of Surrey Canal Road: this crossing has therefore been identified by Lewisham Council as a priority for investment, along with the resolution of other barriers in the network. There is considerable potential to attract more cycled journeys onto the network, for example the busiest route in the London Borough of Hackney carries in excess of 500 cyclists between 0800 and 0930.

4.2.2 GOAL 2012

Sustrans Greenways for the Olympics and London (GOAL2012) project proposes a new bridge crossing of the River Thames to link the Rotherhithe Peninsula (Durand's Wharf) with Canary Wharf (impounding lock on Westferry Road).

4.2.3 National cycle Network

National Cycle Network routes 4 and 21 skirt the study area. Route 4 follows the River Thames, although it currently diverts inland because there is no right of way through Convoys Wharf. Route 21 follows the River Ravensbourne, on the alignment of Waterlink Way.

4.3 Local public transport: buses

4.3.1 Deptford and New Cross Bus Network

The study area is bounded and bisected by bus routes, which are focussed on corridors running, broadly, north-west to south east, along the A2 Old Kent Road / New Cross Road and the A200 Evelyn Street / Creek Road. Intermediate routes are restricted to north-south bus operations along Trundley's Road—there are no east-west links in the area between Surrey Quays and New Cross Road, although Transport for London Buses proposes to extend Route 129 from Greenwich town centre towards Peckham via Convoys Wharf and Surrey Canal Road.

A significant 'gap' in bus provision exists to the south west of Evelyn Street. Here, potential passengers need to walk more than the 'regulation' 400m to their nearest bus stop, and in any case the choice of routes is limited to destinations to the north west and south east. The extent of potential demand for bus services is illustrated by local people's travel to work patterns in Task 4.

London Bus Initiative (LBI) phase 1 proposals were completed in 2004. The programme introduced bus lanes and other priority measures along the length of Evelyn Street, Lower Road, Creek Road, Deptford Church Street and on the A2 Transport for London Road Network (TLRN). Pinch points remain where there was insufficient carriageway to provide full bus lane coverage, for example at the junction of Evelyn Street and Bestwood Street.

Fig. 4.3: London Bus Initiative (LBI) routes

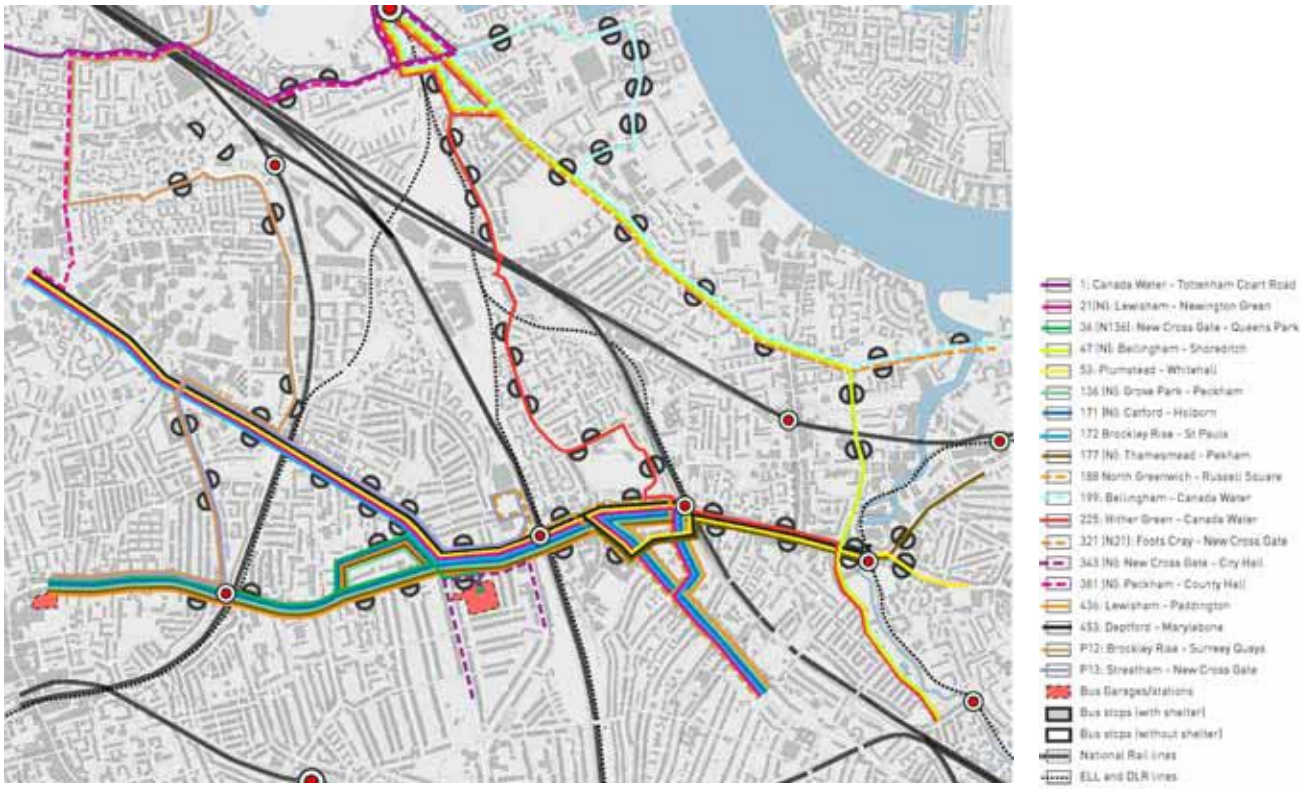


Fig. 4.4: Local bus network

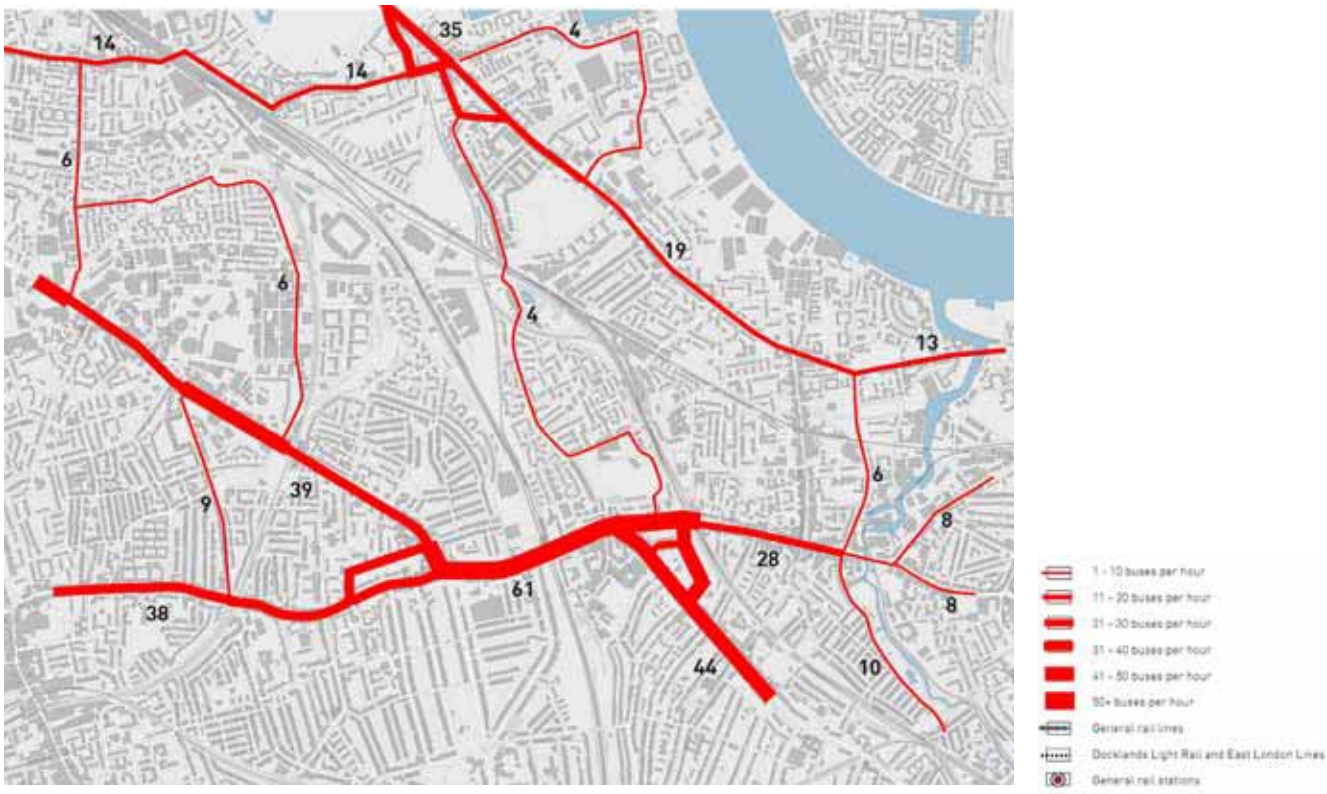


Fig.4.5: Bus frequency

4.4 General motor traffic

4.4.1 Local street network

The Local Implementation Plan defines the local street network, as follows:

London Distributor Roads (Borough responsibility)

- A200 Evelyn Street to Creek Road (London Strategic Road Network—partly TfL)
- A2209 Deptford Church Street
- A2206 Southwark Park Road (in LB Southwark)
- A2208 Rotherhithe New Road (in LB Southwark)
- A206 Creek Road (in LB Greenwich)

Local distributor routes:

- B206 Plough Way and Grove Street
- B207 Trundleys Road to Pagnell Street
- Surrey Canal Road
- St Edward Street
- Ilderton Road (in LB Southwark)

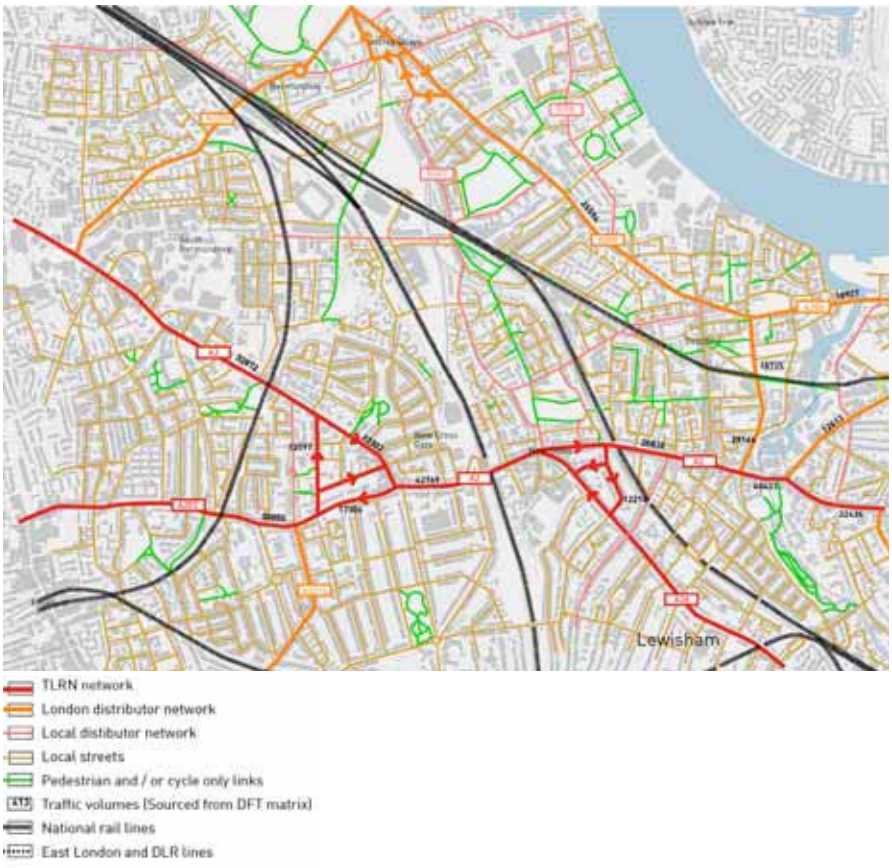


Fig. 4.6: Local street network

4.4.2 Congestion

Congestion is already significant in the area, with typical London-bound peak hour journeys in May 2007 experiencing delays of over 1.5 minutes per vehicle kilometre at each of the various individual links in the network, especially at Creek Road and Deptford Church Street and on the southbound segment of the Surrey Quays gyratory.

Further assessment of trip generation (in Chapter 6) shows that 49% of car and public transport trips combined are for destinations beyond 7.5miles of the study area (Surrey Canal Road Station). The remainder of trips, 51% by all modes, are local. Consequently, the most likely cause of congestion is the third of trips made by car locally combined with those made by drivers stopping in or passing through the area from further afield.

4.4.3 Heavy Goods Vehicle access

A restricted route is in operation via Ilderton Road and Surrey Canal Road for large HGVs serving the SELCHP waste incinerator from the TLRN.

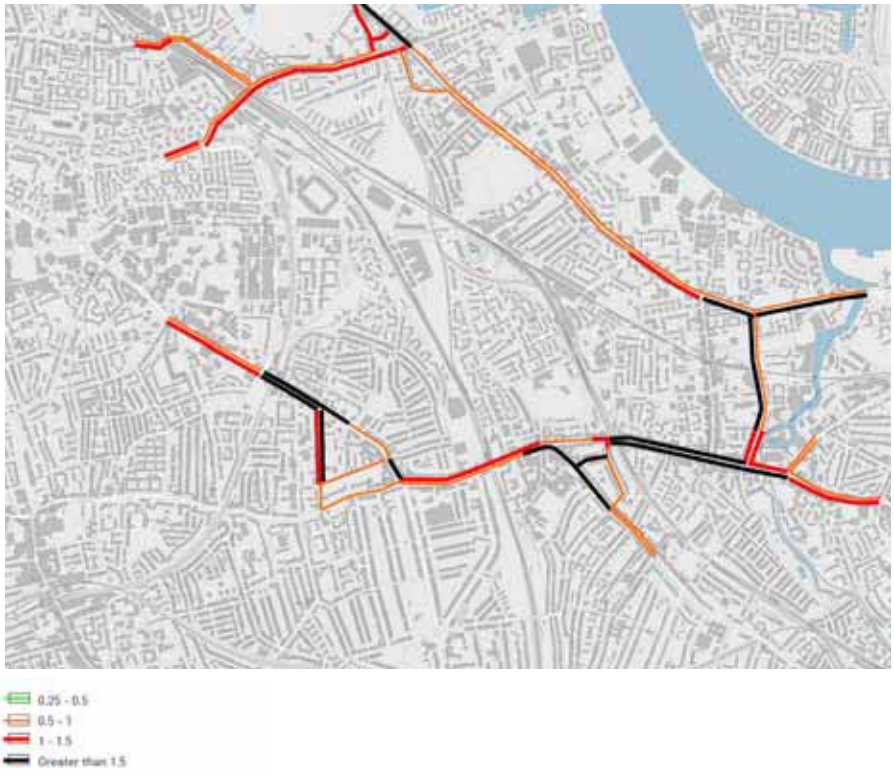


Fig. 4.7: Excess journey time (general motor traffic) AM Peak Mon – Fri, per vehicle Kilometre

4.4.4 Parking

Controlled parking zones have not become established in the study area. Further research may reveal parking stress in certain areas, particularly around stations and town centres, preventing local residents and businesses from being able to park conveniently.

Evelyn Street, which is defined as a 'strategic road', is subject to the same approach to delivering parking controls as on the Transport for London Road Network.

Lewisham's parking standards are set out in the Unitary Development Plan (saved policies) and are summarised as follows:

Use class A: Shops	1:14sqm maximum
Large food stores over 1,000sqm Non-food retail	1:20sqm maximum
Use class B: Business and industrial uses	1:600-1,000 sqm maximum
Use class C: Residential	Up to 1:1.5 unit maximum
Cycle parking	Assumes a rate of approximately 10% of people cycling, with minimum standards.

The maximum standards set out do appear (by comparison with other parking standards in London) to be fairly generous. However, it is also noted that the standards are maxima (for motorised vehicles) and therefore a lower standard may be applied to suit given situations.

Controlled parking zones would not tackle parking stress on unadopted streets (for example within housing estates). However, it is normally the case that parking control arrangements are put in place by landlords to control parking activity and prevent non-resident parking.

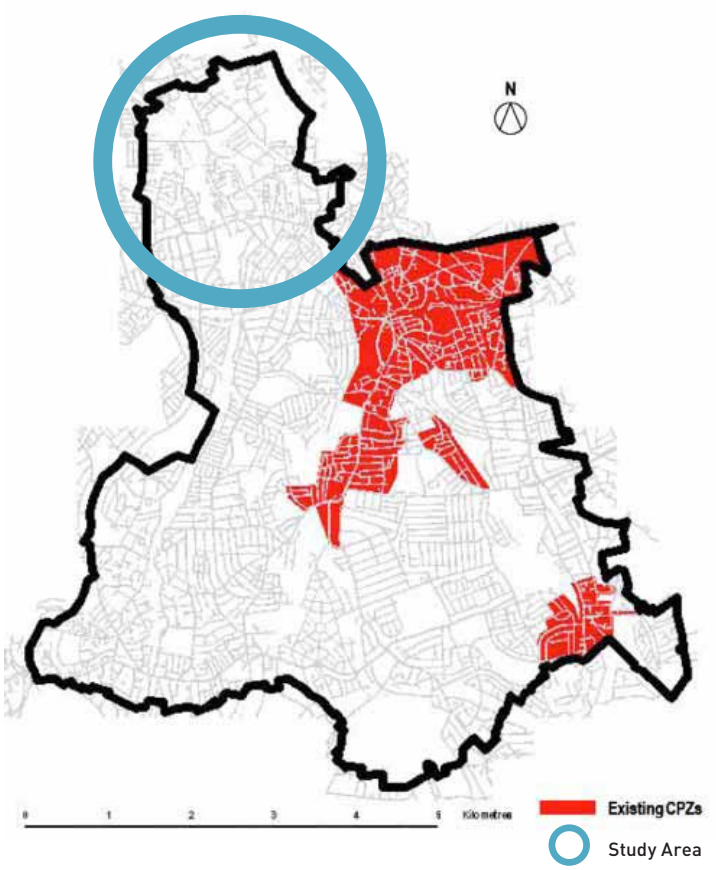


Fig. 4.8: CPZs

05 Quality of Accessibility and Public Realm

Deptford and New Cross have a variable quality of public realm. Some has been renewed in recent years, notably sections of the LCN+ routes certain parts of Evelyn Street. Other areas are in reasonable condition but are missing features that would make them more user-friendly, such as lowered kerbs and crossing points. Some areas do not achieve basic standards for items such as lighting, quality and accessibility: it is these areas that require the most urgent investment in measures to bring them up to a reasonable standard of serviceability and appearance.

This chapter uses a variety of methods to describe the quality and condition of the public realm. Firstly, a desktop survey was undertaken to demonstrate the overall urban design characteristics of the area. Secondly, links and bridge crossings were scored for public realm quality. Thirdly, major barrier streets and junctions were identified, and finally this information was supported, using Intelligent Spatial Metrics software, in terms of a road danger and permeability assessment.

5.1 Walk audit of quality

5.1.1 Coverage

The walked and desktop quality audit reviewed general conditions for walking and cycling, focusing on key 'standard' elements of the public realm--lighting, activation (frontges, street activity), forward visibility, accessibility and public realm quality.

The assessment criteria are not specific to any mode user, although the main 'beneficiaries' of the study are pedestrians. The study should be read primarily as an assessment of conditions for walking (including for trips to public transport) and cycling. A closer inspection would be required to determine the quality of cycling and bus specific infrastructure and the condition of carriageways.

5.1.2 Audit criteria and scoring

Lighting

The assessment was undertaken during the day and comprised an appraisal of the amount of lighting indicated by the presence and spacing of lamp columns.

0 Segment has no lighting

1 Segment has some lighting although it may be sparse and considered substandard

2 Segment has lighting along the majority of the street

3 Segment has high quality consistent lighting that specifically illuminates both carriageway and footway.

Note: a PFI has been signed that will result in the wholesale renewal of street lighting in the borough to a consistent standard.

Activation

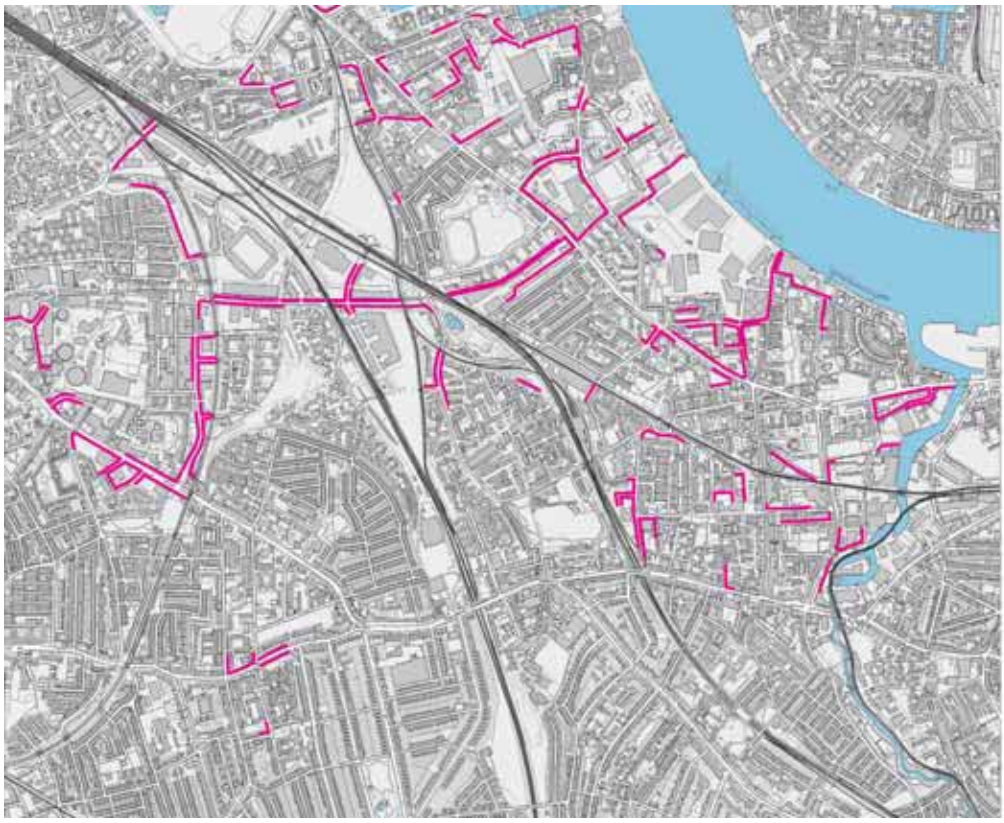
This assessment related to both the 'constitution' of a street (the presence of building frontages that address the street), and the level of activity associated with that frontage.

0 Segment has no activation, features include blank walls, garages or alley-ways

1 Segment has some activation, with partial coverage of street by either residential or employment (30 – 50% 'blank walls'), or no activity. This situation is common on walkways and park links etc

2 Segment has good activation; good examples include Victorian row-housing fronting the street, however there may be some gaps in the otherwise continuous frontage.

3 Segment has plentiful street activity, giving a 'high street' condition with continuous frontage and retail/employment uses activating the ground floor and residential above, with animation spread over a longer time period.



This desktop study marks key streets that feature discontinuous or missing building frontages. The pink markings indicate gaps in an otherwise almost continuous line of development against the 'back of the footway'.

A 'good' residential / mixed use street would comprise development that animates the street with almost contiuous windows, doors, gardens, etc. Development might also be continuous – terraces and well-defined blocks.

A 'good' industrial estate street would similarly animate the street, even though the scale and nature of activity is different to that in residential or mixed use streets. It is possible to provide a high quality of design in such areas provided that there is a strong guiding plan.

Fig. 5.1: Continuity of frontage

A coarse grain occurs when there are significant gaps between buildings.

A fine grain indicates areas with continuous bulit-form – likely to be characterised by traditional streets and blocks.

Coarse to medium grain development tends to correlate with areas of industrial or post-war social housing.

Fig. 5.2: Urban Grain

Forward visibility

Forward visibility is an important issue in terms of safety and sense of security along walking routes and streets. Dark and obscure corners, and areas where vegetation or other obstructions block sightlines can both make walking routes illegible, and also create potential hiding and entrapment places.

0 Forward visibility completely blocked, at either a critical location or at numerous locations. An example might include a walled street or path with numerous turns.

1 Forward visibility is partially blocked, possibly by vegetation or some feature that would create an entrapment spot

2 Good, typically clear and unobstructed forward visibility.

3 Exemplar forward visibility. Score not considered useful since it would indicate a street that had no features (such as trees and lighting) at all; this might itself be regarded as a detriment.

Forward visibility has been further tested as a desktop exercise using Urban Initiatives' ISM computer software. This give an accurate assessment for visibility based on a measurement of street width every ten metres, and takes into account the curvature of individual streets.

Accessibility for people with physical and sensory impediments

Streets need to be accessible to all users, whether they are able bodied, elderly or disabled. Footways along individual segments have been scored according to whether they are step free, have lowered kerbs and tactile paving, are sufficiently wide for a wheelchair (minimum 1.0m) and pedestrian to pass one another and whether they are in a good state of general repair.

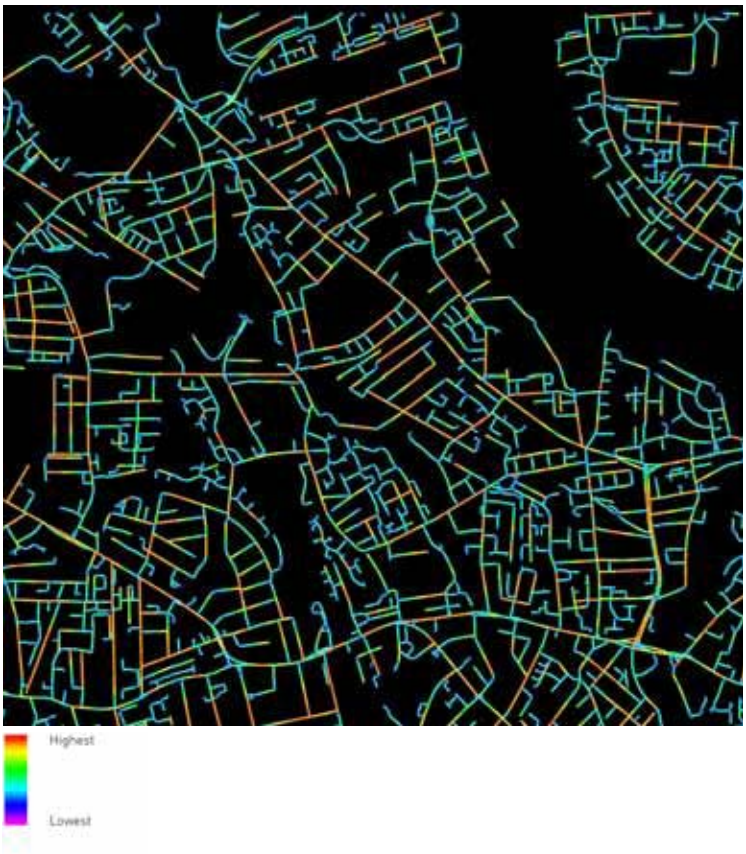


Fig. 5.4: Forward visibility metric

It is noted that in general, most footways should be a minimum of 2.0m wide, with only short sections falling below this width where necessary.

0 Segment has no DDA facilities with significant obstructions to wheel chair users, e.g. pedestrians either unable to walk along a footway as it is below 1m or blocked by tree roots

1 Segment has below average accessibility--comprising standard kerb and channel design with no lowered kerbs or tactile paving.

2 Segment has good DDA facilities, lowered kerbs, tactile paving and crossing facilities. It is generally DDA compliant.

3 Segment has exemplar DDA facilities, providing step-free high quality access.

Public realm quality

The quality of the public realm can greatly effect people's propensity and desire to walk for local trips, including trips to public transport. It can also effect people's perception of time and safety of routes. More direct routes, whilst saving time, may be perceived as taking a similar time to walk as routes with an attractive and well-maintained public realm.

Public realm quality has been assessed in terms of footway materials, the presence, quantity and general quality of street furniture and trees, and a subjective assessment of general ambience—influenced by the layout of spaces and the amount of street furniture clutter.

0 public realm is very poor; the footway is in disrepair and there is no helpful street furniture (signs, etc). Poor conditions for pedestrians exacerbated by traffic measures such as guardrail. Ponding occurs, or may occur, on pedestrian paths in wet weather.

1 public realm is below the average for the area, with partially-deteriorated footways, poor quality, redundant or missing street furniture; environment feels dominated by moving and parked vehicles.

2 good public realm, footways either asphalt or concrete pavers, with trees and seating and amenities on occasion. Inconsistent public realm treatment, including poor quality patching.

3 exemplar public realm, higher quality, consistent footway materials, furniture and trees, no unnecessary guardrail, environment does not feel dominated by traffic.

Criteria for 'failing' links

If a street or path received a zero rating in any of the five criteria, then it was automatically assigned to the 0-5 'very poor' classification. Broadly in this category, it fails to meet minimum quality standards.

Failed or excellent links and aesthetic public realm quality

It is not always the case that a given score corresponds with a good or bad public realm aesthetic.

A beautiful place may feel unsafe at night if it is not properly lit, or be inaccessible to disabled people if it is not yet DDA compliant. Conversely, a place with a poor public realm may feature good lighting at night and be fully DDA compliant.

As a general comment, however, there tends to be a correlation between the performance of individual streets and their visual quality.

In addition, it may be felt important to consider the opinion of local people whose priorities are formed by their daily observations and how they use the area.

Results are summarised on Fig. 5.5, and represented as follows:

RED 0-5:	Very poor walking environment
ORANGE 6-8:	Poor to average
YELLOW 9-12:	Average to good
GREEN 13-15:	Excellent walking environment

Most of the issues identified can be dealt with through the prioritisation and implementation of maintenance programmes, using a palette of standard materials and street furniture uniformly implemented. In certain locations, a higher level of intervention will be required, such as the higher specification landscaping and public realm and the wider regeneration of the urban realm.

5.1.3 Conclusions

The scoring matrix in Appendix 2 sets out in detail the reasons behind the scoring for each street segment. The results are generically summarised as follows:

- Very few routes achieved the 'excellent' rating- a benchmark for an excellent street would be the recently completed Walworth Road scheme in Southwark.
- Approximately 50% of streets in the study area received a 'good' rating. Most TLRN streets received this, given that the TfL streetscape guidance requires a reasonable standard walking environment.
- There are significant areas of 'poor'-rated walking environments. These are for a range of reasons including lack of active frontage, failure to meet DDA requirements etc. This is explained further below.
- Streets such as Surrey Canal Road received a 'red' or 'fail' rating, signalling that these streets have a

number of deficiencies in the scoring mechanism and require priority remedial works.

- The extent of the 'poor' or 'failing' network is significant and concentrated in a core area extending from Ilderton Road and Surrey Canal Road, following, in an almost continuous line, the rail network towards Deptford Creek and New Cross. Other areas of concentrated poor quality public realm are streets to the north of the Oxestalls Road opportunity site, including the former canal alignment, and the western half of the Surrey Quays Station gyratory.
- The 2009 North Deptford Consultation document represented local views about the public realm. There are both contrasts and correlations between this study and the consultation document. The two documents should be viewed together.

Results are summarised in Figures 5.5 (public realm--streets) and 5.6 (public realm--bridges).

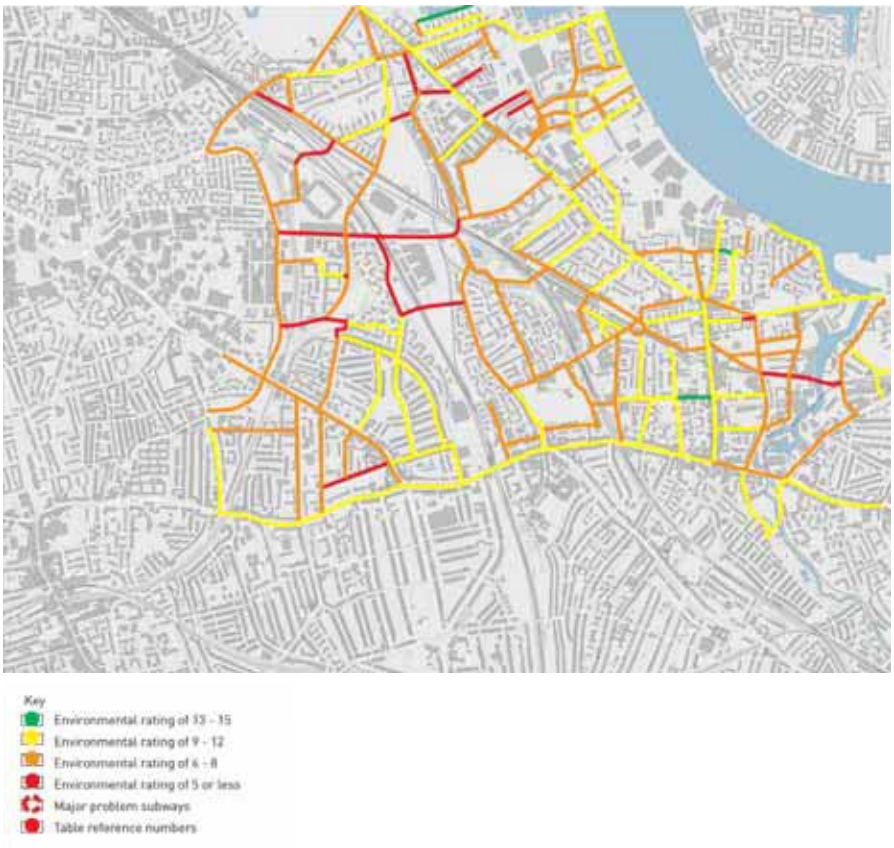


Fig. 5.5: Aggregate public realm quality analysis

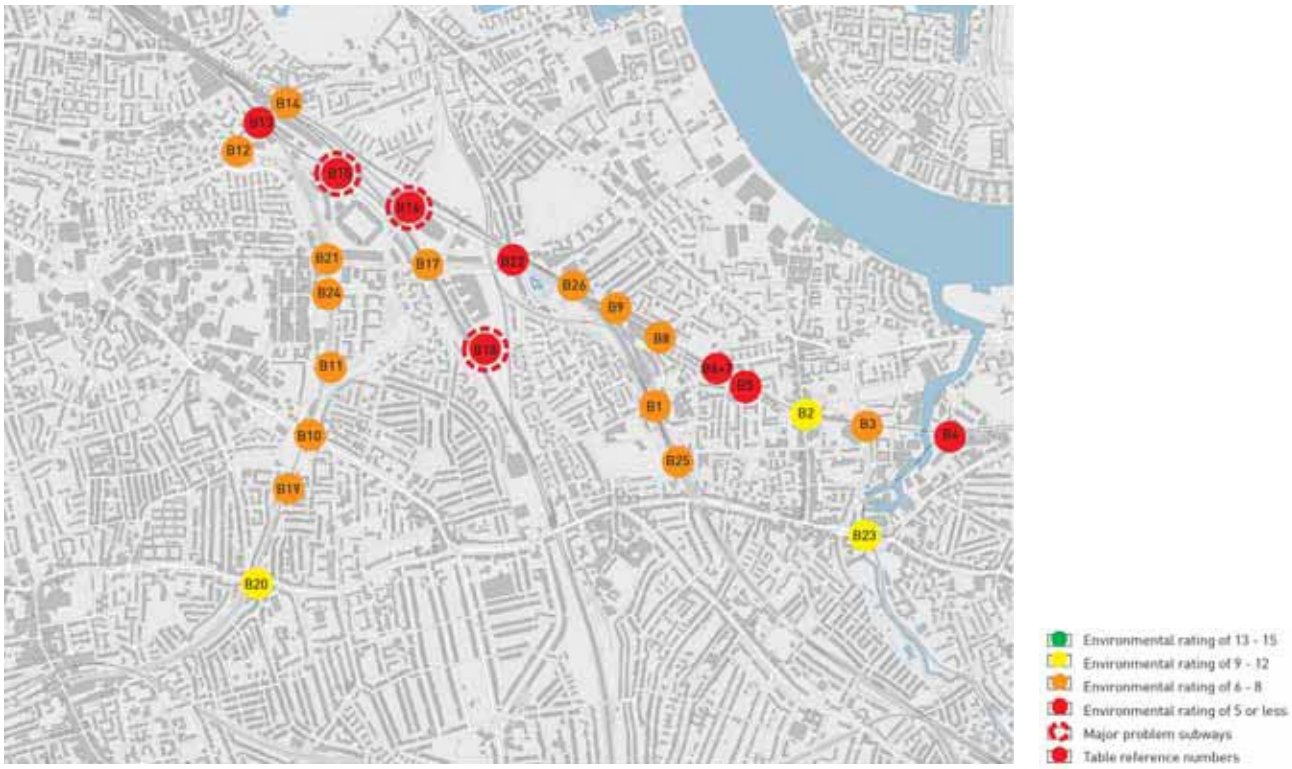


Fig. 5.6: Aggregate bridges public realm quality analysis

5.2 Barriers to pedestrian and cycle crossing movements

In addition to the walk quality audit, a more subjective analysis of areas of 'severance' or barriers to pedestrian and cycle movement was undertaken. This made a general assessment of the ease of crossing a street or other linear barrier. Barriers to pedestrian movement are shown as either crossable or uncrossable.

Uncrossable barriers may be, for example, long walls, railway lines or viaducts that prevent pedestrian movement except at certain infrequent locations, usually bridges. Crossable barriers are busy roads and 'problem' junctios that can, in theory, be traversed at most points, however the weight of motor traffic makes it difficult or even impossible without the provision of crossing facilities.

Crossable barriers were assessed subjectively as follows:

- Presence of pedestrian crossing facilities on key desire lines
- Quality/perception of crossing facilities (whether they are direct/straight staggered crossings and whether crossing choice is inhibited by guard rail and other impediments).
- Dominance of vehicular traffic on pedestrian movement

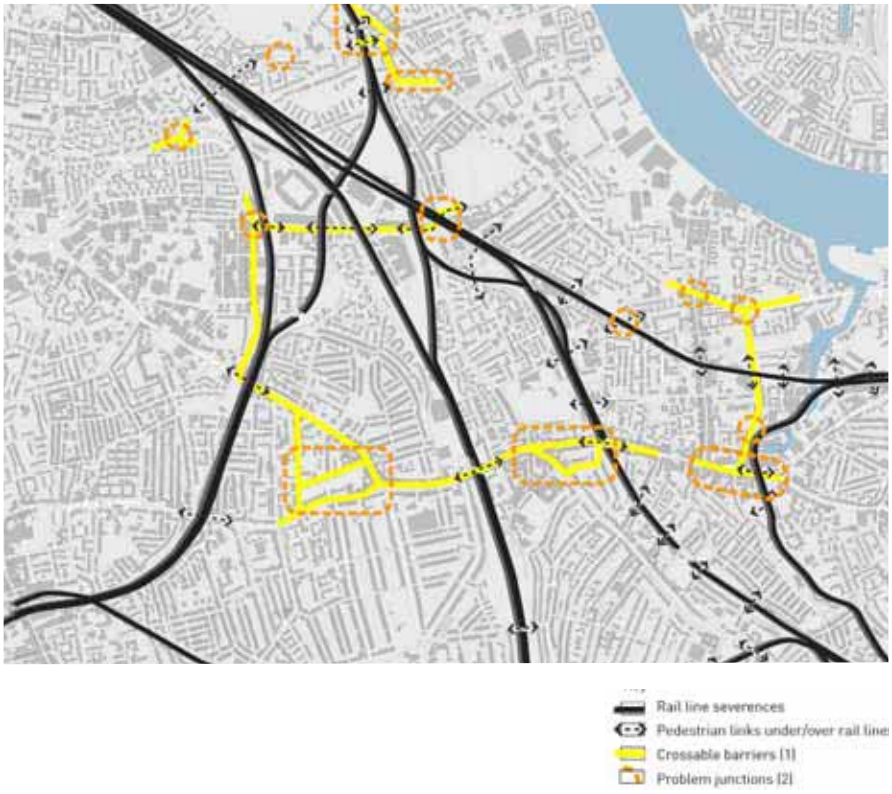


Fig. 5.7: Crossable and uncrossable barriers

'Problem junctions' include major junction nodes and gyratories. These are areas with significant motor traffic domination where vehicles make complex manoeuvres, where pedestrian and cycle crossing movements are either difficult or require diversion to formal crossing points. At gyratories, permeability and legibility for cyclists and public transport users is reduced due to the complexity of routes and dispersed bus stop locations. Road danger is increased because drivers are able to speed up where there is no opposing traffic movement.

Permeability and connectedness

Fig. 5.8 provides a demonstration of the degree of connectedness of the area. Areas in darker shades of blue are poorly connected, whereas areas with shades of yellow are the most connected. It is possible to conclude from the plan that areas with street grids are the most connected--the main concentration of these are in Deptford; elsewhere there are groups and isolated sections of well-connected streets. Cul de sacs are, of course, the least connected typology.

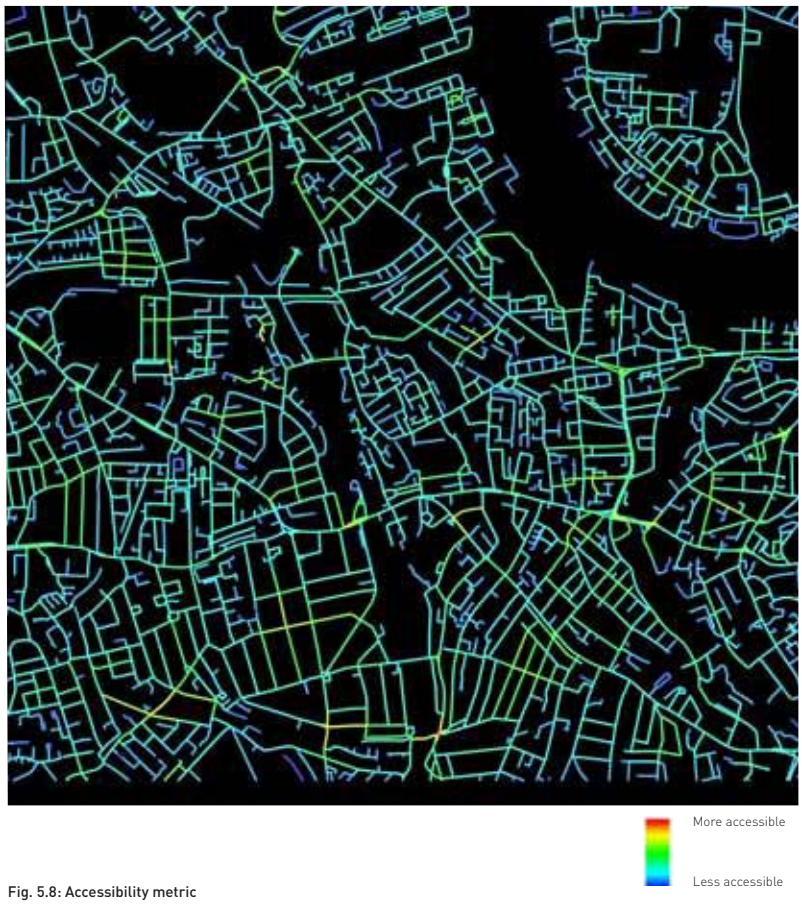


Fig. 5.8: Accessibility metric

5.3 Road Danger Metric

Road safety does not simply relate to the location and number of collisions: dealing with these in isolation is often futile, since crashes are essentially random in nature. Budgets for remedial measures need to take an area-based approach, which sets out to prevent or reduce the severity of injury collisions by influencing street user behaviour.

Road danger has been assessed for the whole street network and is scored for streets identified in the walk quality audit as 'red' or 'orange'.

Fig. 5.9 establishes, using three levels, the amount of likely road danger on the street network. This information is a function of inputs of traffic speed, forward visibility and street width. In some cases, the outputs may be distorted by wider or narrower than average street widths, or long stretches of straight street terminating in a cul de sac, where traffic calming may be present or speeds never reach a high level.

The information from this grid has been combined with the site visit analysis in the matrix of priority investment to inform the range of possible public realm interventions.

Traffic speed indicates the proportionate likely speed that can be 'achieved' on various parts of the network. The analysis is used to inform the road danger metric, and is a function of road width and forward visibility. The red lines on the plan indicate links where the highest speeds can be obtained; mauve indicates medium speeds and green indicates the low speed network. Again, some distortion appears, but the map does give a general indication of the current situation.

Fig. 5.9: Road danger metric

06 Development Impacts

This Chapter sets out the potential travel impact arising from major development proposals in Deptford and New Cross. Twelve major sites considered likely to come forward over the next ten years (including one recent permission) have been selected for inclusion in the appraisal. In addition, a number of smaller sites may come forward over this period.

This chapter should be read in conjunction with technical data in Appendix 1.

6.1 Overview

This high-level assessment process has involved a high level forecast of the potential travel demand by all modes, arising from new development proposals, based on a number of assumptions about the scale and mix of development. The overall aim is to understand the cumulative impacts of the combined developments and their impact on the transport network.

To assess travel mode, local mode rates have been calculated using a combination of local mode share data and National Travel Statistics. Together, it is considered that these provide a sound basis for understanding the relationship between travel mode and journey length. This brings the best local data together with power and volume of national databases.

We have used our 'shortest distance' techniques to derive area wide shortest distance analysis based on the geographical layout of streets in the local and wider area. This data is combined with demographic data to establish multi modal gravity models. Using information on modal distance, we have generated modal dispersion plots for the local and wider area. These are combined with development quantum to assess travel origin and destination.

The process mirrors but automates recognised transport planning techniques used in Transport Assessments. The analysis is particularly useful for providing an overview of development proposals and masterplans in a broad-brush fashion. The approach does not, however, remove the need for a more detailed transport assessment for individual development sites as they come forward.

The assessment was undertaken in a number of phases as shown in Figure 6.1.

Process	Fig. nos	Appendix 1
Step 1: determination of local mode share and purpose	Fig. 6.2	Step 1
	6.3	
Step 2: Assessment of modal dispersion	6.4	Step 2
	6.5	
	6.6	
	6.7	
Step 3: Trip generation	6.8	Step 3a
	6.9	Step 3b
	6.10a	
	6.10b	Step 3c
Step 4: Travel impact	6.11	Step 4a
	6.12	Step 4b

Fig. 6.1: Transport assessment process

6.2 Local Mode Share (Step 1)

Local mode share has been derived from 2001 Census data which had data on Travel to Work mode. Although considered to provide robust data for travel to work journeys, it does not normally represent travel mode for all purposes including non-work trips. Therefore this local data has been combined with modal share data from the National Travel Survey for all journeys, by all purposes, and all day, giving a more realistic spread of anticipated travel demand by mode (Fig. 6.2).

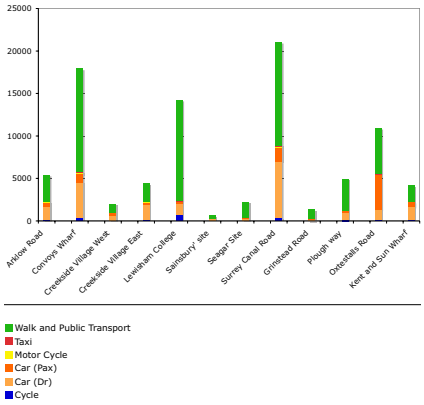


Fig. 6.2: Derived local mode share

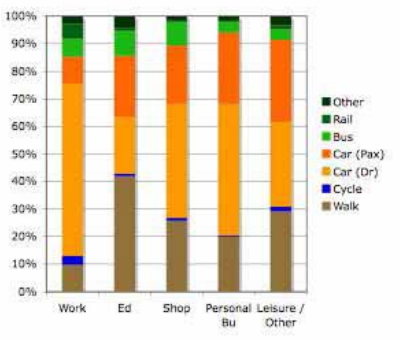


Fig. 6.3: Mode share and journey purpose

6.3 Modal Dispersion (Step 2)

This section describes the methodology for setting up the multi modal dispersion model. This should be read in conjunction with detailed Mode Dispersion data in Appendix 1.

6.3.1 Population Densities

Residential population densities by ward have been provided to give an indication of the relative intensity of their travel use. Using electoral ward-level Census data, it is not possible to depict accurately journeys by destination from each site. However, in a more detailed analysis, using smaller enumeration district data, a more accurate site by site picture would emerge-though this relies on the enumeration district having a sufficient resident population to give a reasonable prediction. Nonetheless, population data has been sourced from the Census and informs existing travel demand by mode as a baseline for calculating the amount of additional travel when in-migration occurs as a result of new residential development. The relative population densities are shown as a heat map.

The most densely populated ward is New Cross; further north-west, the population is less, reflecting the traditional emphasis on providing employment uses, notably in areas such as Convoys Wharf and Surrey Canal Road and therefore the low resident population.

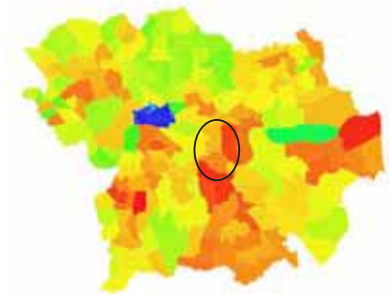


Fig. 6.4: Population by ward heat map, Central, City, South east and East London.

6.3.2 Area Wide Shortest Distance

Area wide shortest journey distance has been calculated from a selection of key trip generators within the centre of the study area, shown as the darker red areas in figure 6.5. This points are combined to produce a contour map related to actual travel distance by road.

Figure 6.5 uses geographical features (existing streets, excluding pedestrian-only links) to calculate distance, rather than relying on a 'crow-fly' distance. It overcomes the essential problem of 'crow-fly' calculations because, by following the street network, true distances are followed, and features such as railway lines and rivers are taken into account. The map can be used to come to broad conclusions about the barrier effect of the railway lines that criss-cross the Deptford and New Cross area on embankments and viaducts, with limited crossing points.

The map indicates that the railways are a major barrier to movement. Areas (for example Hatcham Park Conservation Area and Fordham Park) that are actually quite close to each other are only accessible by street via a significant diversion. On the other hand, the map also indicates river crossing points and the extent to which they provide accessibility to the wider network.

At a local level, contour boundaries are clearly formed where there are impermeable networks of streets (note in particular areas in the south west of the study area). These boundaries could be extended by the provision of additional streets.

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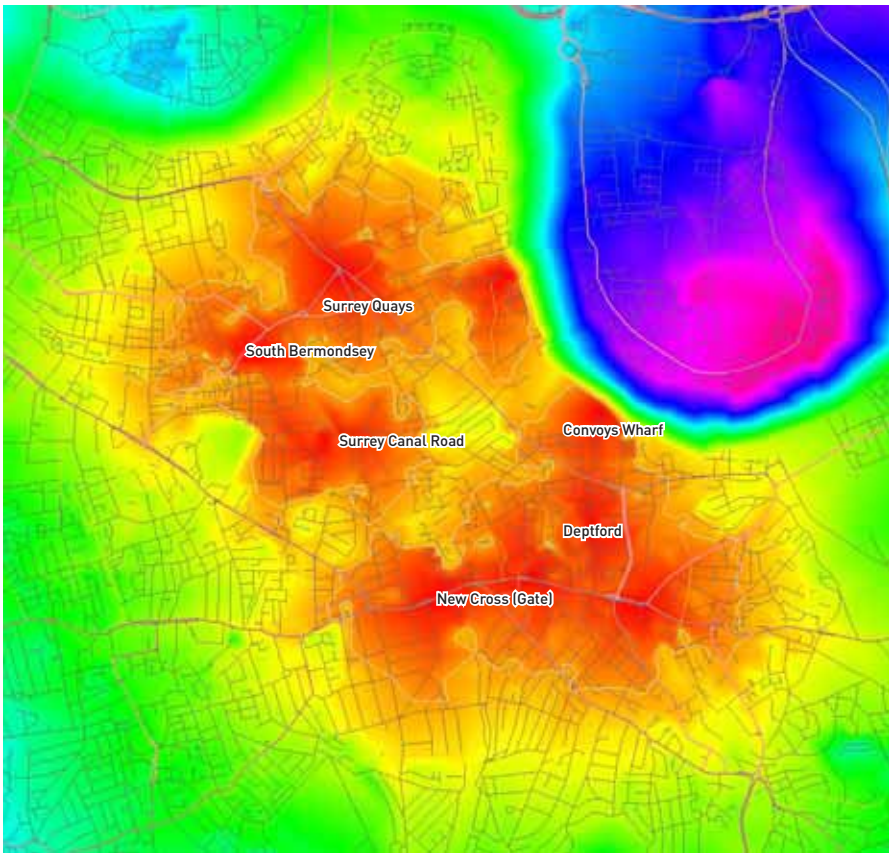


Fig. 6.5: Lewisham 800m walk band. The deepest red areas relate to key attractors; the cooler colours are further away as measured using road length rather than crow fly distance

6.3.3 Multi Modal Gravity Model

National Travel Statistics and Local Census Data have been combined in a gravity model and applied to crow-fly distance assumptions to give travel distance by mode that relates to real journeys made in Evelyn and New Cross wards. Based on National Travel Survey data, it has also been shown that each individual makes an average of 1,000 trips per annum.

The longest distances by mode are made by car, accounting for a total of about 20% annual trips over a distance of up to and over 5.0miles. Public transport use becomes more common for trips over two miles in length. Walking and cycling cover shorter distances, the optimum for walking is up to a mile, whilst the optimum distance for cycling is between one and five miles.

By combining the derived local model share with the above data , a series of dispersion plots has been created for each mode. For each mode these are shown below. The trip dispersions shown on each of the plots represent 51% of all trips to the development study areas, as the analysis only extends 7.5km from the study area. Therefore in addition to the trips shown there is a additional trip demand of 49% which travel further afield – of course most of these are by car and public transport.

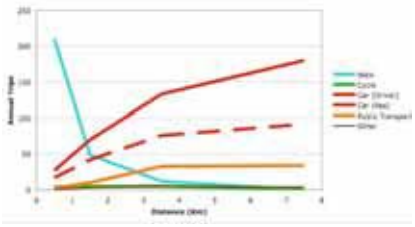
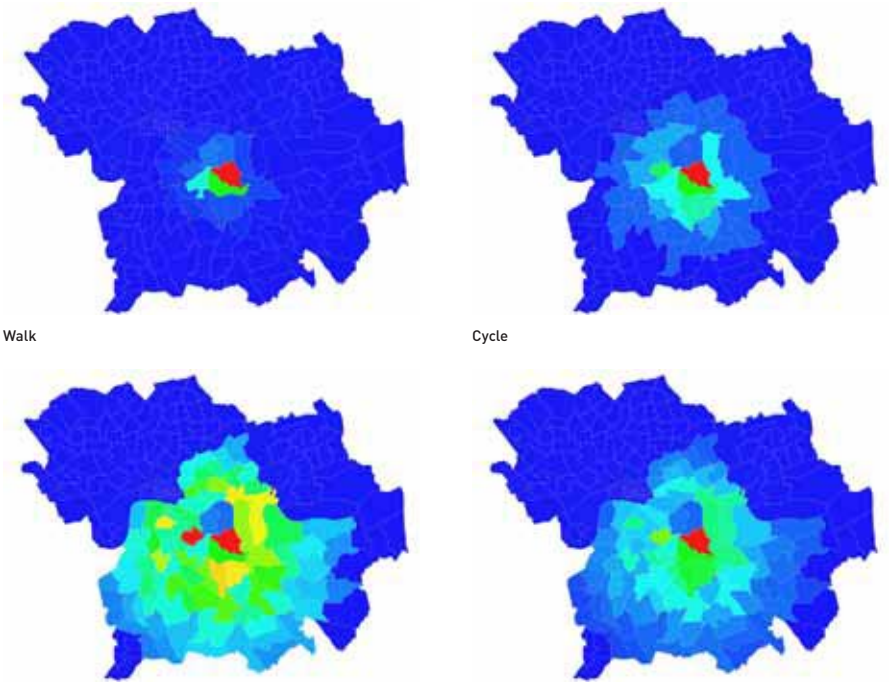


Chart 6.6: NTS travel mode versus distance



Walk | Cycle

Bus | Car

Fig. 6.7 Modal dispersion maps: walking, cycling, public transport and private transport. The geographic area covered is derived from a logarithmic calculation based on the falling away of trips by mode beyond the red centroid. Hence, very few trips extend into the dark blue areas, with almost none at all in areas that are not represented.

For all journey purposes, the gravity model indicates that 33% of trips are made by car—either as a driver or a passenger, the remainder being made by other (more sustainable) modes. Approximately 12% of trips are made by 'other' modes: these could include river taxi / ferry services that are not classified specifically as a mode in the Census data. Given the inner urban context of this area, it is no surprise to see journeys relatively evenly spread across the (non-pedal-cycle) modes, compared with the national picture.

Only 1.1% of trips are made by pedal cycle, despite considerable scope to extend use of this mode in the study area. This is the only mode that is significantly underused (fig. 6.1). Of course the Census, published in 2001, is unable to reflect subsequent increases in cycling, which according to Transport for London, have added a further 50% to the 2001 baseline.

The dispersion maps in Fig.6.7 indicate broadly the distances travelled by mode, showing that walked trips are focussed tightly around the Surrey Canal Road centroid, whilst the focus for car trips is much wider.

6.2 Trip Generation (Step 3)

This section assesses the largest new developments coming forward in the borough and reports on the potential travel generation of each site. The total amount of development expected in the Development Plan period is set out in the London Plan (2008) and emerging Local Development Framework.

6.2.1 Development Proposals

Twelve major proposed development sites have been selected to calculate potential travel demand increases in the study area (Fig. 3 in the Introduction to this study). All of the sites incorporate a mix of proposed uses, including housing, employment and commercial development.

The assessment sourced typical trip rates from a combination of TRICS and TRAVL data, with TRAVL being used wherever possible, to be consistent with the London Borough of Lewisham's protocol.

The list below provides a summary of the quantum of development. This has been sourced from the Deptford and New Cross Masterplan, existing transport assessments for sites not mentioned in the Masterplan, and updated assumptions where they exist for those that are mentioned.

Also listed, for information, are sites identified in the Rotherhithe Multimodal Study supplied by the London Borough of Southwark.

6.2.2 Assessed sites

Deptford and New Cross Masterplan: Six sites (see Fig. 3 in study introduction)

- Surrey Canal Road (Millwall site) residential 2,700 units, employment 44,700sqm football ground retained (but not included in study)
- Grinstead Road residential 160 units, employment 2800sqm.
- Plough Way (or Cannon Wharf) residential 750 units, employment 10,000sqm.
- Oxestalls Road residential 950 units, employment 17,000sqm
- Arklow Road residential 200 units, employment 24,000sqm
- Kent and Sun Wharves residential 300 units, employment 8,300sqm

Additional sites (see Fig. 3 in study introduction)

- Convoys Wharf residential 3,514 units, employment 72700sqm including waste / recycling activity, boat repair, river bus.
- Creekside Village West residential 380 units, commercial uses 12,815sqm, including offices, studios, cultural space, shop and food and drink.
- New Cross Gate (Sainsbury's) site residential: 3605sqm, retail 3605sqm, student accommodation (not confirmed) 12, 470sqm
- Seagar site residential 207 flats+96 affordable+7 live-work. Commercial floorspace 4697sqm, 60 car parking spaces, 393 cycle parking spaces.

Sites in Greenwich included in the study area

- Lewisham College 40,000sqm, residential 21,250sqm, commercial 3,200sqm
- Creekside village East (in Greenwich) residential 438 units, employment (Laban) 9,000sqm, 323 parking spaces

6.2.2 Other sites (not assessed)

Rotherhithe Multi Modal Transport Study highlights a number of large sites that either have planning permission or are likely to come forward in the next few years. These are not included in this assessment. The developments listed comprise:

- "Site A": 596 residential flats, community uses and retail and a replacement entrance to Rotherhithe Underground Station;
- "Site B": 232 residential uses, community uses / public library, offices, studio workshops and retail
- "Mulberry Park" 256 flats and 515sqm of B1 office space
- "Site C" 435 residential units, large floorplate retail unit and a number of smaller retail units
- "Site D" residential development (quantum not known)
- "Downton Road" 213 dwellings, 1425sqm health centre and community centre.
- "Site E" Mixed use development (quantum not known)

Site	Land use category	Size	PTAL	Number of site selected by TRAVL	Trip Rate IN (Daily)	Trip Rate OUT (Daily)
Arklow Road	Employment (Office)	24000 sqm	1 - 6	5	11.9	11.3
	Residential	200 units	1 - 6	6	4.2	4.0
Convoys Wharf	Employment (Office)	727000 sqm	2 - 6	8	7.7	7.1
	Residential	3514 units	2 - 6	7	1.9	1.8
Creekside Village West (LB Greenwich)	Employment (Office)	12815 sqm	2 - 3	6	4.1	4.0
	Residential	380 units	2 - 3	7	2.2	2.2
Creekside Village East	Employment (Office)	9000 sqm	1 - 2	5	11.2	10.7
	Residential	438 units	1 - 2	6	4.4	4.4
Lewisham College	Employment (Office)	3200 sqm	6	5	13.7	13.6
	Residential	21250 sqm	6	5	7.7	7.4
	College (non-residential)	40000 sqm	5 - 6	2	18.6	18.4
Sainsbury's	Residential	3605 sqm	5 - 6	3	8.6	8.5
	Student Accommodation (not confirmed)	12470 sqm	5 - 6	3	7.5	8.2
Seagar (permitted)	Employment (Office)	4697 sqm	5 - 6	5	12.0	11.9
	Residential (Affordable)	96 units	5 - 6	6	3.0	2.8
	Residential (Private)	214 units	5 - 6	6	3.0	2.8
Surrey Canal Road	Employment (Office)	44700 sqm	1 - 6	6	8.5	7.8
	Residential	2700 units	1 - 6	9	3.9	3.8
Grinstead Road	Employment (Office)	2800 sqm	5 - 6	6	15.5	15.4
	Residential	160 units	5 - 6	4	2.8	2.6
Plough Way (Cannon Wharf)	Employment (Office)	10000 sqm	4 - 6	5	13.4	12.8
	Residential	750 units	4 - 6	6	2.7	2.6
Oxestalls Road	Employment (Office)	17000 sqm	4 - 6	5	13.4	12.8
	Residential	950 units	4 - 6	6	5.5	5.2
Kent and Sun Wharves	Employment (Office)	8300 sqm	2 - 3	6	13.2	12.4
	Residential	300 units	2 - 3	6	5.8	5.7

Fig 6.8: Travel generation from 12 larger development sites coming forward. Source: Deptford and New Cross Masterplan and planning applications for the sites not included in the masterplan.

NB, this information should be treated as indicative, since changes may occur and other sites will come forward.

Further sites are also coming forward in Greenwich, as follows:

- Greenwich Reach--980 flats plus 6,000sqm employment
- 43-81 Greenwich High Road and 25-27 Greenwich High Road--240 flats, 9,400sqm employment and a 102 bed hotel
- Creek Road / Bardesley Lane--106 flats plus approx 2,500sqm employment.

6.2.3 Published sources of information

To reflect local conditions, a gravity process was established to determine the number of trips arising from forthcoming development.

Data has been derived from the following sources:

Focus on Personal Travel; Census 2001

The DfT publication 'Focus on Personal Travel' (2005) is designed to bring together information about personal travel in Great Britain and highlight some of the key issues. It draws mainly on data from the National Travel Survey but also uses some other sources to provide a broader perspective.

TRAVL Database

TRAVL is a trip generation and analysis database for London that contains a large number of traffic surveys of varying land use, accessibility and location. It is widely accepted as a robust standard tool for assessing the travel impact of a proposed development in London.

Trip rates for residential developments were obtained both for privately and publicly owned housing, office use, retail, and hotel use, and checked for consistency against existing individual site transport assessments.

In order to provide a representative sample of the study area, the several types of criteria were applied when interrogating the database.

Fig 6.8 sets out the list of sites together with land use categories, the number of comparator sites selected from TRAVL and the resultant trip rates. It is clear from the table that office and other employment uses have a far higher trip rate than residential development.

6.3 Travel Impact (Step 4)

6.3.1 General Impact

Trips generated by the development sites have been disaggregated by mode, as shown in Figure 6.9 below.

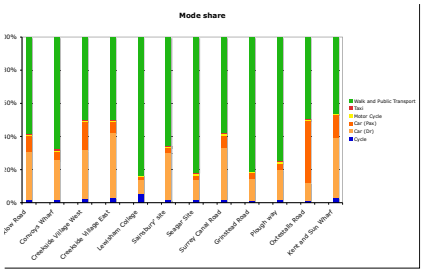


Fig. 6.9 Disaggregation of trips by mode

For each of the development sites, the proposed development quantum have been combined with trip rate data from TRAVL. The full analysis is shown in Appendix 1. For a few sites, walking data is included in the walking and public transport category.

To more precisely forecast combined travel generation, two major assumptions have been made.

1 Existing Traffic – the majority of the site already function in some shape or form. A 15% reduction to TRAVL trip rates has therefore been made.

2 Site Containment – the majority of the site are mixed use, meaning in practice there is scope to contain some trips on the site. A further 10% reduction has therefore been made to simulate this effect.

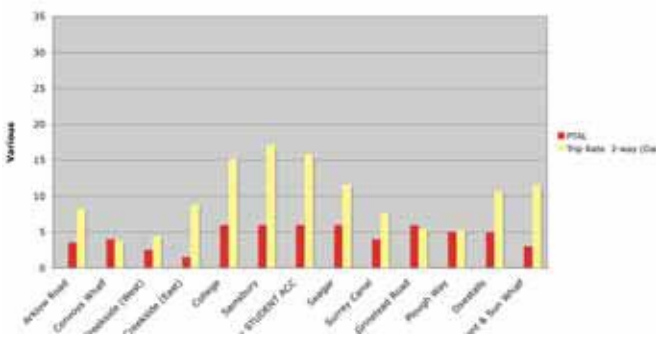


Fig 6.10a: TRAVL results, residential

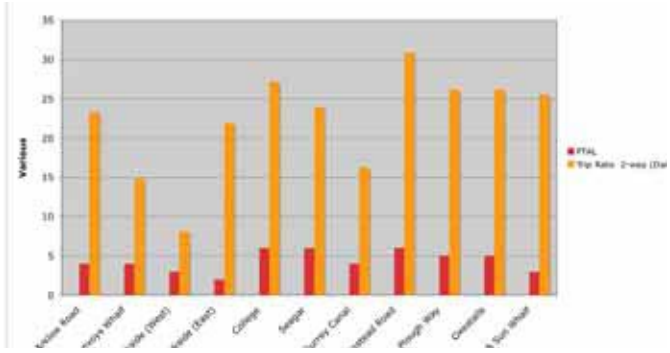


Fig 6.10b: TRAVL results, employment

In aggregate, the sites will produce some 67,727 arrivals and 63,684 departures daily, totally 131,411 daily trips. Of these, TRAVL suggests about 45% would access by public transport and 20% would be car (driver). These mode share from TRAVL are fairly similar to the derived mode share in Fig. 6.2.

6.3.2 Public Transport Impact

Of the circa 89,000 daily trips, TRAVL indicates that about circa 56,707 are by public transport or on foot. Using the modal breakdown from Step 1, the figures have been disaggregated into walking, rail and bus.

- Walking (as a sole mode) 43%, equating to 24,384 trips
- Rail 26%, equating to 14,744 daily trips
- Bus 31%, equating to 17,579 daily trips

This breakdown has been used as a basis for the public transport impact calculation. The spread of rail and bus services through the area increases or decreases the likelihood that individuals will use them based on the distance required to reach stations and bus stops. In order to control for this, the number of rail stations and bus stops within walking distance (rail: 960m and bus: 640m) from each site was established. The number of trips likely to be generated from each site was applied to each rail and bus stop.

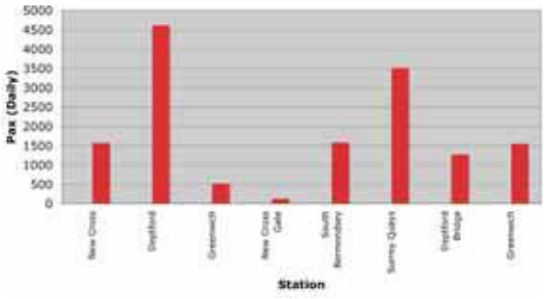


Fig 6.11 Two way rail boardings (daily)

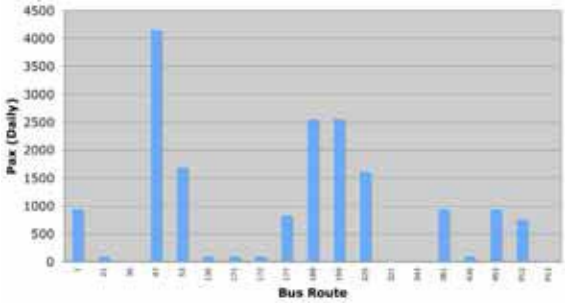


Fig 6.12 Two-way bus boardings (daily)

Figure 6.12 shows the derived daily loadings for current bus services. It should be noted that the impact shown would be spread across the length of the route through the study area; nevertheless the impact on some routes are very large, especially services 1, 47, 53, 177, 188, 199, 255, 381, 453 and P12. This equates to about half of the routes in the local area and all routes running along Evelyn Street, Rotherhithe New Road and Trundleys Road. These impact rates clearly warrant further study and consideration for new services or capacity upgrades.

A similar analysis has been undertaken for the various rail stations in the study area (Fig 6.11). Again there is fairly significant impact at key stations with significant impact arising at Deptford. The impacts of this order require further investigation.

6.3.3 Impact on rail passenger carrying capacity

Chapter 7 provides a summary of current conditions and investment plans set out in the South-East area Rail Utilisation Strategy (RUS, 2008). The RUS indicates that even with signficant investment to 2016, capacity for additional passengers on the rail network will continue to be a problem, albeit with the intensity of overcrowding at peak times being less. The greatest capacity opportunities exist on rail journeys going out of London in the morning peak, and returning in the evening (against the 'tide').

In the meantime, the East London Line will introduce new capacity to local networks, and there is potential for the Bakerloo Line to be expanded through the area, calling at Surrey Canal Road and Convoys Wharf.

6.3.4 Highway Impact

Increases in motorised traffic will have an impact on the capacity of the network. The Rotherhithe Multi Modal Study indicates that a 5% increase in motor traffic arising from proposed new development on the peninsula will add significantly to congestion, particularly around Rotherhithe Tunnel.

New development will produce a total 20,000 vehicle trips on the highway network each day. Typically about 10 – 12% of these would occur during each of the peak hours (0800 – 0900 and 1700 – 1800). The highest concentrations of these trips are shown indicatively in Figure 6.10, which can also be used to show the spread of trips within and beyond the study area.

The gravity model (Fig 6.6) shows in broad terms the destinations of all trips by all modes from the developments coming forward, derived from existing population data. Using electoral ward-level Census data, it is not possible to depict accurately journeys by destination from each site. However in a more detailed analysis, using smaller enumeration district data, a more accurate site-by-site picture would emerge—though this relies on the enumeration district having a sufficient resident population to give a reasonable prediction.

6.3.5 Detailed impacts-further work

Transport assessments have been carried out Convoys Wharf, the Saeger site, Cannon Wharf, Creekside East and West. Other sites are in the process of coming forward. Individual site transport assessments will add a level of detail to this strategic overview. A full multi-modal model may also be appropriate to determine in more detail the amount of travel generated by new development.

6.3.6 Network capacity opportunities

Public transport and street network capacity is going to be placed under increasing pressure as a result of new development.

Scope exists to provide for new journeys following the opening of both phases of the East London Line, and there is scope for the new Bakerloo Line to be constructed through the area. With enhanced bus priority and new routes (particularly routes serving east-west journeys), there may be scope for additional bus capacity.

- The greatest capacity enhancement opportunities may be found on the walking, cycling and riverbus networks.
- Bearing in mind that Central London is within easy cycling distance of the Deptford and New Cross area and can be reached quickly by bicycle, it makes sense to increase investment in facilitating more widespread use of this mode.
- Thames Clippers operate services every 20 minutes to Greenland Pier. The company has expressed initial interest in expanding their service subject to the provision of landing stages, indicating scope for significant service enhancement.

These opportunities have been translated into recommendations in Chapter 8 of this study.

07 Existing transport investment proposals

Deptford and New Cross are the subject of a number of regenerative proposals and programmes that indicate areas that the Council already considers to be a priority.

On this basis, the regenerative programmes and proposals outlined in this chapter have been discounted from further consideration in the priority matrix of public realm schemes set out in Chapter 08.

On the other hand, proposed routes and schemes appearing in the Deptford and New Cross Masterplan and North Lewisham Links and ongoing Transport for London programmes such as the London Cycle Network Plus are considered important contributors to the prioritisation of investment in particular links, and therefore form part of the project prioritisation method. For more information, see Chapter 08.

Fig. 7.1: Lewisham Links (with possible extensions identified for inclusion in this study) (source: North Lewisham Links)

7.1 Walking & Public Realm

7.1.1 North Lewisham Links Strategy

Longboard Consulting, The Landscape Partnership and HKR Architects were commissioned by the London Borough of Lewisham to prepare a strategy for improving pedestrian and cycling routes in the study area. The strategy takes forward the Masterplan's aspirations for a permeable, memorable and sustainable place with streets and open spaces that promote quality, beauty and diversity.

The strategy sets out priorities for investment in the links across the borough on the basis of a series of criteria setting out local need, strategic importance, delivery prospects and strategic 'fit'. Justification for the route network is set out as follows:

- Local need, based on localised access issues, such as routes to school and identified concerns, such as safety;
- Strategic importance, such as providing connectivity between public transport routes and nodes;
- Delivery prospects and timescales based on public sector development schemes such as NDC and BSF projects
- Strategic 'fit', taking into account related investments and identifying synergies between projects.

The Strategy identifies three priority routes for investment. These are:

1 Deptford to New Cross Gate,

2 The 'Western Connection', following the 2011 East London Line extension from Surrey Quays to Avonlea Road, and

3 High Street to Creek, for routes crossing Deptford Church Street, linking Deptford Creek with Deptford High Street and having a spine along Deptford Church Street.

A programme of investment in these three links covering the period to 2013 is given, with individual projects flagged for specific times. Other projects listed are:

- Central Deptford links: From Trundleys Road / Surrey Canal Road through Folkestone Gardens and east to Evelyn Street. Includes improvements under the railway and the Grinstead Road masterplan (Landscape Partnership proposals).
- Riverside links: Connections through the Oxestalls Road, Plough Way (following the old canal alignment) and Canons Wharf sites to the riverside, with spurs also leading to the river.
- Surrey Canal Road link: A straight east-west link along Surrey Canal from Ilderton Road to the Trundleys Road junction.
- Deptford Creek link: Following the route of the Waterlink Way proposals from Creek Road to Deptford Bridge.
- Deptford Park links: Alongside (using Grinstead Road) and through Deptford Park, and treatment of the junction with Oxestalls Road (a new gateway entrance to the park has been provided at this location)
- Thames Park links: A route through Convoys Wharf (which will require setting back from the protected deep water wharf).
- Links to New Cross and the south: along Kender Street and Besson Street (this is subject to a new masterplan being built out with changes to existing traffic management measures and implementation of a 'home zone').

The strategy also provides cost estimates for the delivery of the links and improvements, and identifies potential funding sources including developer contributions and TfL / DCLG funding to deliver its proposals.

7.1.2 Lewisham Local Implementation Plan

Chapter 3 of the Local Implementation Plan provides a summary of Lewisham's local walking strategy. The core principles set out in the document include promoting and improving conditions and safety for walking, making walking more convenient by improving facilities and ensuring that new development is walking-friendly, to integrate walking with other transport proposals, and to improve professional capacity for providing for walking.

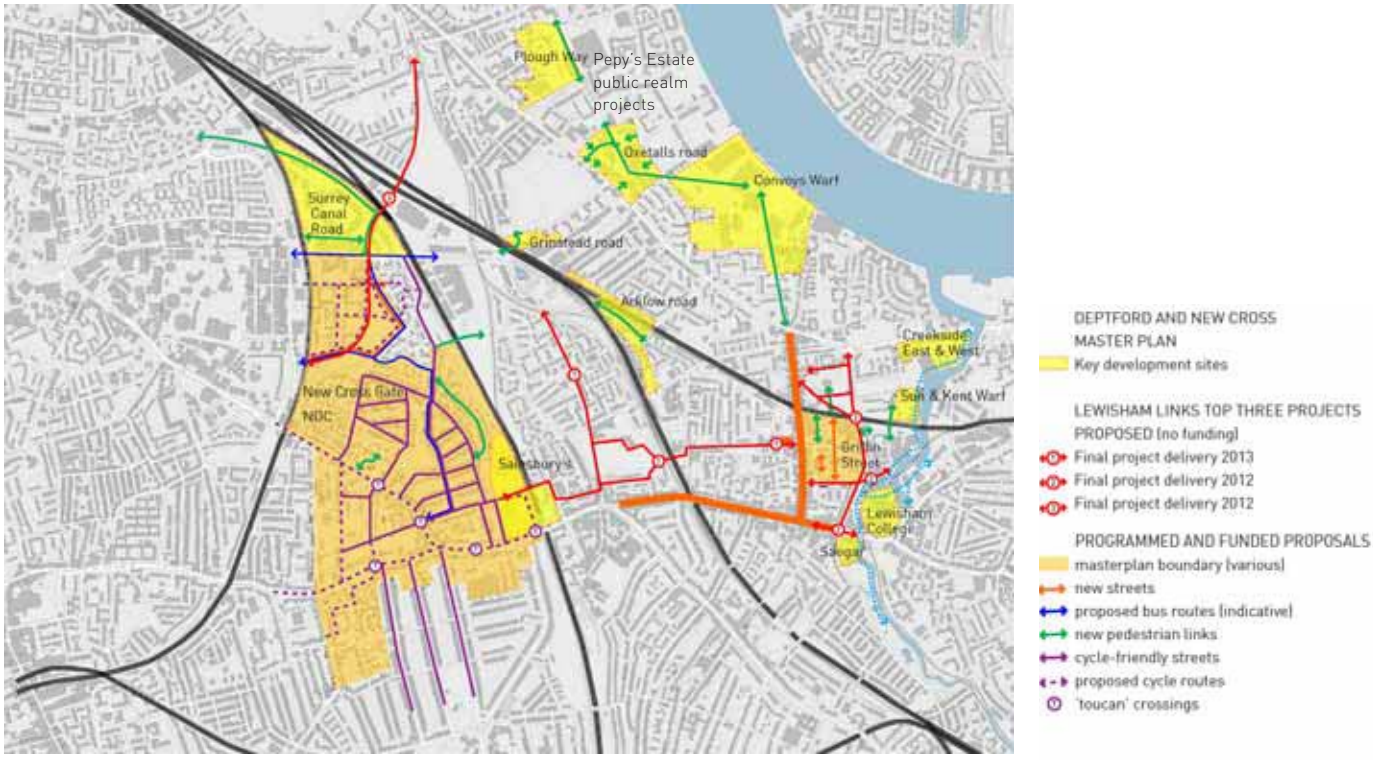


Fig. 7.2: Existing proposals

Fig. 7.3: Waterlink Way visualsiation
(Source: Halcrow for LB Lewisham)

Chapter 4 of the Local Implementation Plan sets out a commitment to amending signal junctions to give pedestrian phases, resurfacing footways (and carriageways), improving and extending the Thames Path and Green Chain walks, and improving access to bus stops.

7.1.3 Waterlink Way

The vision for Waterlink Way, set out in the draft Ravensbourne River Corridor Improvement Plan (Halcrow) identifies a number of transport improvements, including a new street and connecting spurs alongside Bridge House Meadows, walking links, a network of cycle-friendly streets, a number of Toucan Crossings and a new bus route.

Waterlink Way is part of the National Cycle Network (route 21), which follows the Rivers Ravensbourne and Pool towards New Addington. At the northern end the proposals specify the introduction of riverside paths and improved landscaping for shared use between pedestrians and cyclists. These paths may be provided as new development comes on stream; it will be important to ensure that an alignment is protected for this purpose. A bridge may be provided for pedestrians and cyclists at Deptford Bridge, providing a crossing of the major junction at this location.

7.1.4 East London Line

The new Phase 2 (Silwood Junction) chord will follow a former rail alignment that is currently used as a footpath and cycle way; TfL is committed to providing continued access alongside the line. It is not known whether they will fund the provision of a shared use path.

During Phase 1, a new rail flyover and footbridge will be constructed at the apex of Silwood Junction. The footbridge, connecting Trundleys Terrace with the Silwood Estate, will be DDA compliant and designed for shared pedestrian and cycle access.

7.1.5 Living Streets Walkability Study: Deptford

Living Streets were commissioned by the London Borough of Lewisham in 2003 to conduct a Community Street Audit for Deptford town centre. The audit sets out to identify where problems and opportunities exist for pedestrians and recommends works for improvement or remediation. Audits are undertaken with local stakeholders—these are individuals, members of local community groups and members of Living Streets.

The major problems it identified included poor crossings and traffic domination on Creek Road, Deptford Broadway and on Deptford Church Street, parking enforcement issues, areas of poor wheelchair accessibility and poor street maintenance.

The major recommendations contained in the report include a strategic approach to addressing key issues for pedestrians in Deptford, a shortlist of ten specific task based recommendations, and a long-list of detailed improvements.

7.1.6 New Cross Gate NDC Masterplan

New Cross Gate Masterplan (2004) was commissioned by the New Cross New Deal for Communities team and completed by Alan Baxter Associates, Urban Practitioners and CBRE. The plan seeks the creation of new streets and spaces to complete an urban grid for the area, against which its regeneration can take place.

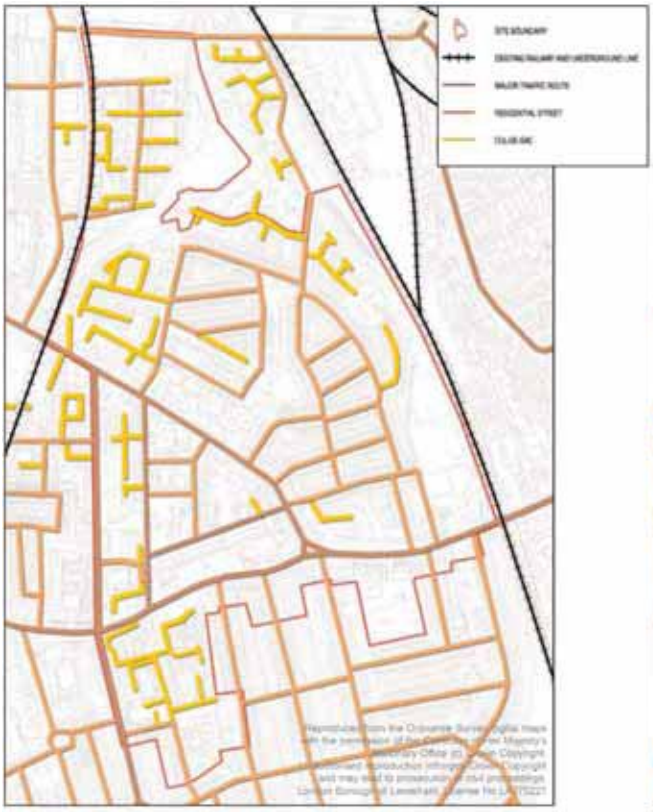


Fig. 7.4a: New Cross Gate NDC Masterplan (existing)

Fig. 7.4b: New Cross Gate NDC Masterplan (proposed connected street network)

The Masterplan provides a community led vision for the area bounded by the A202 Queens Road, Station Passage, Ilderton Road, Surrey Canal Road, Mercury Way and the railway line through New Cross Gate Station. Fig. 7.4a and 7.4b show the existing and proposed street network, demonstrating the proposal to improve connectivity, permeability and legibility.

7.1.7 New Cross Gate Streets for People scheme (EU bid in assocation with TfL proposals for Kender Triangle)

In June 2008, an exhibition was held to display proposals for the Kender Triangle, to the south west of the site. The flyer describes 'Streets for People' proposals in the area, part of which is the restoration of two-way working on the TLRN at this location, bringing Besson Street into the proposed zone. Funding is in place for most of the proposals, which have been designed from the perspective of achieving a 'child-friendly city'.

7.1.8 Giffin Street Masterplan

Giffin Street Masterplan was developed in response to the refurbishment of the Wavelengths leisure complex. It incorporates measures to introduce new streets and pedestrian links, public on and off street parking, a rejuvenated market area for Deptford and the redevelopment of some local authority housing. The site is bounded by, but does not include consideration of, Deptford High Street and Deptford Church Street; and it is situated to the south of the railway line. The plan does not respond to the presence of the London Cycle Network, though this is being addressed through other mechanisms.

Giffin Street Masterplan has links to the Deptford and New Cross town centre strategies. Both strategies seek to improve the economic performance of their town centre locations.

7.1.9 Deptford and New Cross town centre strategies

Deptford town centre strategy draws on proposals set out by EDAW for the provision of public realm improvements around activity focus areas. The area identified as the 'Heart of Deptford High Street' is partially covered by the Giffin Street Masterplan. An evening economy hub is identified to the north of the railway line, and public realm improvement nodes are identified at the southern end of the High Street (junction with the A2), the railway bridge and at the junction with Evelyn Street / Creek Road. The plan indicates an onward route via New King Street to Convoys Wharf, where a new 'heart' is envisaged.

New Cross town centre strategy notes the importance of marketing the town centre and the need to improve the public realm of the A2. The strategy focuses on forthcoming development by the New Cross NDC and potential new development on the retail park at New Cross Gate.

7.1.10 Deptford Station Access scheme

Proposals for improving the environment around Deptford Station, including restoring the coach ramp to provide step free access, are in progress. A Step-1 Area-based Scheme proposal has been submitted to Transport for London.

7.1.11 Surrey Canal Road – Grinstead Road Junction, Deptford: Movement and Feasibility Study

In March 2008, the Landscape Partnership was commissioned by Longboard Consulting on behalf of the London Borough of Lewisham to undertake a study of the Surrey Canal / Grinstead Road and Trundleys Road junction. The purpose of the study was to identify key problems and solutions to achieving an improved public realm.

7.1.12 North Deptford public realm projects

Lewisham Council is currently consulting on a range of public realm enhancements for an area north of Evelyn Road, which includes the Pepy's Estate and has been gathering local public opinion on the state of their neighbourhood. The results of the work conducted by IPSOS Mori and Urban Practitioners are presented in a report titled North Deptford Consultation, published in February 2009.

7.1.13 Lewisham Local Implementation Plan

The plan also sets out the Council's policies and proposals for cycling in the borough. Measures include the completion of the LCN+ by 2010, improving conditions for cycling and for providing cycle parking and cycle training. The LIP also states that all relevant schemes should be cycle-audited.

7.2 Cycling

7.2.1 Lewisham Cycling Strategy

Chapter 3 of Lewisham Local Implementation Plan (LIP) provides a summary of Lewisham's cycling strategy. The strategy builds on the Government's Saving Lives White Paper (including proposals for concerted action towards a healthy nation), the National Cycling Strategy (now superseded) and the London Cycling Action Plan. The actions arising from the plan are set out as policies and proposals in Chapter 4 of the LIP.

7.2.2 London Cycle Network Plus

London Cycle Network Plus is a 900km network of cycle routes serving London that is due for target completion by 2010. Lewisham's section of the network is substantially complete except at Surrey Canal Road and Evelyn Street, where the following measures are proposed:

- Surrey Canal Road: construction of a Toucan crossing at the junction of Surrey Canal Road and Trundleys Road. This proposal is subject to the outcome of studies deciding on capacity and road danger, because the Toucan is adjacent to a railway viaduct and overbridge.
- Evelyn Street: As part of the Parallel Initiatives and LCN+ programme, it is planned to tighten the geometries of priority junctions along the street and make necessary improvements to signalised junctions.
- Deptford Bridge: This is identified in the LCN+ Barriers Report as a barrier to completion. At present, an existing Toucan crossing has recently been re-opened following improvements to Deptford

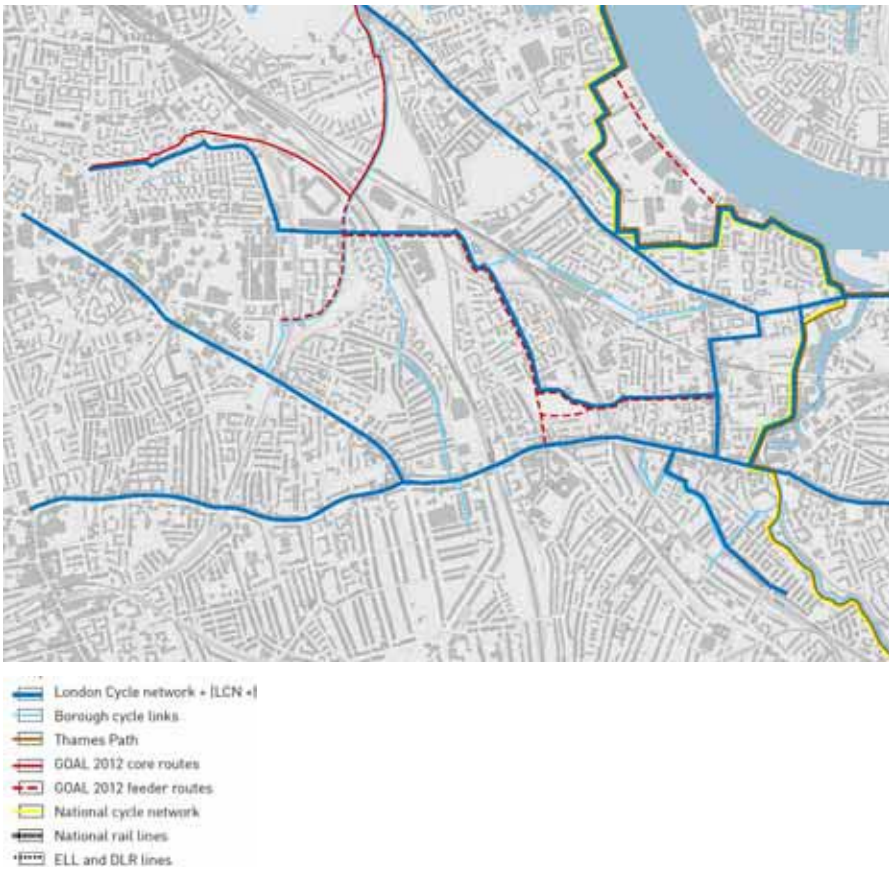


Fig. 7.5: Lewisham cycle network including LCN+ and GOAL

Bridge Station, allowing north-south journeys along the Waterlink Way (NCN route 21).

Following the publication of the 2009/10-2018/18 Business Plan, the future of the LCN+ is uncertain. First indications are that it will not, after all, continue to receive funding. Notwithstanding, in Lewisham, the LCN+ is substantially complete, and the remaining sections may be completed as part of the Mayor's proposed barriers funding and other sources such as Section 106. This does, however, rely on continued support from neighbouring boroughs to continue their work on this network.

7.2.3 LCN+ CRISP studies

A number of CRISP (Cycle Route Implementation Stakeholder Plans) studies were undertaken in the borough to assess the quality and completeness of the London Cycle Network Plus and to identify areas for investment. The CRISPs provide broadly detailed proposals to individual junction level, and are intended as a first stage towards detailed feasibility and design.

The CRISPs, once approved, are intended to inform the programme of works to complete the LCN+ by 2010.

7.2.4 Cycling 'Superhighways'

TfL's Business Plan makes a broad commitment to the delivery of proposals for 'superhighways' for cyclists. The Mayor is also seeking to prioritise cycles where there are large cycle flows and where cyclists need protection from motor traffic, the removal of smaller obstacles to cycling and providing more cycle parking.

7.2.5 GOAL routes and National Cycle Network

Sustrans have designed a network of cycle routes leading to a proposed new pedestrian and cycle bridge over the Thames at Rotherhithe, and ultimately to the Olympic Park. The core network enters the borough at Surrey Quays and follows the alignment of the forthcoming 2011 East London Line extension as far as the Millwall Stadium where it is proposed to follow a disused railway alignment into LB Southwark. A number of spurs feed into the core network, which correspond with the Deptford and New Cross Masterplan.

The National Cycle Network in Lewisham comprises routes 4 (following the Thames) and 21 (following the River Ravensbourne). Route 4 is one of the Millennium cycle routes, completed by 2000, however it requires investment to improve wayfinding and to straighten the route through Convoys Wharf. Route 21 is also complete, however further investment will take its route closer to Deptford Creek, on dedicated shared use cycle and pedestrian paths.

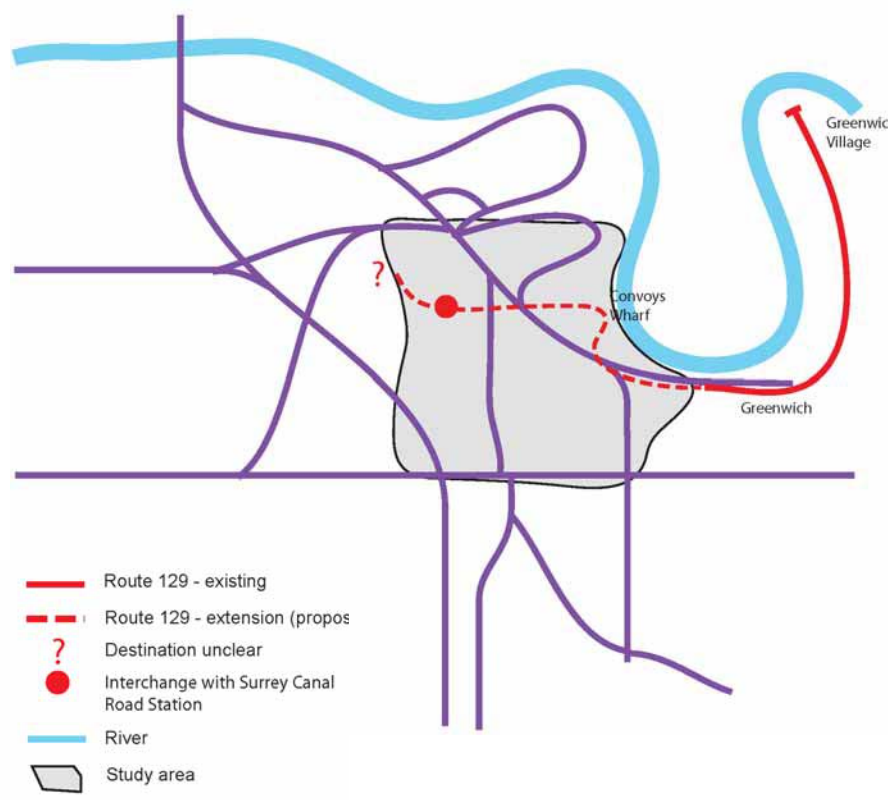
7.3 Bus

7.3.1 Route 129

Details of Route 129 appear in the Convoys Wharf transport assessment. The route currently runs from Greenwich Millennium Village to Greenwich town centre and is reportedly under-utilised. Proposals exist to extend the service towards Peckham via Surrey Canal Road and Rotherhithe New Road, using 10 vehicles rather than the four used at present. This arrangement would take the starting point for services closer to their Walworth garage, resulting in greater resource efficiency.

7.3.2 Possible circular bus services and service 199 re-routing—Convoys Wharf

The Convoys Wharf transport assessment suggests the re-routing of Service 199 and the provision of circular bus services, the routes for which are not determined. No mention is made of the potential for constructing a river transit service pier at Convoys Wharf: the feasibility of this will depend on the eventual use of the safeguarded deep-water wharf.0



Map 7.6 Proposed route 129 extension

7.3.3 Greenwich Waterfront Transit

Greenwich Waterfront Transit (GWT) is planned to operate from Abbey Wood to Greenwich Peninsula via Woolwich. Transport for London has carried out consultation on this route, which will make use of existing busway infrastructure and new bus priority measures. The London Borough of Greenwich is keen that the route should eventually be extended to and through Greenwich town centre ('Phase 2'), although proposals are not far advanced, and bus priority and bus-only routes would probably not be feasible within Greenwich town centre itself. At the time of writing, it seems unlikely that phase 2 will come forward in the medium term.

7.3.4 Lewisham Local Implementation Plan

Chapter 4 of Lewisham Local Implementation Plan identifies London Bus Priority Initiative routes, the first tranche of which include Evelyn Street, New Cross Road and Deptford Church Street within the study area—these were completed in 2003 and include three flagship routes incorporating whole route priority measures. In addition to priority measures, the Council is also implementing bus stop accessibility schemes to assist disabled passengers.

7.4 Rail

7.4.1 Existing proposals

Rail related issues have been discussed in a number of contextual documents, however the main 'driver' of change is the amount of capacity that is likely to be available on the rail network as patronage increases. Capacity for passenger travel is particularly important in London since some 40% of journeys in the capital are made using public transport (including rail and Underground travel) compared with 37% of trips being made by car (Source: Transport 2025, mode share data 2005).

7.4.2 South London Rail Utilisation Strategy (RUS)—South East (March 2008)

South London RUS represents part of Network Rail's wider investment strategy. The document highlights ways in which overcrowding can be tackled in the context of a growing railway, especially in the south east of London. Since the RUS was published, the Government White Paper, 'Delivering a Sustainable Railway' has incorporated a High Level Output Specification for the Thameslink programme—which influenced the RUS in the expectation that the schemes would go ahead.

The RUS demonstrates that the trends for rail travel have increased substantially over recent years. For example, Southern's busiest Sydenham and Norbury lines have experienced a 40% growth in passengers over the ten years to March 2008, and in some instances, overcrowding on trains has reached a point where people are physically unable to board some peak trains at certain stations.

Changes arising from the RUS are set out in the plan, as follows:

- Thameslink's imminent (and now continuing) construction will result in infrastructure changes at London Bridge and Blackfriars, eventually bringing new journey opportunities. The expected implementation of these changes will be early 2009.
- The East London Line will open, extending services to West Croydon and Crystal palace, resulting in the need for major timetable changes.
- New timetable changes from 2009 may result in additional overcrowding on some sections.
- In the longer term, the RUS recommends a programme of train and platform lengthening to accommodate 10-12 car trains.
- 2016 is likely to mark the end of National rail infrastructure investment in south east London in the longer term.

Chapter 6 of the RUS outlines the strategy for the short term, focusing on the significant timetable changes needed in the area from December 2009, which will occur in conjunction with the implementation of domestic high speed services into St Pancras and the reversal of Southeastern's franchise commitment to reduce service frequency and thereby capacity on its routes to Charing Cross. In summary, in the short term passengers will experience significant changes in train timetables with current levels of service broadly maintained, with some areas seeing significant improvement.

The following schemes were committed before the development of the RUS analysis:

- The East London Railway to West Croydon and Crystal Palace will result in a complete revision of the Southern timetable in order to accommodate the additional capacity and journey opportunities;
- Blackfriars Platforms 1-3 will be closed from Spring 2009, to allow for infrastructure enhancement. This will mean that there will be no terminating platforms at Blackfriars, so all peak commuter trains will have to continue northwards, requiring additional rolling stock. Terminating platforms will not be available until 2011.
- Southeastern's timetable commitments, affecting services between Sydenham and London Bridge.
- Overall timetable frequencies to 2010 are illustrated on the accompanying map.
- The limitations of the 2008 and 2010 timetable are illustrated on the accompanying map

Chapter 7 describes the recommended strategy for providing capacity needed to cope with existing and future levels of demand until 2012. The main focus of this is the need for infrastructure investment and rolling stock to enable longer trains to operate, together with the completion of the first stage of Thameslink. Train lengthening works will need to be substantially complete until the commencement of Thameslink construction works at London Bridge.

2008 Capacity Utilisation and Frequencies

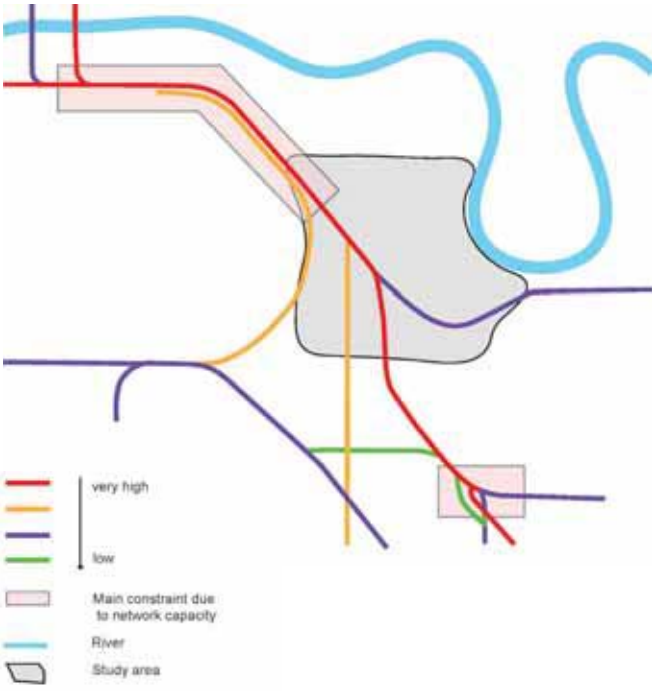


Fig 7.7: Network Capacity Utilisation. The RUS states that existing rail network utilisation uses up most of the existing capacity on the network. Emphasis is given to lengthening trains and adding limited new rail infrastructure including a rail flyover at a location between South Bermondsey and London Bridge.

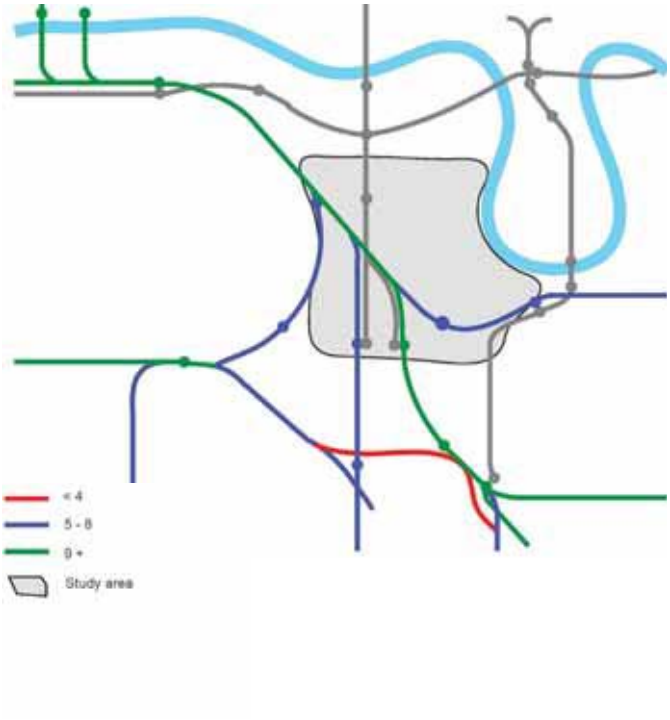


Fig. 7.8: 2008 frequencies

2010+ Capacity Utilisation and Frequencies

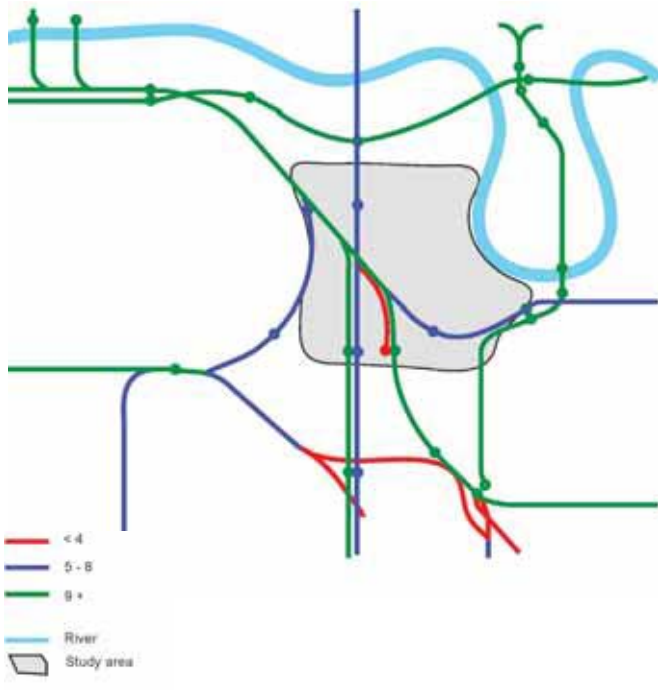


Fig 7.9 Frequencies in 2010. The East London Line extension will bring a significant increase in service frequency north-south between New Cross Gate and Croydon. Its eventual extension towards Clapham Junction (subject to programming and funding), may result in the closure of South Bermondsey Station or reduced frequencies, if Surrey Canal Station is built. The RUS is clear that this will bring capacity increases into London Bridge, whilst passengers will be able to use the East London Line to reach the City.

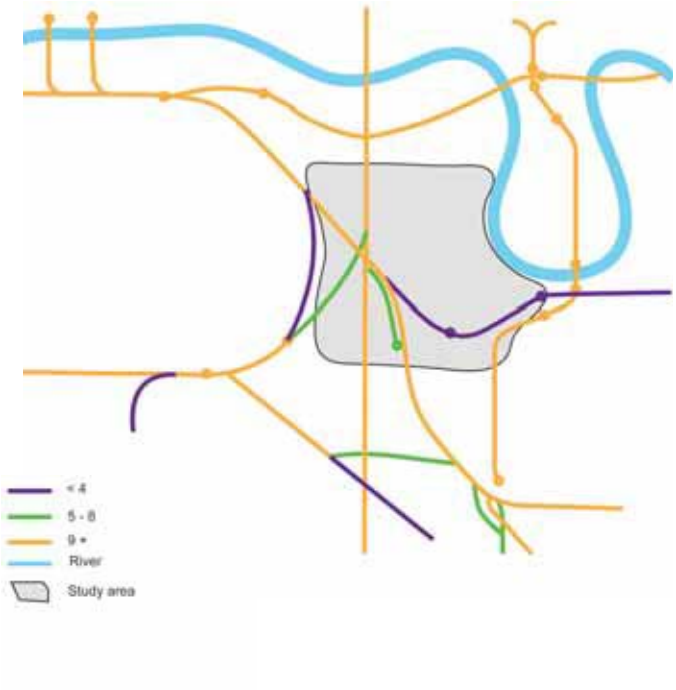


Fig 7.10: Frequencies in 2015. The completed East London Line extension running towards Clapham Junction and the completion of Thameslink will bring further frequency changes. Much of the improvement will be accommodated through the diversion of Kent express commuter services towards St Pancras.

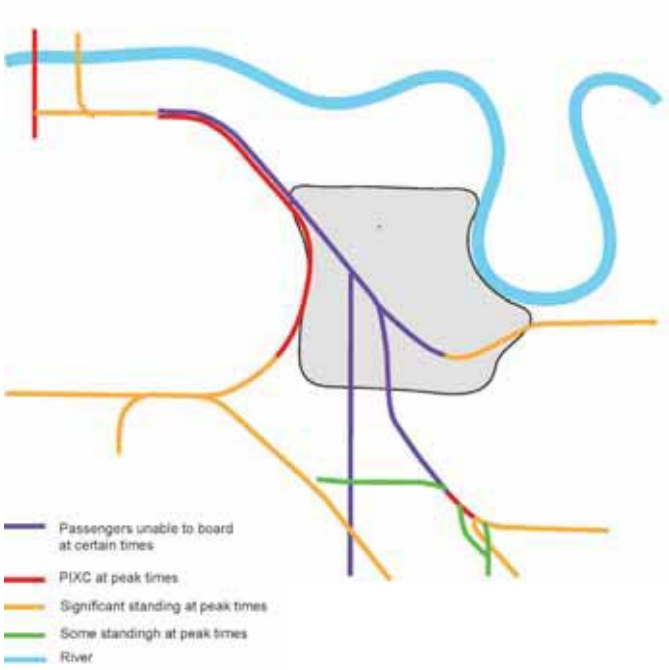


Fig 7.11 Crowding in 2008. The RUS is intended to relieve crowding and accommodate new demand for rail travel. The current situation is that in the morning peak passengers are unable to board trains running north of Lewisham, Deptford and New Cross Gate. ('PIXC'='Passenger numbers in excess of capacity')

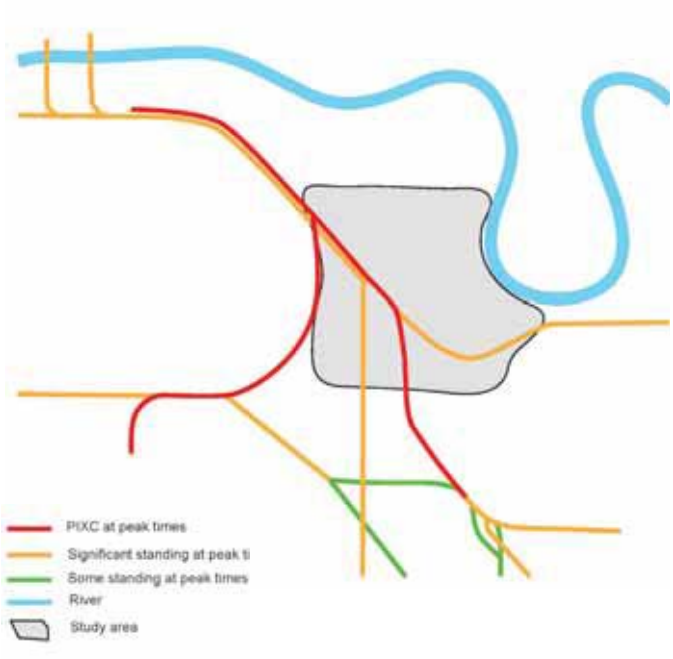


Fig 7.12 Following investment, crowding is still anticipated to exceed the capacity of services at peak times. However, the situation will be less intense, and the East London Line will add significantly to the available rail network. It should be noted that the period of 'standee discomfort' will be limited to the 15 minutes-or-so that it takes to travel between Lewisham and London Bridge. ('PIXC'='Passenger numbers in excess of capacity')

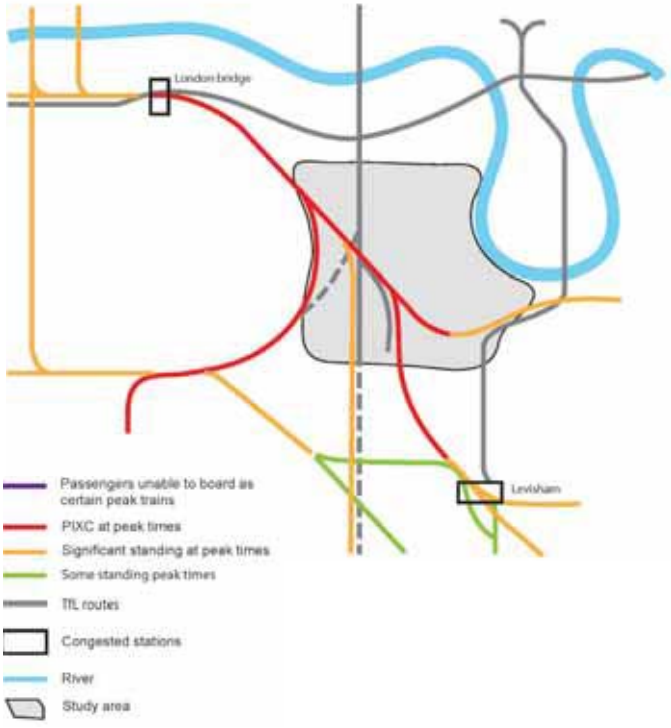


Fig.7.13 Following investment in Thameslink, crowding will remain, however the rail network will be accommodating a much larger number of passengers on more, and longer, trains. ('PIXC'='Passenger numbers in excess of capacity')

From 2011, the major remodelling works at Farringdon and Blackfriars will be complete, allowing all stations on the Thameslink route to accommodate 12-car trains at higher frequencies to and north of London Bridge. At the same time, network capacity will be increased to allow additional services to operate, giving a capacity of 16 trains per hour through the core network.

During construction of the Thameslink infrastructure, it will be essential to maintain commuter flows at London Bridge. This will be a major challenge affecting the RUS over the next ten years. RUS Chapter 8 describes how this may be achieved, although the strategy remains a work in progress.

On a more local level, both New Cross and New Cross Gate will receive investment to achieve step-free access from the street to their platforms.

Chapter 8 sets out medium term schemes—concentrating on the construction works at London Bridge, where the railway and station will be remodelled to cater for the implementation of Thameslink. The remodelled station will comprise nine through and six terminating platforms.

Grade separation of tracks will also take place in the Bermondsey area and additional capacity will be constructed at Lewisham.

The construction phasing will be designed to ensure that during the Olympics in 2012, the amount of passenger capacity will be sufficient to cater for the projected additional demand.

The RUS anticipates that capacity will need to be maintained as far as possible given the amount of crowding on peak services into London Bridge and

Proposed Improvements – General RUS Strategy

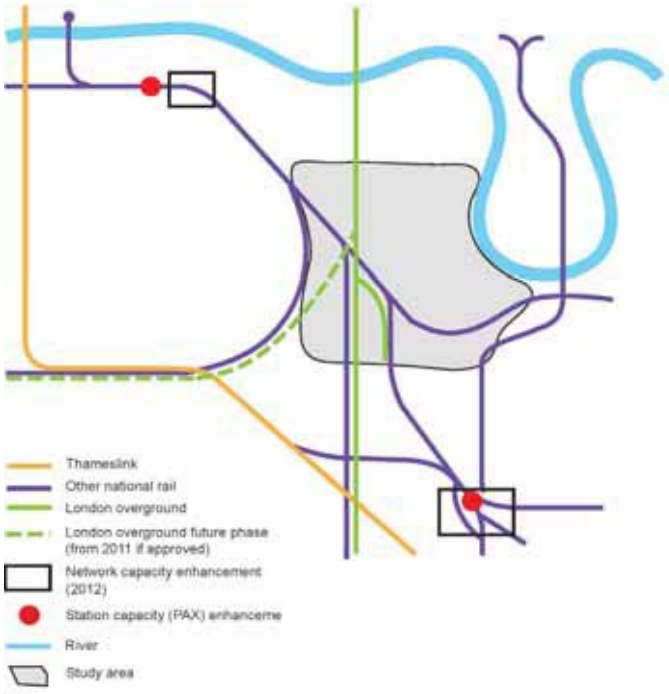


Fig 7.14 By 2010, the East London Line will be open between Dalston Junction and West Croydon. Passenger waiting capacity will have been improved at Lewisham and London Bridge, and a new rail flyover will have been constructed to utilise spare capacity between South Bermondsey and London Bridge.

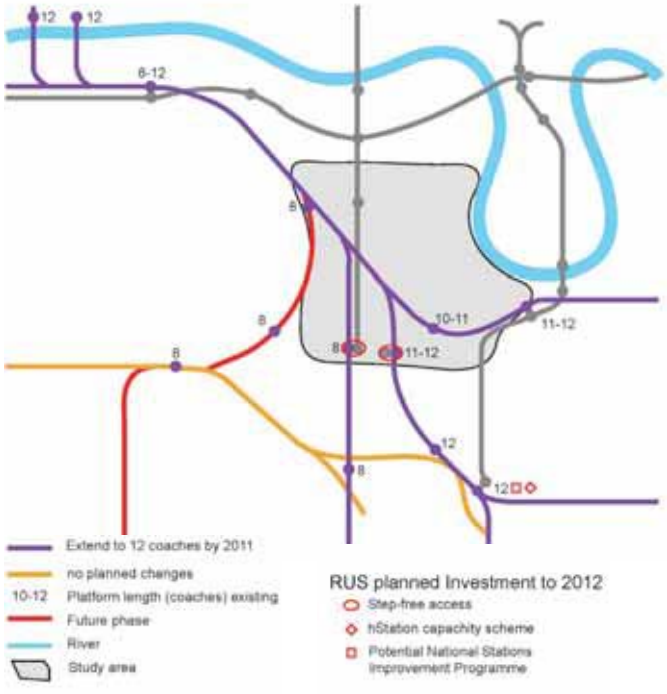


Fig 7.15 By 2012, significant increases will have been made to station capacity, enabling more stations to accommodate 12-car trains. More services will be operating with longer trains.

projected passenger growth. A 'work in progress' strategy is being developed which involves the potential for achieving train and platform lengthening in advance of the works and some reduction in frequencies.

RUS Chapter 9 describes the indicative peak train service strategy within the RUS area, showing likely peak crowding levels based on investment having been made until 2019. Longer-term strategies and a mechanism for implementing the recommendations of the RUS are set out in Chapters 10 and 11 of the document.

7.4.3 TfL Response to South London Rail Utilisation Strategy

In its response to the South London RUS, Transport for London states its support for the strategy and sets out its own programme for rail improvements, as follows:

- TfL will deliver a significant improvement in rail service provision by June 2010, with Phase 1 of the East London Line opening following the conversion of track and stations to National Rail infrastructure standards. This will produce higher service frequencies on the Sydenham corridor, with trains formed of new rolling stock having a greater capacity than existing LUL stock.
- TfL will become the franchise operator for the North London Line and the East London Railway from November 2007. These routes are collectively known as the London Overground.

Agreement has recently been reached between TfL and the Department for Transport (DfT) on the further extension of the Overground from Surrey Quays to Clapham.

7.4.4 East London Railway: Strategy including East London Line Extension Phase 2.

The East London Line and Docklands Light Railway (DLR) are provided, indirectly, via Transport for London. The Transport for London Business Plan 2009/10 sets out an ongoing strategy for delivering a 50% increase in capacity on the DLR, by adding one carriage to each train and extending platforms, and the completion of Phase 1 of the East London Railway.

The plan also anticipates the introduction of Oyster Pay as you Go readers at all National Rail and Overground stations in Greater London.

For the purposes of maintaining consistency with the current RUS until it is revised, however, this study assumes that Phase 2 will eventually be built under a future new iteration of the business plan. However, the study's recommendations do not take into account the eventual existence of the station; instead, it simply recommends, that the Council lobbies for the link to be completed and a new station to be provided.

The East London Railway (ELL) between New Cross and West Croydon, and Dalston Junction is due to open in 2010. New track and heavy-rail rolling stock will be installed where required. In phase 1, New Cross station will be served by four trains per hour, and New Cross Gate by eight trains per hour. The service frequency on the line south of New Cross Gate will be complemented by a further six trains per hour serving Victoria, London Bridge and stations to the south of New Cross Gate.

In phase 2, four trains per hour will operate between Surrey Quays Station and Clapham Junction. The construction of this phase, which has already been facilitated by a new flyover at Silwood Junction, is dependent upon a funding gap being bridged. At the time of writing (December 2008). A new station, either operational or passive, may be constructed at Surrey Canal Road. A passive station (foundations and levels ready for buildings and platforms) will be prepared ready for future station construction.

The RUS states that the existing shuttle from London Bridge to Victoria will be removed to provide additional track capacity between South Bermondsey and London Bridge. All other services will remain in operation. Journeys on the little-used shuttle will transfer to the East London Line Extension.

The resultant service frequency in each direction from Surrey Quays northwards will be 12 trains per hour in phase 1 and 16 trains per hour following the completion of phase 2.

On completion, the line will become part of TfL's London Overground franchise, with responsibility for the track taken on by Network Rail, and stations operated by TfL.

The line will bring 300 jobs and significant improvements in the number of train services in the study area. In the first phase, a new link to West Croydon will be formed, with an intermediate stop at New Cross Gate and a spur to New Cross. In 2011, it is proposed that the line will be extended in a further phase, using an existing Transport and Works Act, from Surrey Quays to Clapham Junction with a new chord connecting the East London Line with the line to Peckham.

7.4.5 Station improvements

New Cross Gate and New Cross stations will be improved, in the first phase of Network Rail's Access for All programme, with step-free access. Proposals exist at New Cross Gate for modifying the station entrance to provide more space for pedestrians on the footway outside and for providing step-free access from the street to all platforms. This work will involve demolishing the existing Victorian station entrance and reproviding it further back from the existing narrow footway, giving in effect a station square and an opportunity to resolve the existing traffic bottleneck. .

Access to Deptford station will be improved as a result of funding for a Station Access Area Based Scheme. A staged application is underway, led by Deptford's town centre management.

7.5 Investing in Lewisham's borough network for general motor traffic

7.5.1 Local Streets

Lewisham Council's policy focus is upon reducing demand for travel by promoting local activity (mixed use development). For necessary travel, the Council's approach is to increase the efficiency of the network by distributing travel demand across the modes, and in particular towards the modes that have the greatest potential capacity. In doing so, the amount of congestion on the network may be controlled. Traffic management entails:

- Managing congestion by balancing capacity with restraints;
- Managing parking supply (which determines demand) by introducing controls on parking, particularly around stations and other major public transport interchanges, and capping parking standards.
- Reallocating carriageway space to buses and pedal cycles, to encourage more widespread use of these modes
- Increasing the convenience and practicability of walking and cycling so that the number of short car trips can be reduced.

7.5.2 Existing proposals

Lewisham Local Implementation Plan, Chapter 4

Lewisham Local Implementation Plan recognises that it is not financially or physically possible to build sufficient new roads to accommodate an expansion in the volume of motor traffic; nonetheless, even with investment in the sustainable modes, the car will continue to play an important role in the area. Reduced congestion will benefit necessary car trips.

LIP proposals focus on reducing car dependency by introducing car clubs and other initiatives, such as Liftshare, which encourages car sharing, and car-free development. The LIP mentions and responds to the Mayor's proposals for limited capacity increases, focussed primarily on key junctions along the TLRN. The Council's response (Proposal 4G.20) is an overall plan not to increase capacity for motor traffic—its priority instead is to increase accessibility for people on foot, cycle and bus—indeed, a conscious decision has been made to 'increase' general traffic bottlenecks in order to provide for additional bus priority measures.

However, the LIP commits the borough to adhering to the 'parallel initiatives' concept (proposal 4G.6), where borough strategic roads are given similar bus priority, parking and loading restrictions and other treatments to those found on red routes. Since red routes are designed to maximise capacity for motor traffic, it is not clear how Lewisham proposes to tackle the policy paradox of car restraint with capacity maximisation. Task 5 incorporates recommendations for how this paradox might be resolved.

Parallel Initiatives and powers of the London Borough of Lewisham under the Traffic Management Act 2004, with respect to the Strategic Road Network

Evelyn Street is identified as part of the Strategic Road Network as designated under the Traffic Management (Strategic Roads in Greater London) Designation Order 2005 (SI 2005, no.476. Section 301A of the Highways Act 1980 and Section 121B of the Traffic Regulation Act 1984 impose restrictions on the exercise of London Borough councils of powers that would also affect GLA roads.

The GLA is, however, not responsible for delivering investment on the strategic road network—subject to the restrictions, the London Borough of Lewisham may apply for funding for parallel initiatives to deliver schemes that further the purposes of the strategic road network, namely to achieve the expeditious management and movement of 'traffic'—which in principle includes pedestrians, cyclists and public transport users.

The Strategic Road Network incorporates some scope for improving public realm, but the rigid application of other standards may restrict the extent to which measures can include the carriageway.

Improvements may also be possible for the existing bus priority measures. These include the selective widening of bus lanes, additional sections of bus lane where there are gaps and the provision of measures to improve cyclist safety.

The street is also part of the LCN+. Several junctions have been treated with measures to tighten corner radii; a few others remain to be treated. Other junctions are signalised, and will receive advance stop lines as necessary.

Fig.7.16 Kender Triangle restoration of two way working and 20mph 'Home Zone'

Parking and enforcement plan—controlled parking zones

There are no proposed or existing CPZs in North Lewisham. Evelyn Street may, however, receive parking controls as part of the development of parallel initiatives, which include bus priority measures. The review of parking facilities along the 'parallel' routes will take into account the needs of disabled drivers and businesses.

New Cross Gate: Kender Triangle Streets for People proposals

The proposals for Kender Triangle are to restore two-way working on the Besson Street / Queens Road / Old Kent Road gyratory. The object here is to tackle the dominance of motor traffic and to reduce the number of busy through streets in the area, whilst reducing the complexity of cycled and public transport journeys and reducing road danger.

7.6 Schemes beyond the study area boundary

7.6.1 Existing proposals

Rotherhithe peninsula MMS and Investing in Rotherhithe's Public Realm

Rotherhithe Multi-modal study was commissioned by Transport for London and LB Southwark and undertaken by Mouchel. It concludes that the amount of traffic congestion will increase over time, particularly if new development goes ahead. A number of interventions are suggested in order to relieve capacity with a focus on junctions along Lower Road.

Investing in Rotherhithe's Public Realm was commissioned by LB Southwark and completed by URBED and The Landscape Partnership in 2006. It sets out a range of projects that seek to enhance the permeability and public realm of the peninsula for pedestrians and cyclists, identifying in the process a number of new nodes including Greenland Pier. The report also mentions Sustrans pedestrian and cycle bridge proposals, which are linked with GOAL2012 proposals.

This programme is taken forward in Southwark's Local Implementation Plan. Proposal 013 sets out costed proposals for new and improved pedestrian links between Greenland Dock, Canada Water and Surrey Quays.

7.6.2 Thames river ferry services

Thames Clippers' potential expansion

Thames river bus services are operated by Thames Clippers, and call regularly at Greenland Pier, in the north of the study area. Convoys Wharf is a proposed 3,514 dwelling plus employment / commercial development. The London Borough of Lewisham has suggested that the provision of a new pier could be part of the development's transport strategy—the ferry operator, Thames Clippers has indicated an initial interest in building its service with developer contributions and seed funding. The suggested service involves providing an 'express' river bus link calling at Greenwich, Convoys Wharf (or Greenland) and Canary Wharf, with a 'stopping' shuttle service calling at Greenwich, Masthouse, Convoys, Greenland and Canary Wharf.

Potential developers of Oxestalls Road have expressed a keen interest in promoting the use of river bus services to provide commuter links across the Thames. Thames Clippers already provide such as service—from Masthouse Pier to Canary Wharf Pier (short crossing, every ten minutes) and from Greenland Pier to Canary Wharf crossing (long diagonal service, every twenty minutes). The developer envisages that pedal cycles could be carried on the ferries at an additional half-fare, or deposit-paid cycle lockers could be provided, complemented by Velib-style cycle hire at Canary Wharf Pier, allowing for cycle-assisted journeys that would enable the ferries to widen their catchments.

Again, Thames Clippers are open to suggestions of what type of service could be provided. They take the view that, subject to investment in suitable piers, roll-on-roll-off bicycle and pedestrian ferries could provide an alternative to building a bridge over the river: the company would provide the ferries in return for the piers.

Assuming all of the development sites coming forward are developed as envisaged, the total number of dwellings and population could give an increase of over 8,000 dwellings in the study area, and a further 1,700 in Rotherhithe Peninsula. The distribution of these individuals by mode from ward to ward is illustrated in Task 4, which gives an indication of the potential increase in passengers arising for the ferry services.

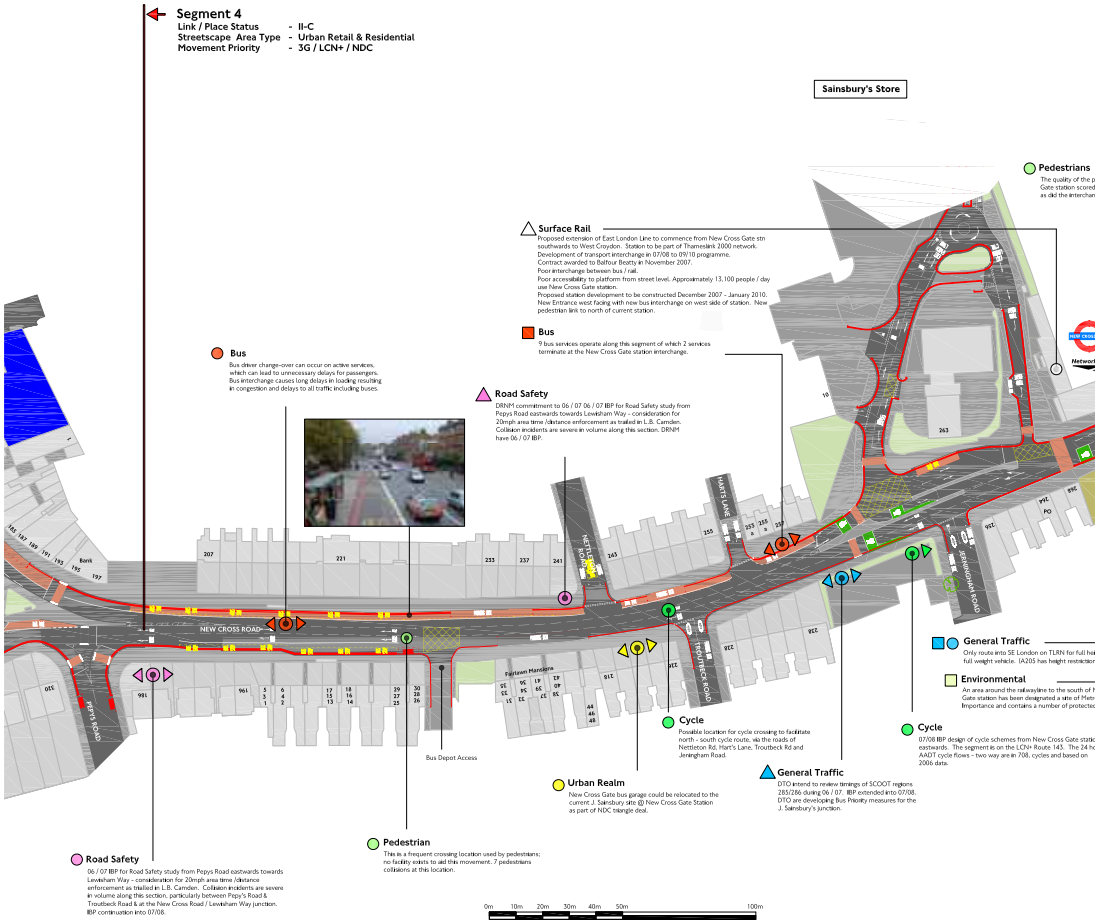
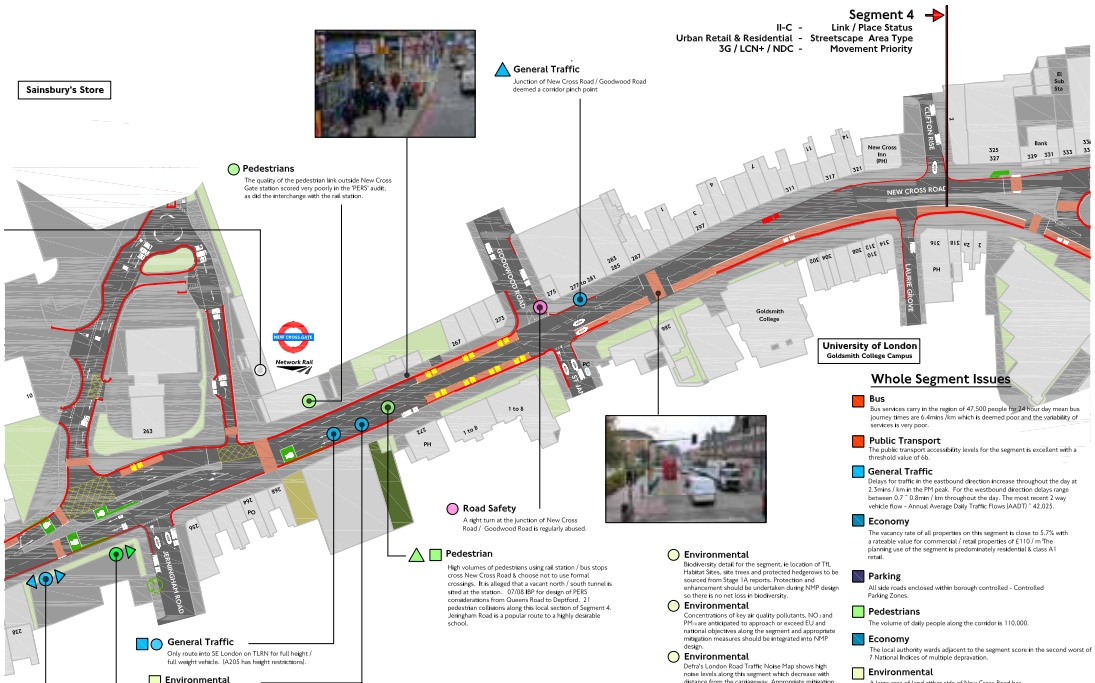
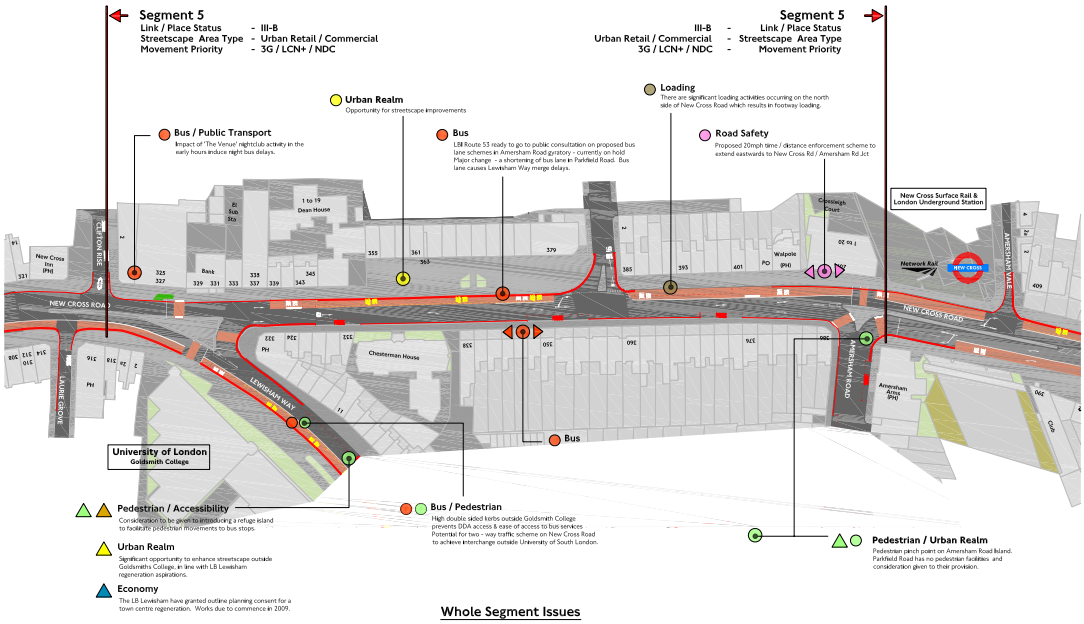


Fig. 7.17: TLRN proposals segments


Segment 4
II-C - Link / Place Status
Urban Retail & Residential - Streetscape Area Type
3G / LCN+ / NDC - Movement Priority
Sainsbury's Store
General Traffic
Junction of New Cross Road / Goodwood Road deemed a corridor pinch point
Pedestrians
The quality of the pedestrian link outside New Cross Gate station scored very poorly in the 'PERS' audit, as did the interchange with the rail station.
NEW CROSS ROAD
GOODWOOD ROAD
LAURIE GROVE
CLIFTON RISE
JERNINGHAM ROAD
Goldsmith College
University of London
Goldsmith College Campus
Network Rail
Road Safety
A right turn at the junction of New Cross Road / Goodwood Road is regularly abused.
Pedestrian
High volumes of pedestrians using rail station / bus stops cross New Cross Road & choose not to use formal crossings. It is alleged that a vacant north / south tunnel is sited at the station. 07/08 IBP for design of PERS considerations from Queens Road to Deptford. 21 pedestrian collisions along this local section of Segment 4. Jerningham Road is a popular route to a highly desirable school.
General Traffic
Only route into SE London on TLRN for full height / full weight vehicle. (A205 has height restrictions).
Environmental
An area around the railway/line to the south of New Cross Gate station has been designated a site of Metropolitan Importance and contains a number of protected species.
Cycle
07/08 IBP design of cycle schemes from New Cross Gate station eastwards. The segment is on the LCN+ Route 143. The 24 hour AADT cycle flows - two way are in 708, cycles and based on 2006 data.
ral Traffic
end to review timings of SCOOT regions
during 06 / 07. IBP extended into 07/08.
developing Bus Priority measures for the
ury's Junction.
Environmental
Biodiversity detail for the segment, ie location of TfL Habitat Sites, late trees and protected hedgerows to be sourced from Stage 1A reports. Protection and enhancement should be undertaken during NMP design so there is no net loss in biodiversity.
Environmental
Concentrations of key air quality pollutants, NO2 and PM10 are anticipated to approach or exceed EU and national objectives along the segment and appropriate mitigation measures should be integrated into NMP design.
Environmental
Defra's London Road Traffic Noise Map shows high noise levels along this segment which decrease with distance from the carriageway. Appropriate mitigation measures should be integrated into NMP design.
Whole Segment Issues
Bus
Bus services carry in the region of 47,500 people the 24 Hour day mean bus journey times are 6.4mins /km which is deemed poor and the variability of services is very poor.
Public Transport
The public transport accessibility levels for the segment is excellent with a threshold value of 6b.
General Traffic
Delays for traffic in the eastbound direction increase throughout the day at 2.5mins / km in the PM peak. For the westbound direction delays range between 0.7 ~ 0.8min / km throughout the day. The most recent 2 way vehicle flow - Annual Average Daily Traffic Flows (AADT) ~ 42,025.
Economy
The vacancy rate of all properties on this segment is close to 5.7% with a rateable value for commercial / retail properties of £110 / m The planning use of the segment is predominately residential & class A1 retail.
Parking
All side roads enclosed within borough controlled - Controlled Parking Zones.
Pedestrians
The volume of daily people along the corridor is 110,000.
Economy
The local authority wards adjacent to the segment score in the second worst of 7 National Indices of multiple depravation.
Environmental
A large area of land either side of New Cross Road has been designated a Conservation Area.
Economy / Environmental / Urban Realm
The LB Lewisham are developing strategies to significantly regenerate Deptford north of New Cross Road. An aspiration is to develop a parallel route north of the A2 which involves the construction of a new footbridge as part of the New Cross Gate station development. There is a night time crime problem in the area which affects the desire of the community to become vibrantly involved.
Cycle
The expansion of the bus lane and cycle lane network is desirable along with the mandatory introduction of advanced cycle stop lines on all traffic signal controlled junctions.
Urban Realm
Streetscape of segment 4 is poor with narrow and cluttered footways, particularly west of the old Deptford Town Hall (now Goldsmiths College).
Legend
Building
Gardens
Footpaths
Carriageway
Grass Verge
Note Categories
Information Notes
Issues Occurring
Opportunities evolving into action
Issues and Opportunities
Bus / Public Transport
Urban Realm
General Traffic
Environmental
Pedestrian
Cycle
Accessibility
Freight & Servicing
Road Safety
Economy
Loading
Parking
Assets Renewal
Borough
New Cross
Blackheath
A2 Network Management Plan
New Cross Road (Billington Road To Laurie Grove)
Drawing No.
Segment 4
Date
May '07
Checked
PMH
Drawn by
DSB
Scale
1:1000



Legend

- Building
- Gardens
- Footpaths
- Carriageway
- Grass Verge

Note Categories

- Information Notes
- Issues Occurring
- Opportunities evolving into action

Issues and Opportunities

- Bus / Public Transport
- Urban Realm
- General Traffic
- Environmental
- Pedestrian
- Cycle
- Accessibility
- Freight & Servicing
- Road Safety
- Economy
- Loading
- Parking
- Assets Renewal

Whole Segment Issues

General Traffic
2007 / 2008 IBP Program to introduce 2 way working, gyratory along with review on traffic signal / SCOOT. Efficiency improvements: Westbound delays are relatively constant throughout the working day at 0.7 ~ 1.1 mins / km. In the eastbound direction delays increase as the day progresses form 0.8 ~ 3.1 mins / km.

Cycle
2007 / 2008 IBP Programme to develop cycle CRDP designs study from New Cross Road to Deptford

Buses
Daily people movement on buses is 59,000 in 24hr day. Expected bus journey times are 5.7min / km which is poor as is the variability of journey time.

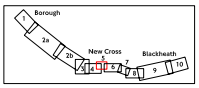
Economy / Environmental / Urban Realm
The LB Lewisham are developing strategies to significantly regenerate Deptford north of New Cross Road. An aspiration is to develop a parallel walking / cycle route to enhance sustainable permeability.

Cycle
The expansion of the bus lane and cycle lane network is desirable along with the mandatory introduction of advanced cycle stop lines on all traffic signal controlled junctions.

Environment
Biodiversity detail for the segment, ie location of TfL Habitat Sites, site trees and protected hedgerows to be sourced from Stage 1A reports. Protection and enhancement should be undertaken during NMP design so there is no net loss in biodiversity.

Environment
Concentrations of key air quality pollutants, NO_2 and PM_{10} are anticipated to approach or exceed EU and national objectives along the segment and appropriate mitigation measures should be integrated into NMP design.

Environment
Defra's London Road Traffic Noise Map shows high noise levels along this segment which decrease with distance from the carriageway. Appropriate mitigation measures should be integrated into NMP design.



A2 Network Management Plan

New Cross Road (laurie Grove To Amerham Road)

Drawing No.	Segment 5
Date	May '07
Checked	PMH
Drawn by	DSB
Scale	1:1000

Segment 5 has been reviewed by: TfL Strategy / DRNP – LRSU / Walking / Accessibility / Flagship A13 / DRNO / Environment / DRNP / Congestion Charging / TPCO / TfL Strategic Freight / LB Lewisham / Land Use Planning / London Rail / DTO - LTC / DRNO Urban Design

General Traffic / Bus
Traffic undertake illegal right turn manoeuvres into Watson's Street. R33 Flagship project has developed a traffic signal control involving Watson Street and Florence Road. Modelling predicts and improvement to existing situation.

Cycles
Request to modify layout of New Cross Road / New Cross Gate stn. to facilitate improved cycle flows. 07/08 Development from CRISP study.

Surface Rail / London Underground
Station to be part of Thameslink 2000 Network and East London Line. Typical daily pedestrian activity 10,700. No new surface proposals being developed by London Rail.

Cycle / Pedestrians
Possible cycle crossing location to facilitate North - South cycles routes. A facility would also benefit rail users.

Assets Renewal
No BIP has been raised, but there is a DRND wish to introduce traffic signal control to the New Cross Rd / Florence Rd jct.

General Traffic
Florence Road - Watson Street used as an alternative Rotherithe Tunnel traffic route.

General Traffic
Consideration for a bus lay-by to be constructed on east side of Tanners Hill junction - TFED to monitor left turn violations at Tanners Hill junction and report.

Legend

- Building
- Gardens
- Footpaths
- Carriageway
- Grass Verge

Note Categories

- Information Notes
- Issues Occurring
- Opportunities evolving into action

Issues and Opportunities

- Bus / Public Transport
- Urban Realm
- General Traffic
- Environmental
- Pedestrian
- Cycle
- Accessibility
- Freight & Servicing
- Road Safety
- Economy
- Loading
- Parking
- Assets Renewal

Whole Segment Issues

Buses
Bus services carry in the region of 25,700 people for 24 hour day. Bus journey times are 1.7min / km which is deemed poor. The reliability sereitcs is deemed average. TfL's Bus Priority Unit are keen to promote the closure of selective side road junctions to reduce delays to services.

Public Transport
The public transport accessibility levels for the segment is excellent with a threshold value of 6a.

General Traffic
Delays for traffic in the eastbound direction increase throughout the day to a peak of 3.8mins / km in the westbound direction the interpeak and PM peak realise the greatest delay of 2.3 min / km.

General Traffic
Route 53 VISSM Model from Brookmill Road eastwards being developed for PM peak only at present.

Economy
The vacancy rate of all properties on this segment is 8.5% and ca rateable value of properties of £57 / m. The major planning use is A1 Retail and C3 Residential.

Parking / Loading
The mean loading bay occupancy is 32% with a peak use of one bay at 80% during operational hours. 59% of all commercial property have access to an on-street parking facility.

Pedestrian
The quality of pedestrian crossing facilities is deemed good and better than the adjacent segments.

Road Safety
The whole segment is a 'Road Safety High Severity' location with accidents involving vert / dark / pedestrians / KSI / right turns / overtaking identified as problem issues.

Environmental
An area around the railway line to the south of New Cross Station and the Ravensbourne River (Deptford Bridge) have both been designated as sites of Borough Importance. An area around Deptford High Street and Tanner's Hill has been designated a Conservation Area.

Cycle
The expansion of the bus lane and cycle lane network is desirable along with the mandatory introduction of advanced cycle stop lines on all traffic signal controlled junctions.

Urban Realm
Pedestrian signing along corridor is poor.

Environment
Biodiversity detail for the segment, ie location of TfL Habitat Skins, site trees and protected hedgerows to be sourced from Stage 1A reports. Protection and enhancement should be undertaken during NMP design as there is no net loss in biodiversity.

Environment
Concentrations of key air quality pollutants, NO i and PM10 are anticipated to approach or exceed EU and national objectives along the segment and appropriate mitigation measures should be integrated into NMP design.

Environment
Defra's London Road Traffic Noise Map shows high noise levels along this segment which decrease with distance from the carriageway. Appropriate mitigation measures should be integrated into NMP design.

Segment 6

II-C - Link / Place Status
Urban Retail / Commercial / Residential - Streetscape Area Type
3G / LCN+ - Movement Priority

Urban Realm / Economy / Environmental
Deptford Church Street is deemed as a critical route by the LB Lewisham who consider it the gateway to the redevelopment of Deptford / Canary Wharf to wish to enhance it's place status.

Pedestrian
Road closed for Deptford Street Market. High volumes of pedestrians Wed / Fri / Sat.

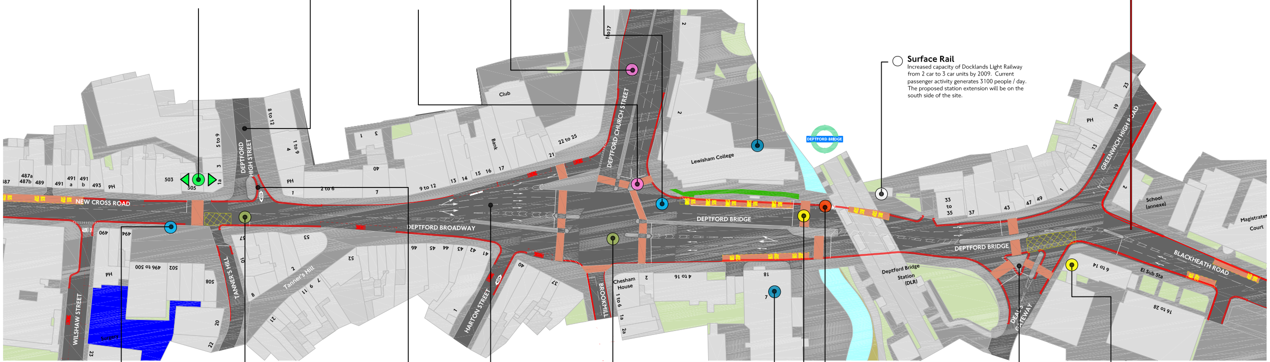
Cycles
Request to modify layout of New Cross Road / New Cross Gate stn to facilitate improved cycle flows. 07/08 Development from CRISP study.

Road Safety
Deptford Church Street / Deptford Bridge High Street Junction accidents. High severity location.

General Traffic
Significant right turn movements into Deptford Church Street due to HGV prohibitions on A200.

Economy
Convey's Wharf and Deals Gateway residential development will introduce more people movement into the Deptford Bridge area. A significant £16m regeneration project.

Surface Rail
Increased capacity of Docklands Light Railway from 2 car to 3 car units by 2009. Current passenger activity generates 3100 people / day. The proposed station extension will be on the south side of the site.



General Traffic
Consideration for a bus lay-by to be constructed on east side of Tanners Hill junction - TPED to monitor left turn violations at Tanners Hill junction and report.

Assets Renewal
DRND 06 / 07 IBP to expand width of Pelican crossing by Tanners Hill. IBP in 07/08 programme for detailed design. As footway is narrow, congestion occurs as pedestrians stand and wait to cross.

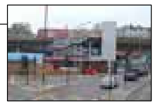
Assets Renewal / Road Safety
DRND 06/07 IBP design solution for Deptford Bridge / Deptford Church Street Junction. LBI Route 53 design is developed for Brookmill Road. Works planned for 2007 / 08.

Bus
3 Phase Route 53 Flagship developments, including a buildout on the north side bus stand / inset / & relocation of loading box to Greenwich High Road. At Deals 'Gateway' Junction detailed design for improved right turn lane.

Urban Realm / General Traffic / Economy
700 property residential housing development under construction at Deal's Gateway. At time of development south east corner not modified due to perceived high utility works - seen as a missed opportunity.

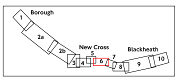
Urban Realm
Urban designers consider Deptford too wide and needs to be narrowed. Junction provides too many islands. Is footway cycle track needed?

Economy
The LB Lewisham have granted planning consent for a 26 storey residential development at the current brewery site. A footbridge to the station is a part of the consent.



A2 Network Management Plan

New Cross Road (Amersham Road To Deal's Gateway)



STREETS

Drawing No.	Segment 6
Date	May '07
Checked	PMH
Drawn by	DSB
Scale	1:1000

Segment 7 has been reviewed by TfL Strategy / DRNP - LRSU / Walking / Accessibility / CCE /Flagship R53 / DRND / Environment / DRNM / Congestion Charging / TPED / TfL Strategy Freight / London Borough of Lewisham / London Rail / DTO - UTC / Land Use Planning

A2 - Segment 4 (II-C)								
Theme	**EF Score**	**EF Priority**	**Problem**	**Source**	**Diagnosis**	**Comments**	**Proposed Measure**	**Measure Ref**
Road Safety	1	83%	Critical Road Safety	EF	With the exception of the area around Troutbeck Rd the entire segment is deemed to have a critical road safety record. Reoccurring accidents on this segment are those involving pedestrians and overtaking vehciles.		Segment-wide accident/ speed reduction strategy	S4-01
			Pedestrian safety	PA	Passengers changing buses near bus depot cross 4 traffic lanes as there is no formal crossing facility	Kender St Major Project	Staggered pelican as part of S3 proposals. Addition pedestrian refuges for improved accessibility	S4-01
Buses	3	54%	Very poor bus journey time variability	EF	Very poor bus journey time variability and bus journey time is poor. Bus stop provision is good.	9 bus services use this segment	Extension of bus lanes as part of development. Increased bus stop capacity outside station. Gating of A20 traffic in Segment 5	S4-06 S5-11
			Bus delays	PA	Driver changes occur at the stop near the bus depot delaying services		Improved bus infrastructure to mitigate effect of driver change-overs	S4-05
Environment	3	40%	Poor air quality	EF	NOx, PM10, CO2, and noise are all rated as poor. At a strategic level this area is a Heritage Conservation area.		Gating of traffic in Segment 5	S5-11
Cycling	3.6	35%	Poor quality of cycle route provision	EF	Quality of cycling surface is rated as critical, possibly due to poor maintenance or utility work. ASL provision is poor. Cycle route infrastructure is rated as good due to lengths of bus lane.		Introduction of parallel route to the north. ASL's and lead-in lanes to be provided as part of Sainsburys development	S4-04 S4-06
Accessibility	3	33%	Critical bus stop accessibility	EF	1/2 crossings is DDA compliant, 1/4 bus stops has acceptable kerb height		DDA compliance at all bus stops and crossings	S4-02 S4-03
			Severance	PA	Wide carriageway with high traffic flows causes severance issues		Reduction of vehicle speeds. Narrower traffic lanes and hatched median strip with pedestrian refuges. Introduction of additional crossing [illegible] bus	S4-01 S4-06
Pedestrians	3.3	31%	Poor condition of pedestrian environment	EF	Streetscape Guidance compliance and street name plate provision is rated as very poor. Signage index is rated as poor		Improved pedestrian signage as part of Legible London initiative	S4-06
			Pedestrian accessibility	PA	Narrow footways in some areas, particularly outside New Cross Gate Station		Wider footways as part of Sainsburys development	S4-06
Urban realm	3.5	27%	Poor Urban realm	EF	All urban realm indicators score average or poor. Large part of segment is conservation area, Grade II listed buildings abutting corridor		Urban realm as part of Sainsburys development	S4-06
Freight	5.2	25%	Average journey time	EF	Journey time delay is deemed excellent but journey time is deemed average. This segment has some of the highest vehicle flows on the corridor and much of the segment has two traffic lanes in each direction.		Gating of general traffic in Segment 5	S5-11
General Traffic	5.2	22%	Average journey time	EF	Journey time delay is deemed excellent but journey time is deemed average. This segment has some of the highest vehicle flows on the corridor and much of the segment has two traffic lanes in each direction.		None	
			Traffic pinch point	PA	The bridge at New Cross Gate Station is a known pinch point and is also a strategically important crossing of the railway line		None	
			Turning manoeuvres	PA	Illegal right turns into/out of Goodwood Rd are a safety concern		None	
Parking	4	20%	Parking violations	EF	Average parking violations, nearly all PCN's issued are for parking outside of designated boxes	All side roads are in Lewisham CPZ	None	
Loading	6	7%	Loading violations	EF	Very good loading violations, only 2 PCN's issues over a 6-month period		None	

Fig. 7.18: TLRN Asset Management summary

08 Investment Priorities

Local and strategic public realm improvement recommendations are set out in this chapter. A sieving exercise has been undertaken to determine priority projects, based on a scoring table that takes into account each of the survey stages and other considerations, such as the presence of future development, local community services and existing projects that require future funding for completion. The priority matrix confirms the importance of the Deptford and New Cross Masterplan and North Lewisham Links document.

Beyond the public realm, a series of recommendations are incorporated for improving cycling, public transport and general traffic links, in response to the likely increase in travel demand established in Chapter 6. Proposals include new bus routes, a new riverbus pier, station access improvements and parking and traffic management.

Some of the recommendations in this chapter should be reflected in the Section 106 Supplementary Planning Guidance document and in current or imminent negotiations.

8.1 Recommendations: Public Realm

8.1.1 Public realm roject prioritisation method

Investment priorities that will be of most benefit to pedestrians and cyclists (including for trips to public transport) have been identified through a dual 'sieving' process, culminating in a single spreadsheet (summarised in Fig. 8.1) giving a series of priority projects to deliver the core public realm improvement network for Deptford and New Cross.

Area analysis and scoring

The quality of accessibility study involved an extensive walked audit of streets and key pedestrian and cycle specific links in the study area, as described in Chapter 5 (Quality of Accessibility). The results of the audit are recorded in summary on a plan (Fig. 5.5) with route segments colour coded by performance.

From this, the next step was the creation of a spreadsheet with a list of streets marked orange or red on the summary audit map. The list excludes those streets that fall within areas of proposed, programmed or funded investment (see Chapter 7), and streets that are outside the borough boundary.

Along the top line, a list of key considerations and themes ('items') applying to each segment was given, with a score for each. The scoring system was simple: each 'item' has a score ranked in order of considered importance. Where 'items' have a similar level of importance, the same score was given. Where 'items' stand alone (without comparators, for example "not a road", they are automatically given the median score of the largest range. The full spreadsheet is in Appendix 2.

Desktop analysis

The desktop analysis set out to confirm the site visit analysis and bring additional links on board for scoring in the matrix. It entailed the bringing together of a variety of linear proposals across the whole network into a sieve map that, in combination, showed the relative importance of various segments based on the number of initiatives, and introducing new matters including road danger and visibility.

The considerations included a selection of key linking routes connecting town centres and major trip attractors. The matrix (stages 1 and 2) was used to test these links. The effect of this work was to raise the score of important routes that would otherwise not have 'made it' to the shortlist of priority projects (those scoring above 15 in the matrix).

The completed map is not exhaustive. Forthcoming development proposals may bring forward a number of potential schemes that fall outside of the sieving process.

Recommendations from prioritisation matrix: mapping priority schemes

Fig.8.1 summarises the priority schemes identified through the process of site visits and sieve mapping outlined above. Details of potential opportunities are given in the table, with a broad indication of potential sources of funding. Appendix 2 provides more detailed information.

		Total Score		Funding Opportunities	Opportunity: schemes, for example area based, walking, cycling, 20mph, school travel plans, maintenance.	Scope of costs (approximate)
	Score applied	Score	Deficiencies identified (scored less than 1)--see section 5.1 for details			
	Streets and ranges of streets based on seven priority action areas			**NB:** LCN+ funding has been reduced and will no longer be in place after 2009/10		
	Deptford Church Street	27	Activity, public realm quality, accessibility	LCN+ (to 2009/10 only), S106; extension of existing regeneration projects e.g. Giffin Street Masterplan.	Major public realm improvement including DDA, reducing general traffic to one lane in each direction, implementing 4.5m bus and cycle lanes in each direction, modifying central reservation to provide informal crossings, reduce speed limit to 20mph. Any new development should heal street frontage.	Costs require detailed feasibility.
	Bestwood Street	22	Activity, Accessibility, public realm quality		Treat as part of restoration of two way working. Infrastructure is in good repair, though improvements to public realm quality could be considered. Activity would be enhanced through new frontage development.	Cost of restoration of two way working requires detailed feasibility.
	Surrey Canal Road	22	Activity, Accessibility, Public realm quality	LCN+ (to 2009/10 only); S106	Carriageway will be lowered as part of ELLX Stage 2, so focus of opportunities is on landscaping and improving the public realm of the footway (former towing path) as a shared use foot/cycle path. LCN+ opportunities to implement Toucan crossings at either end (on Ilderton Road and Trundleys Road) and to treat the junction of Surrey Canal Road and Landmann Way to reduce vehicle turning speeds. Replace and increase lighting. Future development should provide active frontages.	General landscaping and environmental improvement £150k to include some footway resurfacing; Toucan crossing (new) £70k, Speed reducing features at Trundleys Road and Landmann Way £150k, provide all-green pedestrian crossing phase with toucan, £70k. Lighting within existing or new PFI contract.
	Pedestrian route between Trundleys Road and Fordham Park	21	Activity, forward visibility, public realm quality	LCN+ (to 2009/10 only) Housing Regeneration	Provide lowered kerbs for side streets. Remove visibility obstructions through new high quality landscape design. Minor improvements to pedestrian and cycle crossing of Edward Street (remove guard rail and other obstructions), raised speed table at crossing. Estate regeneration will need to result in more active frontages and activity on the street.	Lowered kerbs and tactiles, double yellow lines £20k. Speed table and removal of obstructions £25k.
	East London Line adjacent pedestrian and cycle route	20	Activity, forward visibility	LCN+ (to 2009/10 only), GOAL 2012; ELLX	Provide metalled surface and lighting.	Metalled surface £100k, lighting within existing or new PFI contract.
	Creekside (north of railway)	19	Activity, public realm	LCN+ (to 2009/10 only), S.106	Widen footways, reduce carriageway width. Tree planting, landscaping, rationalisation of car parking into inset bays. Other public realm improvements, sinusoidal humps. New development should provide animation to street frontage.	Costs require detailed feasibility.
	Evelyn Street between Deptford High Street and Deptford Church Street	18	Activity, accessibility, public realm quality	LCN+ (to 2009/10 only), S106 (especially for signal junction)	Major public realm improvement programme entailing lane rationalisation, footway widening, new signal junction at northern end of Deptford High Street to incorporate toucan crossing phase, assistance to cyclists turning right.	Costs require detailed feasibility.
	Edward Street	18	Activity, forward visibility, accessibility, public realm quality		Widen footways under bridges by forming shared spaces, minor footway and carriageway repairs, environmental enhancements e.g. tree planting. Safe routes to school measures including footway extensions and traffic calming. New development should increase active frontage.	Footway widening--allow £100k for targeted improvements, speed tables at junctions £20k each, sinusoidal humps £10k each.
	Trundleys Road south of Surrey Canal Road	15	Activity, accessibility	s.106, revenue.	Resurfacing, widen footways especially on residential side, remove centre and other lining, install sinusoidal humps, remove (most) guard rail, review bus stop positions and provide accessibility measures.	Widen footways £200k, plane and resurface carriageway £250k. Sinusoidal humps £10k each, bus stop accessibility £10k each stop.
	Grinstead Road	14	Activity, accessibility	S106	Footway and carriageway maintenance, sinusoidal humps. New development should enhance street frontage, especially at Trundleys Road end.	Footway maintenance £200k, sinusoidal humps £10k each, patching and apply gravel top dressing, no lining replacement £20k.
	Housing estate south of Windlass Place	14	Activity, forward visibility,	Housing Regeneration	Bring footways to shared use pedestrian / cycle access standard. Remove excess guard rail and fencing, renew lighting	Widen footways £50k, lighting via existing or new PFI contract
Key links in New Cross Links Strategy with community faciities but not scoring 'red' or [illegible]	**Hatcham Park Road, Batavia Road, Achiles Street and Douglas Way between Fordham Park and Deptford High Street. Includes underpass at New Cross rail station.**	22	Three links: Activity.	LCN+ (to 2009/10 only), s.106, housing regeneration projects and revenue	Resurface footway sections where necessary, introduce improved lighting where necessary, and introduce regular activities (e.g. markets) and public realm / landscaping schemes. New development should enhance active frontage.	Costs require detailed feasibility. Scheme being implemented as funding becomes available.
Lower priority and other key links (not scored)	**Trundleys Terrace and bridge**	0	Accessibility	TfL London Rail	Public realm improvements associated with new pedestrian and cycle bridge	Costs require detailed feasibility. Basic level of service: footway replacement £50k, carriageway resurfacing £50k
	Creekside south of railway	0	Activity, accessibility	LCN+ (to 2009/10 only), s.106 and revenue	Widen footways, reduce carriageway width. Tree planting, landscaping, rationalisation of car parking into inset bays. Other public realm improvements, sinusoidal humps. New development should provide animated frontage.	Costs require detailed feasibility.
	Riverside link along New King Street	0	Activity, Accessibility, public realm quality		Major public realm improvement to strengthen pedestrian link between Deptford High Street and Convoys Wharf.	Costs require detailed feasibility.
	Riverside link from Grove street	0	Accessibility	Revenue	Improve access for all--lowered kerbs, selected application of tactile paving.	Lowered kerbs £5k per set.
Bridges	**Bridge at Trundleys Road / Surrey Canal Road / Grinstead Road junction**	20	Lighting, activity, forward visibility, accessibility, public realm quality	Network Rail / s.106 Grinstead Road Masterplan	Promote Grinstead Road site development and masterplan.	S.106 / planning conditions
	Bridge by SELCHP on ELL 2011 extension	18	Lighting, activity, forward visibility, accessibility, public realm quality	Network Rail / ELLX phase 2	This should be improved as part of ELLX	£10k for cleaning and lighting.
	Bridge at Deptford Church Street	16	Activity, public realm quality	Network Rail / s.106	Cleaning and minor public realm improvements including lighting	£10k for cleaning and lighting.
	Bridge at Edward Street (north)	15	Lighting, activity, accessibility, public realm quality	Network Rail / s.106	Provide lighting, repair and widen footways, ideally to 2.0m standard	PFI lighting contract. Allow £20k for footway widening.
	Bridge at Edward Street (south)	15	Lighting, activity, accessibility, public realm quality	Network Rail / s.106	Provide lighting, repair and widen footways, ideally to 2.0m standard	PFI lighting contract. Allow £20k for footway widening.
(dark orange)	links scoring 20 or higher			(light green)	Other important links	
(light orange)	links scoring between 15 and 19			(light blue)	links connecting to riverfront	

Fig. 8.1: Ranked schemes, opportunities, funding

On most of the routes, funding sources are intuitive: funding may either already exist (for example remaining funds to be directed to the LCN+) or is likely to come forward from developer contributions. This may need to be topped up with funding from other TfL sources, under the new Borough LIP APR bidding headings, and borough sources, such as revenue-funded local street maintenance.

Areas around stations should be considered for potential funding under TfL's Area-based schemes funding pot.

8.1.2 Quick wins and placemaking

In addition to the matrix, it is recommended that an analysis is carried out of potential 'quick wins', for example, localised footway widening and decluttering to improve accessibility.

At appropriate locations,it may also be desirable to introduce new 'places', to transform focal points including local shopping parades, potential urban squares, and junctions. New focal points may also be established within new development sites, although regard should be had to the effects of any new retail or business development on the viability of existing lcoal shopping places, with the objective of integrating proposals where possible.

Some potential schemes have been outlined in the following examples, which are linked with the priority schemes set out in the summary matrix and map in figures 8.1 and 8.2.

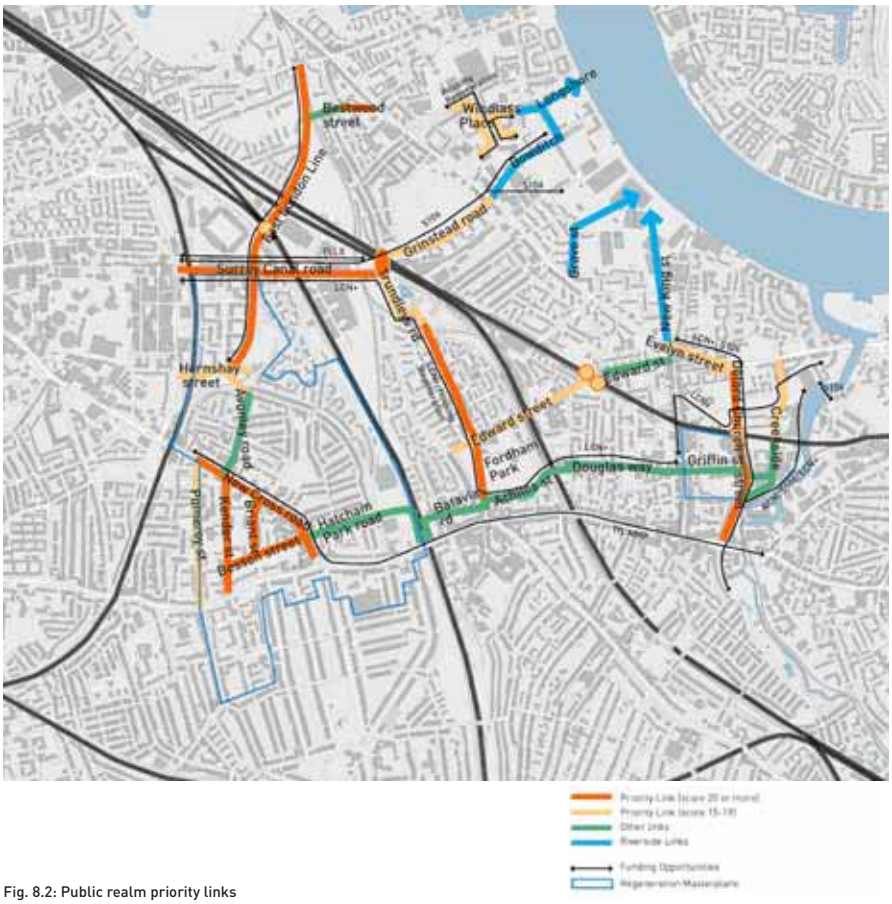


Fig. 8.2: Public realm priority links

Streets: Surrey Canal Road

The development of the staion and the coming forward of the Millwall Football ground / Surrey Canal Road development site provides the potential to turn the Surrey Canal Road into a street with frontages. Components of this work may include:

- Landscaping, incorporating public realm improvements on the shared footpath / cycle track.
- New, active frontages animating Surrey Canal Road on both sides, to give animation and natural surveillance to the street.
- New public spaces at either end of Surrey Canal Road, augmenting the Grinstead Road masterplan at the eastern end and improving the junction with Ilderton Road at the western end.

Spaces: Milton Estate

The pedestrian and cycle route through the Milton Estate presents a pleasant environment during the day, however there are problems with the threat and reality of crime. Eventual estate regeneration could result in the following:

- Improvements to landscaping to increase forward visibility and reduce the number of 'hiding places', to make the route feel safer.
- Redevelopment of housing should produce new frontages onto this street. Some of the side streets could be connected together, with pedestrian and cycle priority maintained along the north-south route.
- Increased animation of the space through improvements to the shopping area and the introduction of active community uses and regular social events such as markets to reinforce the importance of this corridor as a link to Surrey Canal Road station.

8.2 Recommendations: Cycling

8.2.1 Creating good conditions for cycling

Good conditions for cycling should be achieved throughout the area as an integral part of taking forward the recommendations in this study. The recommendations establish an adequate 'skeletal' network for cycling, enabling riders to reach key destinations and transport interchanges such as the riverbus service.

Chapter 5 establishes a baseline for improving the quality of the public realm. A better public realm will help the borough to improve conditions for cycling--good design will normally reduce the need for special facilities. The priority matrix of improvements takes into account the existence of formal cycle routes.

8.2.2 Targeted measures at key barriers for cyclists

Funding may be achieved to reduce the impact on cycling of a number of barriers in the borough. Joint public realm, walking and cycling schemes could be established at the problem junctions identified in Fig. 5.8; these are:

1 The junction of Deptford High Street, Evelyn Road, New King Street and Creek Road

2 The junction of Deptford Church Street and Creek Road

3 The junction of Trundleys Road, Grinstead Road and Surrey Canal Road (funding has been identified via the LCN+ for a Toucan crossing at this location; other improvements may also be appropriate)

4 The mini-gyratory at Edward Street where it passes under the London Bridge-Deptford railway.

Other 'problem junctions' include the gyratories and Deptford Bridge junction on the A2, the junction of Rotherhithe New Road and Ilderton Road, and the Surrey Quays gyratory. These are in the jurisdiction of TfL and LB Southwark.

The study also recommends that the Council progressively implements a permeability programme, as funding permits: work includes allowing cyclists to use some pedestrian-only links including through parks and between cul-de-sacs, providing 'filters' for cyclists at street closures, and allowing contraflow cycling on one-way streets.

8.2.3 Cycling Super Highway

Transport for London's business plan sets out the Mayor's plans for the development of Cycle Superhighways. A key opportunity exists in the borough for the development of such a scheme, following the listed Victorian railway viaduct between Rotherhithe New Road and Deptford town centre. The link would ultimately provide a direct route for cyclists into Central London and towards Catford.

Opening this new route would provide significant opportunities for utilising the railway arches for shops, studios and small businesses as part of a possible parallel refurbishment programme negotiated with Network Rail (there is no evidence of such a programme at the present time). Where opportunities exist, new connections could be opened up through the viaduct to improve permeability, and feeder routes could be established using existing cycling links.

This study recommends that an early approach is made to the Mayor's office, with concept designs, to establish one of the first such links in London.

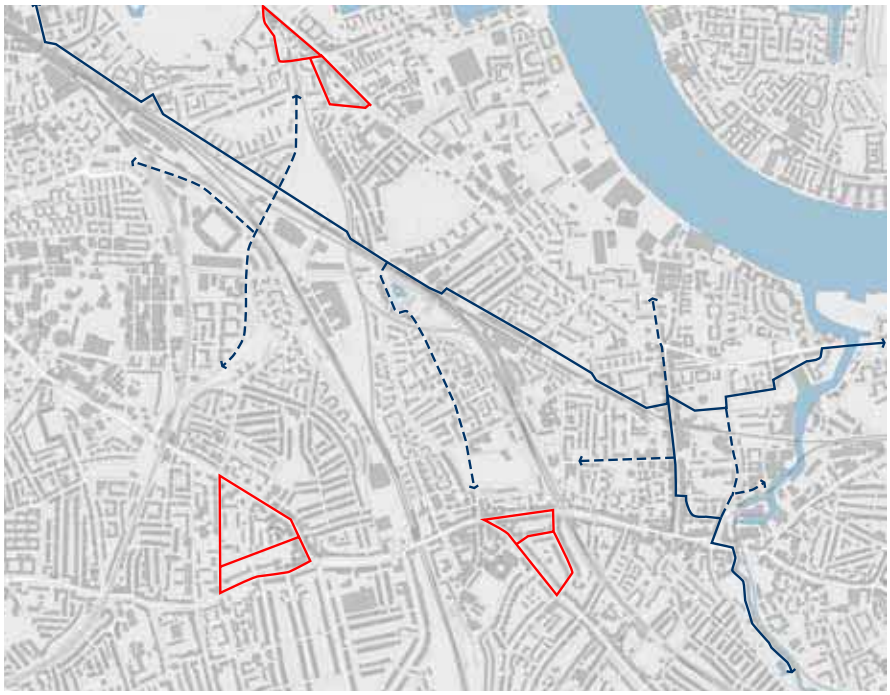


Fig. 8.3: Cycling Superhighways and feeder routes, cycle-friendly traffic management measures

8.3 Recommendations: Bus

8.3.1 Bus service enhancements

In summary, the following changes will be required to accommodate future demand for travel. Further increases may be needed to accommodate any mode shift that can be achieved:

Bus services	
Waterlink Transit	Introduce Waterlink Transit using Bendy-buses or similar (capacity). This could be an amended Route 199.
1	Target capacity increases on these services
47	
53	
177	
188	
199	
255	
381	
453	
P12	
Additional services	Add service 129 and provide improved local service access by either new services or diverted existing services.

The greatest scope for improving bus services is on route 199 (increase from buses every 13 minutes) with a route extension towards either Central London or the City. Waterlink Transit would be in place in advance of the possible extension of the Bakerloo Line.

Some scope also exists to increase the frequency of route 47 and to divert route 188 through residential areas to the south west of Evelyn Road. The Deptford Creekside developers may also be asked to provide a new bus service along Creekside, which again could be used to increase the density of services elsewhere.

8.3.2 Lewisham Waterlink Transit

This study considers it worthwhile to implement a bus service in Deptford and New Cross that is similar in concept to the GWT, with enhanced bus priority measures and limited stopping patterns. The reasons for this are as follows:

- A significant proportion of Deptford and New Cross has no access to rail services; a limited stop bus service would plug this gap in the rapid public transport market.
- According to the South East Rail Utilisation Study, most of the rail network will continue to be at capacity (in some instances to the point that passengers are unable to board trains) until after 2012; the likelihood is that passenger numbers will increase such that any increase in capacity will be filled.
- Introducing the Waterlink Transit to the area would result in a high specification bus service that would be an attractive alternative to driving, especially if there is a high level of bus priority and directness.
- The Waterlink Transit may provide opportunities for braiding existing bus service routes to increase public transport coverage of the area, particularly for east-west journeys.

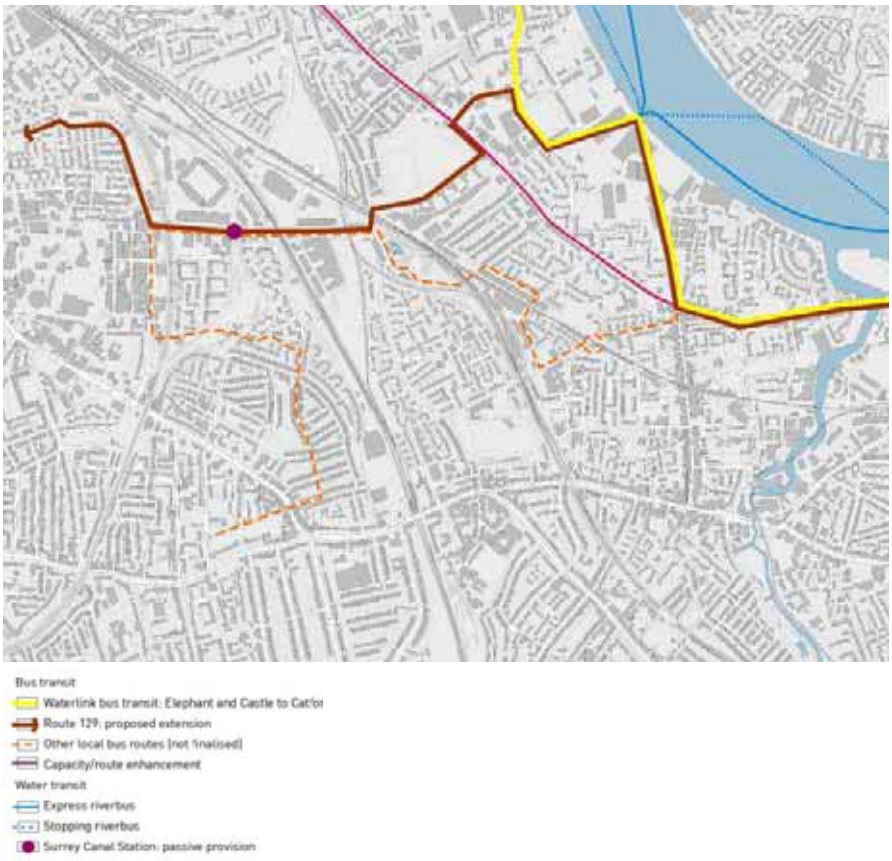


Fig.8.4 New suggested bus routes

A potential route is mapped in Fig.8.4. The end destinations of the service would need further discussion; this study suggests that possibilities may include Greenwich DLR, Lewisham Station and Catford at the south eastern end, and Bermondsey Jubilee Line station and Elephant and Castle at the western end, giving east-west and north-south connections in one route. In any event, the route would need to link major development sites coming forward, notably Convoys Wharf (interchange with possible river services), Oxestalls Road and Plough Way.

On this basis, the study's recommendation is that the suggested system would interchange with national rail, DLR, riverboat and London Underground services as follows:

- Lewisham Station (DLR+National Rail)
- Greenwich Station (DLR+National Rail) or Deptford Bridge (DLR)
- Convoys Wharf (river service)
- Canada Water (indirect interchange with Jubilee and East London Lines)
- Surrey Quays (East London Railway)
- Bermondsey (Jubilee Line for London Bridge)
- Elephant and Castle (Bakerloo Line and National Rail to Blackfriars)

The Waterlink Transit service would meet the increased demand for travel generated by the Creekside, Convoys Wharf, Oxestalls Road and Plough Way developments in the short to medium term.

In the longer term, a dramatic improvement in public transport provision would be made through investment in extending the Bakerloo Line from Elephant and Castle, with stations at Surrey Canal Road and Convoys Wharf. Even after this Underground extension is completed, Waterlink Transit would still have a role, even if its route is changed to respond to other travel demands.

In the meantime, an alternative route to the one shown in Fig.8.4 could be to effectively follow the alignment of the Bakerloo Line towards Walworth and Elephant and Castle, including a possible new bus-and-cycle-only street going west from the junction of Surrey Canal Road and Ilderton Road (Fig. 8.6).

8.4 Addressing local PTAL deficiencies

Deptford and New Cross PTAL indicates that there is a significant are to the south west of Evelyn Street that is very poorly served by public transport. The effects of introducing random and proposed routes to the area have been tested—the purpose of this was to test the outcome of an increased density of services at comparatively low frequencies on PTALs. The final routing of any new services would need to be discussed and finalised with London Buses or a community transport operator.

The proposed bus routes are service 129 (a likely improvement) and routes identified in New Cross Masterplan (with a low likelihood of implementation at the current time).

Comparison of the series of PTAL maps, Fig. 8.5a-d, indicates that new buses would provide a modest uplift in PTAL performance.

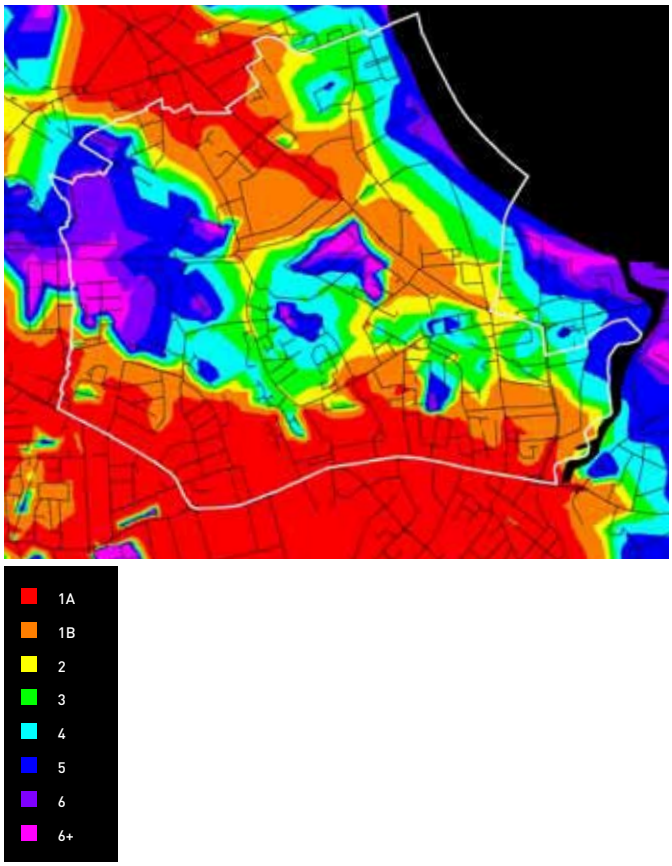


Fig. 8.5a: PTAL from existing public transport service levels

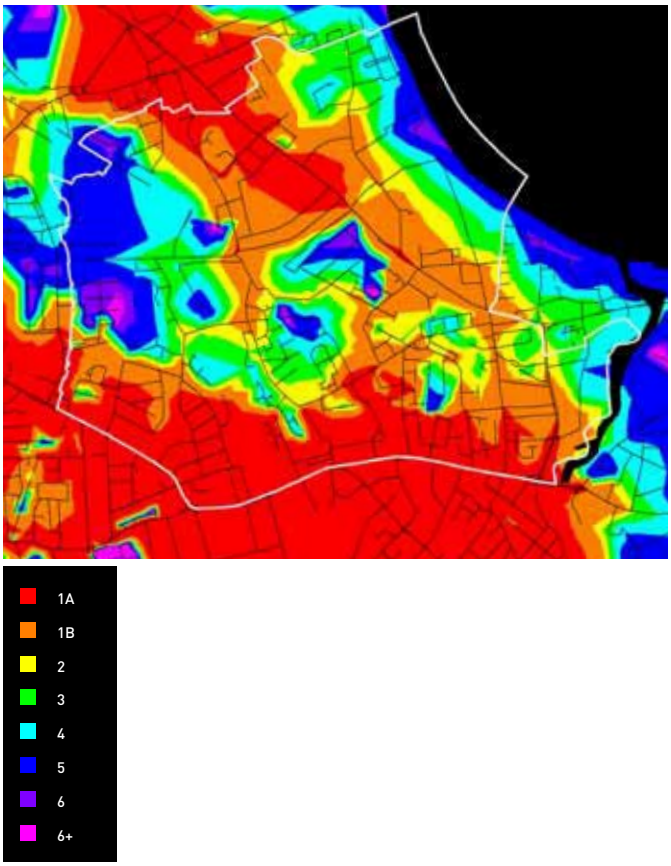


Fig.8.5b Resultant PTAL: two-staged improvements – local buses

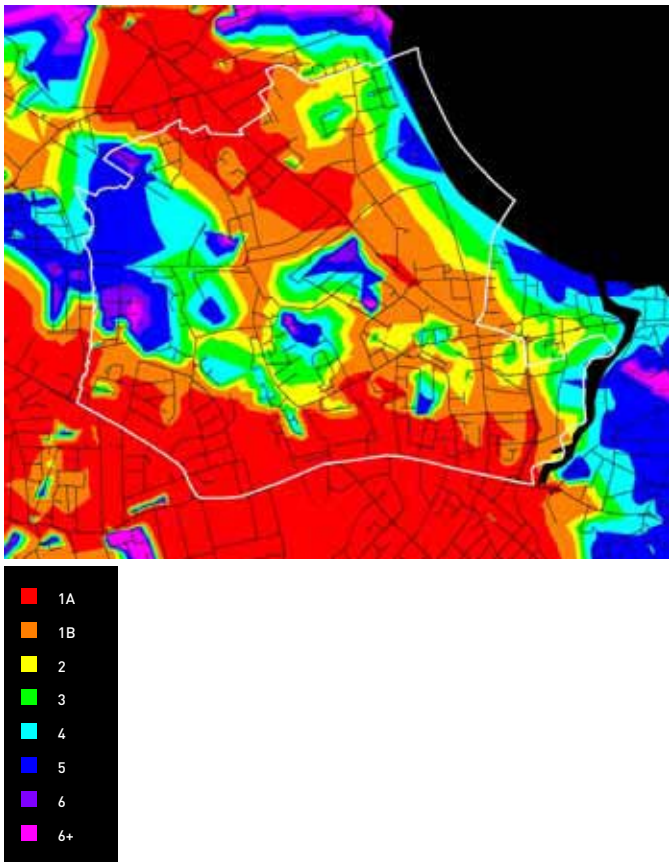


Fig.8.5cResultant PTAL: two-staged improvements – local buses and Waterlink Transit

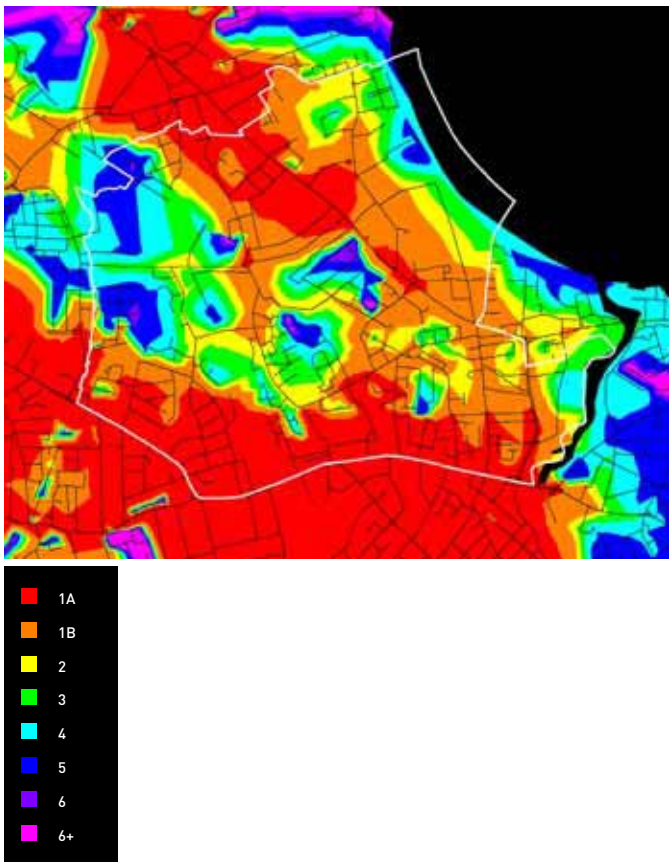


Fig.8.5d Resultant PTAL: All bus improvements + Surrey Canal Station

8.5 Recommendations: Rail

Area Based Schemes: Station Access

Improving accessibility to the rail network is also important. Every station in Lewisham may be considered for station access measures (funded through TfL Area Based Schemes). Each bid needs to consider the following:

- Identify schemes to raise the quality of the public realm in the vicinity (800m walk route) of the stations and on key routes leading to them (particularly where these routes lead to bus interchanges and town centres).
- Identify a range of smaller measures for improving accessibility, such as lowered kerbs, junction tightening and entry treatments, pedestrian crossing improvements and cycle access and parking measures.
- Identify potential funding sources, including developer contributions. New development will therefore be a key determinant of likely priority schemes.

East London Line Extension Phase 2

The study recommends that the borough lobbies robustly for the completion of Phase 2 of the London Overground and the construction of Surrey Canal Station to serve new development.

At the very least, it is recommended that passive provision is made for a future station to be constructed at Surrey Canal Road for when funding becomes available. Should the Bakerloo Line be extended through the area, the combination of Surrey Canal Road Bakerloo and ELL stations and South Bermondsey Station would create a new interchange.

Rail network development

The RUS demonstrates that there is little prospect of additional capacity becoming available on the rail network short of reducing the intensity of existing overcrowding. The current situation is that it is not currently realistic to expect people in Deptford and New Cross to use the rail network, which is beyond capacity during the peak and only has stations on the periphery of the area.

However, a rail based solution is appropriate for delivering the regeneration and intensification of the area, which is situated at the edge of the prime commercial employment areas of the capital. Improved connections with central London, the City and Canary Wharf would do much to stimulate regeneration and development, bringing a greater degree of certainty for the private sector.

Bakerloo Line Extension

The RUS discusses the possibility of extending the Bakerloo Line from Elephant and Castle towards Lewisham, to deliver best value from investment the line and its trains by 2022. The London Borough of Lewisham endorses the line extension, which would be include an eight-mile underground line from Elephant and Castle, via stations at Walworth and Lewisham. At Ladywell, the line would rise above ground to follow the Hayes line towards Catford and Beckenham Junction, relieving six train paths on the Lewisham to London Bridge, Cannon Street and Charing Cross lines.

This study recommends that stations are constructed to serve Deptford and New Cross at Surrey Canal Road (interchange with East London Line Phase 2 and South Bermondsey Station), Convoys Wharf (interchange with riverbus services) and Deptford town centre (interchange with National Rail and DLR). Potential spurs to make the most of the service frequency could be established in the longer term.

In the short term of course, there would be reliance on bus services. A bus that 'shadowed' the suggested alignment of the Bakerloo Line extension would begin to demonstrate demand and the principle of investing in the corridor, especially if new development comes forward as envisaged.

The Waterlink Transit bus service would connect Elephant and Castle with Bermondsey, Surrey Quays, Convoys Wharf, Greenwich, Lewisham and Catford, broadly following and extending existing bus route 199. The recommended route could be adjusted to follow Surrey Canal Road towards Walworth and Elephant and Castle instead. Local Traffic Management

Proposed improvements to several street segments in the area may also result in carriageway resurfacing and improved parking and loading layouts that will benefit general motor traffic. In addition, five priority proposals have been identified to change conditions for general motor traffic in the area and achieve other regenerative benefits (some measures illustrated in Fig.8.3).

Fig. 8.6: Bakerloo line extension: potential option for alignment to better serve Deptford and New Cross. The Waterlink Transit could 'shadow' the route in the meantime. Note: the alignment shown is indicative only and could be very different in practice.

8.6 Local Traffic Management

Key proposals (not in any particular order of priority):

- Restore two-way working or reduce the size of the existing gyratory at Surrey Quays Gyratory (Bestwood Street, Bush Road, Rotherhithe New Road, Hawkstone Road). This would involve partnership working with the London Borough of Southwark and Transport for London.
- Identify (over time—ongoing TfL funded programmes) suitable areas for the application of 20mph schemes, HGV restrictions, danger reduction and rat-run removal.
- Identify suitable zones for controlled parking and loading schemes, including CPZs, removal of one-way working, traffic management, e.g. HGV bans. Priority for CPZ schemes should be given to areas within 800m of rail stations and ferry piers and other areas where there is identified parking stress that disbenefits local residents and businesses.

Fig.8.7 Modal filter: allows cycles through but not motors.

- Control the availability of car parking in new development. Review parking standards to reflect the need to reduce dependency on cars.
- Introduce street cars and possibly a range of measures (such as reserved parking) to encourage their uptake and reduce the impetus for private car ownership.
- Increase permeability specifically for pedestrians, cyclists and public transport users by carefully introducing modal filtering (Fig. 8.8).

8.7 Recommendations: Beyond study area boundary

The London Borough of Lewisham may consider the following recommendations (see Fig. 8.3):

Walking , cycling and public realm

- Taking opportunities to link with the London Borough of Southwark's proposed pedestrian and cycle network in the Rotherhithe Peninsula area;
- Negotiating the removal of the Surrey Quays gyratory, or alternatively, remodelling the gyratory to permit two-way bus and pedal cycle operation on Lower Road. This would require partnership with TfL.
- Negotiating additional crossings of Deptford Creek with the London Borough of Greenwich.
- Highlighting local proposals for public realm improvement on streets within Southwark and Greenwich identified for investment in this study

Cycling

- In the event that the SUSTRANS GOAL2012 proposed bridge is not supported, a new ferry service could be established that provides a 'roll-on-roll-off' service between Rotherhithe Peninsula and Canary Wharf, similar in concept to ferries in Amsterdam. Thames Clippers would be committed to providing the appropriate river craft if suitable new piers are provided – at a fraction of the cost of a new bridge crossing (Fig.8.9).
- This study recommends that opening negotiations are commenced between Thames Clippers, Sustrans, Transport for London and the London Boroughs of Southwark and Tower Hamlets with a view to taking this initial concept forward.

8.8 Recommendations: Riverbus

Thames river bus services could provide an important link in the public transport chain, particularly for journeys across the Thames between Greenland (and / or Convoys) Pier and Canary Wharf.

To maximise the advantage of these services it would be important to connect bus-based public transport (including the suggested Waterfront Transit) to the services—the best location for this would be Convoys Wharf since services would connect with the Waterfront transit and proposed route 129, which would provide an important east-west link between Convoys Wharf and Peckham via Surrey Canal Road. Alternatively, buses could 'turn around' at Greenland Pier—an alternative terminus to Canada Water for some services.

Lewisham Council could consider establishing developer agreements to provide necessary pier facilities and financial priming for new services from Convoys Wharf. This would enable Thames Clippers to build its service to a point at which it would have a viable commercial operation.

Fig.8.8 Amsterdam cycle ferry

8.9 Recommendations: Transport for London Road Network (TLRN)

The following recommendations are not included in the priority programme for investment in Deptford and New Cross. This is because the Transport for London Road Network (TLRN), including associated footways and GLA side roads falls outside of the control of the Borough.

Nonetheless, the borough is in a stakeholder position to influence decisions made for the road, bringing to bear local priorities for transport, and to some extent TfL requires that borough streetscape and public realm standards are implemented.

Node treatments

Several key nodes exist along the A2, which are deserving of investment in public realm treatments. The most prominent of these are New Cross Gate, a town centre, and Deptford Bridge, a significant junction on the edge of Deptford town centre, a pedestrian and cyclist crossing and a public transport interchange.

Both of these locations could become significant multi-modal nodes in their own right, with New Cross Gate being strengthened as a town centre, and Deptford Bridge forming a gateway to Deptford town centre and the rest of New Cross.

Restoration of two way working

Two major gyratories spread the impact of motor traffic from the mainline road networks into surrounding residential areas. Whilst it is true that gyratories often work well in traffic terms, providing additional capacity for through traffic, there are a number of issues that need to be taken into account:

- One way traffic, if not calmed, tends to move faster, and drivers may have less regard for pedestrians and cyclists resulting in more road danger;
- Permeability for all modes is reduced, with the obligation to travel in one direction.
- Legibility for public transport may be reduced if bus stops for each direction are situated on different parts of the street network
- Capacity for motor traffic is placed ahead of creating places for people.
- One way systems lengthen journeys for cyclists, adding to their exposure to risk from speeding motor traffic and junction conflicts.

New Cross Gate Masterplan and Kender Triangle Streets for People scheme recognise the limitations of gyratory systems and set out proposals for restoring two-way operation on Queens Road and Old Kent Road. The same treatment could be investigated for the New Cross gyratory system.

Traffic Management

Other improvements could include:

- Provision of additional, straight pedestrian crossings and Toucan crossings where cycle routes cross the main line;
- Improved bus priority and, thereby, conditions for cycling along the route.
- Removal of unnecessary pedestrian guardrail and the provision of median strips to ease informal pedestrian crossing movements. Consider implementing cycle parking in (a new) median strip.

Fig.8.10 TLRN at New Cross

APPENDIX 1 (CHAPTER 6)

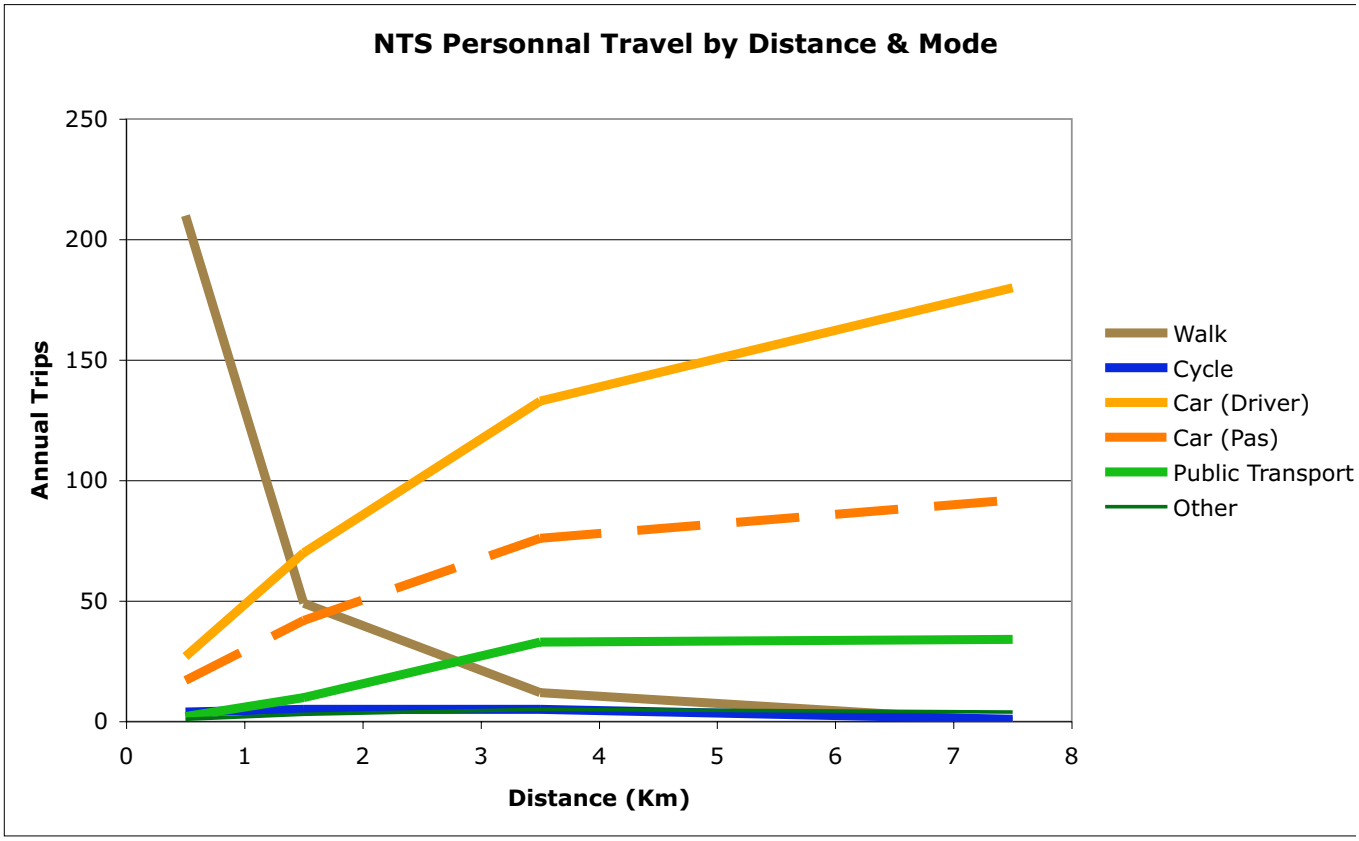
STEP 1	Walk	Cycle	Car (Dr)	Car (Pax)	Bus	Rail	Other	
Work	18	6	115	18	12	10	5	**184**
Ed	47	1	23	25	10	1	5	**112**
Shop	51	2	82	42	17	1	3	**198**
Personal Bu	40	1	96	52	8	1	3	**201**
Leisure / Other	89	5	94	91	12	4	10	**305**
	245	**15**	**410**	**228**	**59**	**17**	**26**	**1000**
							1000	
NTS mode share	24.5%	1.5%	41.0%	22.8%	5.9%	1.7%	2.6%	**100.0%**
NTS Work mode	**9.8%**	**3.3%**	**62.5%**	**9.8%**	**6.5%**	**5.4%**	**2.7%**	
Local Data Work Mode	**6.4%**	**1.9%**	**28.7%**	**2.2%**	**13.8%**	**37.6%**	**9.5%**	**100.1%**
Adjustment Constant	0.65	0.58	0.46	0.22	2.12	6.92	3.50	

1st Iteration

	Walk	Cycle	Car (Dr)	Car (Pax)	Bus	Rail	Other	
Work	12	3	53	4	25	69	17	**184**
Ed	31	1	11	6	21	7	17	**93**
Shop	33	1	38	9	36	7	10	**135**
Personal Bu	26	1	44	12	17	7	10	**117**
Leisure / Other	58	3	43	20	25	28	35	**213**
	160	**9**	**188**	**51**	**125**	**118**	**91**	**742**
							742	

2nd Iteration

	Walk	Cycle	Car (Dr)	Car (Pax)	Bus	Rail	Other		
Work	12	3	53	4	25	69	17	**184**	1.00
Ed	37	1	13	7	25	8	21	**112**	1.20
Shop	49	2	55	14	53	10	15	**198**	1.47
Personal Bu	45	1	76	20	29	12	18	**201**	1.72
Leisure / Other	83	4	62	29	36	40	50	**305**	1.43
	226	**11**	**258**	**74**	**169**	**139**	**122**	**1000**	
							1000		
Combined Mode Share	**22.6%**	**1.1%**	**25.8%**	**7.4%**	**16.9%**	**13.9%**	**12.2%**		



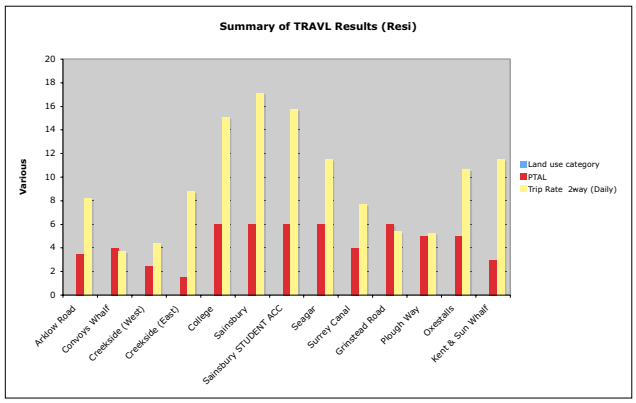
Step 2 Derived Local Mode Share

Step 3: Gravity model

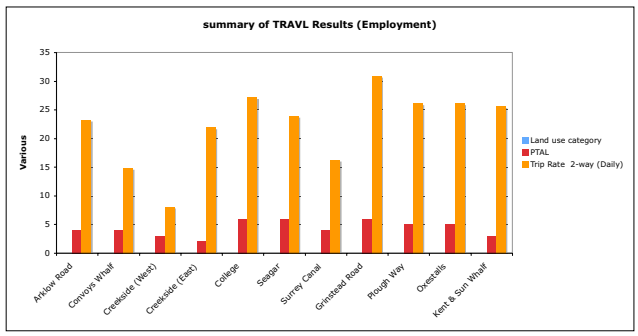
					WALK	PED DISPERSI	CYCLE	CYCLE DISPEI	CAR DR	CAR DISPERSI	CARPAS	BUS	BUS DISPERSI	R AIL	OTHER (inc RMT
Ward	**Borough**	**Real Pop**	**Distance**	**AF**	22.9%		1.12%		26.80%		7.4%	16.90%		13.9%	12.2%
Evelyn	Lewisham	14222	9.70	0.041812		5.38%		0.14%		1.07%			0.39%		
New Cross	Lewisham	15886	8.64	0.021294		4.56%		0.07%		0.52%			0.24%		
Livesey	Southwark	12951	12.16	0.018765	15.82%	1.85%	0.23%	0.07%	1.81%	0.21%	0.85%		0.10%		
Rotherhithe	Southwark	12421	18.60	0.003599		0.90%		0.07%		0.78%			0.56%		
Surrey Docks	Southwark	13368	20.72	0.003113		0.78%		0.06%		0.68%			0.48%		
South Bermondsey	Southwark	11824	21.11	0.002853		0.67%		0.05%		0.58%			0.42%		
Telegraph Hill	Lewisham	15306	21.99	0.003166		0.90%		0.06%		0.69%			0.50%		
Nunhead	Southwark	11788	23.58	0.002120		0.53%		0.04%		0.46%			0.33%		
Brockley	Lewisham	15738	23.62	0.002821		0.71%		0.05%		0.61%			0.44%		
Greenwich West	Greenwich	12838	30.04	0.001423		0.36%		0.03%		0.31%			0.22%		
Riverside	Southwark	12352	30.45	0.001332		0.34%		0.03%		0.29%			0.21%		
Peckham	Southwark	13171	31.32	0.001343	5.42%	0.34%	0.41%	0.03%	4.39%	0.29%	3.38%		0.21%		
East Walworth	Southwark	13001	32.73	0.001214		0.05%		0.01%		0.34%			0.24%		
Grange	Southwark	13988	33.57	0.001241		0.06%		0.01%		0.35%			0.24%		
The Lane	Southwark	13132	35.00	0.001072		0.05%		0.01%		0.30%			0.20%		
Shadwell	Tower Hamlets	12630	35.18	0.001020		0.05%		0.01%		0.28%			0.28%		
Ferndale	Southwark	13529	37.46	0.001064		0.04%		0.01%		0.27%			0.27%		
Brunswick Park	Southwark	12189	37.52	0.000866		0.04%		0.01%		0.24%			0.24%		
Chaucer	Southwark	15080	39.43	0.000971		0.04%		0.01%		0.27%			0.27%		
Ladywell	Lewisham	13972	40.81	0.000839		0.04%		0.01%		0.23%			0.23%		
Lewisham Central	Lewisham	15016	40.93	0.000812		0.04%		0.01%		0.23%			0.23%		
Blackheath	Lewisham	13085	44.12	0.000672		0.03%		0.01%		0.19%			0.19%		
t Dunstan's and Stepney Green	Tower Hamlets	14238	45.18	0.000697		0.03%		0.01%		0.19%			0.19%		
Newington	Southwark	13684	46.27	0.000639		0.03%		0.01%		0.18%			0.18%		
South Camberwell	Southwark	12117	46.93	0.000559		0.02%		0.01%		0.15%			0.15%		
Camberwell Green	Southwark	14170	47.24	0.000635		0.03%		0.01%		0.18%			0.18%		
East Dulwich	Southwark	11976	47.29	0.000531		0.02%		0.01%		0.15%			0.15%		
Tower	City of London	137	48.39	0.000306		0.00%		0.00%		0.00%			0.00%		
Peninsula	Greenwich	11883	48.43	0.000507		0.02%		0.01%		0.14%			0.14%		
Whitechapel	Tower Hamlets	12539	48.65	0.000530		0.02%		0.01%		0.15%			0.15%		
Bridge	City of London	0	49.53	0.000000		0.00%		0.00%		0.00%			0.00%		
Crofton Park	Lewisham	14119	49.82	0.000569		0.03%		0.01%		0.16%			0.16%		
Cathedrals	Southwark	14473	50.16	0.000576		0.03%		0.01%		0.16%			0.16%		
Limehouse	Tower Hamlets	13345	50.18	0.000531		0.02%		0.01%		0.15%			0.15%		
Portsoken	City of London	110	50.49	0.000307		0.00%		0.00%		0.00%			0.00%		
Dowgate	City of London	0	50.69	0.000000		0.00%		0.00%		0.00%			0.00%		
Peckham Rye	Southwark	12321	51.43	0.000466		0.02%		0.01%		0.13%			0.13%		
Aldgate	City of London	0	51.45	0.000000		0.00%		0.00%		0.00%			0.00%		
Candlewick	City of London	0	51.47	0.000000		0.00%		0.00%		0.00%			0.00%		
Billingsgate	City of London	0	52.03	0.000000		0.00%		0.00%		0.00%			0.00%		
St Katharine's and Wapping	Tower Hamlets	11250	52.76	0.000404		0.02%		0.00%		0.11%			0.11%		
Vicary	City of London	0	53.11	0.000000		0.00%		0.00%		0.00%			0.00%		
Langbourn	City of London	0	53.54	0.000000		0.00%		0.00%		0.00%			0.00%		
Walbrook	City of London	60	53.66	0.000002		0.00%		0.00%		0.00%			0.00%		
Lime Street	City of London	0	53.74	0.000000		0.00%		0.00%		0.00%			0.00%		
Blackheath Westcombe	Greenwich	11576	53.82	0.000493		0.02%		0.00%		0.11%			0.11%		
Bethnal Green South	Tower Hamlets	13904	54.01	0.000477		0.02%		0.01%		0.13%			0.13%		
Corn exchange	City of London	0	54.83	0.000000		0.00%		0.00%		0.00%			0.00%		
Mile End East	Tower Hamlets	11929	55.30	0.000390		0.02%		0.00%		0.11%			0.11%		
Cornhill	City of London	0	55.51	0.000000		0.00%		0.00%		0.00%			0.00%		
Rushey Green	Lewisham	13242	55.62	0.000428		0.02%		0.00%		0.12%			0.12%		
Vassall	Lambeth	13902	55.85	0.000433		0.02%		0.00%		0.12%			0.12%		
Queenhithe	City of London	161	55.90	0.000005		0.00%		0.00%		0.00%			0.00%		
Cheap	City of London	0	56.93	0.000000		0.00%		0.00%		0.00%			0.00%		
Spitalfields and Banglatown	Tower Hamlets	9035	57.16	0.000277		0.01%		0.00%		0.08%			0.08%		
Broad Street	City of London	0	57.37	0.000000		0.00%		0.00%		0.00%			0.00%		
Bread Street	City of London	0	57.41	0.000000		0.00%		0.00%		0.00%			0.00%		
Princes	Lambeth	12115	57.44	0.000367		0.02%		0.00%		0.10%			0.10%		
Bassishaw	City of London	0	58.15	0.000000		0.00%		0.00%		0.00%			0.00%		
Lee Green	Lewisham	12633	58.46	0.000376		0.02%		0.00%		0.10%			0.10%		
Bishopsgate	City of London	131	58.52	0.000004		0.00%		0.00%		0.00%			0.00%		
Coleman Street	City of London	0	59.08	0.000000		0.00%		0.00%		0.00%			0.00%		
Mile End and Globe Town	Tower Hamlets	12664	59.54	0.000357		0.02%		0.00%		0.10%			0.10%		
Oval	Lambeth	12655	59.60	0.000356		0.02%		0.00%		0.10%			0.10%		
Village	Southwark	10763	59.81	0.000301		0.01%		0.00%		0.08%			0.08%		
Forest Hill	Lewisham	13035	60.30	0.000358		0.02%		0.00%		0.10%			0.10%		
Bishop's	Lambeth	8991	60.40	0.000246		0.01%		0.00%		0.07%			0.07%		
Castle Baynard	City of London	0	61.02	0.000000		0.00%		0.00%		0.00%			0.00%		
Farringdon Within	City of London	249	61.46	0.000007		0.00%		0.00%		0.00%			0.00%		
Aldersgate	City of London	1667	62.05	0.000043		0.00%		0.00%		0.01%			0.01%		
Bethnal Green North	Tower Hamlets	12566	62.45	0.000322		0.01%		0.00%		0.09%			0.09%		
Cordwainer	Lambeth	16359	62.81	0.000415		0.02%		0.00%		0.12%			0.11%		
Cripplegate	City of London	3170	63.07	0.000078		0.00%		0.00%		0.02%			0.02%		
Weavers	Tower Hamlets	11464	63.65	0.000283		0.01%		0.00%		0.08%			0.08%		
Perry Vale	Lewisham	14499	63.71	0.000357		0.02%		0.00%		0.10%			0.10%		
Bromley-by-Bow	Tower Hamlets	12218	63.82	0.000300		0.01%		0.00%		0.08%			0.08%		
Herne Hill	Lambeth	13078	64.05	0.000319		0.01%		0.00%		0.09%			0.09%		
Charlton	Greenwich	12277	64.08	0.000299		0.01%		0.00%		0.08%			0.08%		
Bow West	Tower Hamlets	11138	65.70	0.000258		0.01%		0.00%		0.07%			0.07%		
East India and Lansbury	Tower Hamlets	13074	66.07	0.000313		0.01%		0.00%		0.09%			0.09%		
Stockwell	Lambeth	14281	67.24	0.000316		0.01%		0.00%		0.09%			0.09%		
Farringdon Without	City of London	987	67.25	0.000022		0.00%		0.00%		0.01%			0.01%		
Middle Park and Sutcliffe	Greenwich	12606	68.72	0.000267		0.01%		0.00%		0.07%			0.07%		
Millwall	Tower Hamlets	15494	69.31	0.000323		0.01%		0.00%		0.09%			0.09%		
Bunhill	Islington	12055	69.83	0.000247		0.01%		0.00%		0.07%			0.07%		
Blackwall and Cubitt Town	Tower Hamlets	14547	70.80	0.000290		0.01%		0.00%		0.08%			0.08%		
Catford South	Lewisham	14336	70.82	0.000286		0.01%		0.00%		0.08%			0.08%		
Ferndale	Lambeth	14533	71.16	0.000287		0.01%		0.00%		0.08%			0.08%		
Kidbrooke with Hornfair	Greenwich	12811	71.41	0.000251		0.01%		0.00%		0.07%			0.07%		
Vincent Square	Westminster	10921	71.59	0.000213		0.01%		0.00%		0.06%			0.06%		
Haggerston	Hackney	11131	72.23	0.000213		0.01%		0.00%		0.06%			0.06%		
Woolwich Riverside	Greenwich	14548	73.07	0.000272		0.01%		0.00%		0.08%			0.08%		
St James's	Westminster	13109	74.21	0.000238		0.01%		0.00%		0.07%			0.07%		
Hoxton	Hackney	10812	74.37	0.000195		0.01%		0.00%		0.05%			0.05%		
Larkhall	Lambeth	15932	74.60	0.000280		0.01%		0.00%		0.08%			0.08%		
Queensbridge	Hackney	10763	75.14	0.000191		0.01%		0.00%		0.05%			0.05%		
Tachbrook	Westminster	9870	75.54	0.000173		0.01%		0.00%		0.05%			0.05%		
Thurlow Park	Lambeth	11783	75.90	0.000205		0.01%		0.00%		0.06%			0.06%		
Victoria	Hackney	11855	76.44	0.000203		0.01%		0.00%		0.06%			0.06%		
Holborn and Covent Garden	Camden	12998	76.44	0.000222		0.01%		0.00%		0.06%			0.06%		
Sydenham	Lewisham	14547	77.07	0.000245		0.01%		0.00%		0.07%			0.07%		
Clerkenwell	Islington	11236	77.45	0.000187		0.01%		0.00%		0.05%			0.05%		
Bow East	Tower Hamlets	10169	77.54	0.000169		0.01%		0.00%		0.05%			0.05%		
Whitefoot	Lewisham	13952	77.76	0.000224		0.01%		0.00%		0.06%			0.06%		
Eltham West	Greenwich	12781	78.04	0.000210		0.01%		0.00%		0.06%			0.06%		
College	Southwark	10976	78.05	0.000180		0.01%		0.00%		0.05%			0.05%		
Bellingham	Lewisham	14200	79.16	0.000227		0.01%		0.00%		0.06%			0.06%		
Grove Park	Lewisham	13958	79.88	0.000218	1.36%	0.01%	0.33%	0.00%	8.51%	0.06%	8.46%		0.06%		
Brixton Hill	Lambeth	13217	81.81	0.000198											
St Peter's	Islington	11233	82.39	0.000165											
De Beauvoir	Hackney	10420	82.69	0.000152											
Tulse Hill	Lambeth	14026	83.48	0.000201											
Canning Town North	Newham	12299	84.27	0.000173											
Canning Town South	Newham	11213	84.36	0.000158											
Chatham	Hackney	11329	84.66	0.000158											
Clapham Town	Lambeth	12684	85.26	0.000174											
Clapham Common	Lambeth	11317	86.43	0.000152											
Woolwich Common	Greenwich	14841	86.73	0.000197											
Wick	Hackney	10018	87.21	0.000132											
Stratford and New Town	Newham	12795	87.87	0.000165											
Gipsy Hill	Lambeth	13100	89.21	0.000168											
Downham	Lewisham	14086	89.12	0.000177											
Streatham Hill	Lambeth	13540	90.91	0.000164											
Knight's Hill	Lambeth	12489	92.05	0.000147											
Shooters Hill	Greenwich	12346	92.54	0.000144											

Trip rate and PTAL analysis (All mode)

	Land use category	PTAL	Trip Rate 2-way (Daily)	Trip Rate IN (Daily)	Trip Rate OUT (Daily)
Arklow Road	Residential	4	8.234	4.215	4.019
Convoys Whalf	Residential	4	3.718	1.892	1.826
Creekside (West)	Residential	3	4.381	2.203	2.178
Creekside (East)	Residential	2	8.799	4.429	4.37
College	Residential	6	15.12	7.695	7.425
Sainsbury	Residential	6	17.154	8.618	8.536
Sainsbury STUDENT ACC	Residential Student Acc	6	15.777	7.544	8.233
Seagar	Residential (Affordable)	6	11.522	6.018	5.504
Surrey Canal	Residential	4	7.701	3.91	3.791
Grinstead Road	Residential	6	5.413	2.818	2.595
Plough Way	Residential	5	5.305	2.733	2.572
Oxestalls	Residential	5	10.669	5.459	5.21
Kent & Sun Whalf	Residential	3	11.55	5.817	5.733



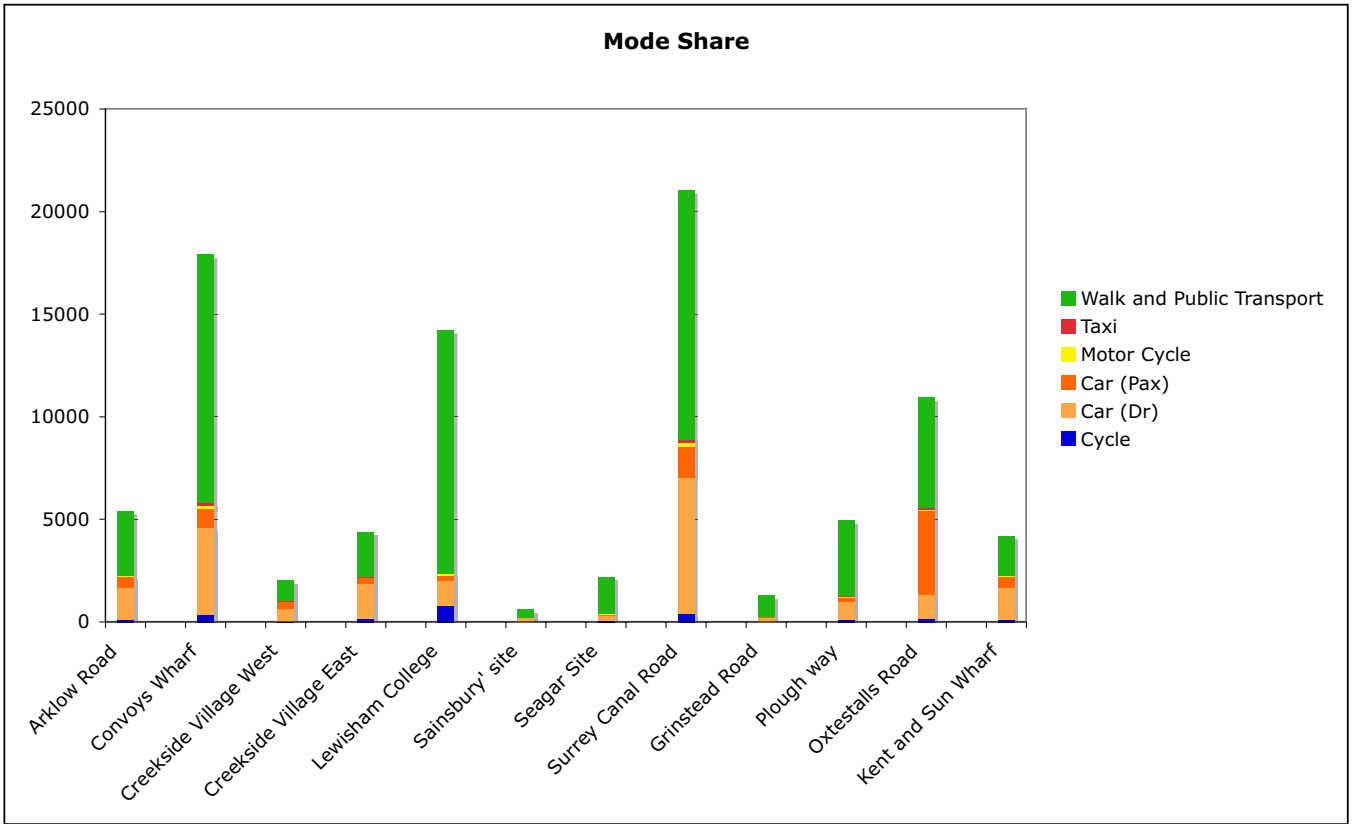
	Land use category	PTAL	Trip Rate 2-way (Daily)	Trip Rate IN (Daily)	Trip Rate OUT (Daily)
Arklow Road	Employment (Office)	4	23.31	11.915	11.395
Convoys Whalf	Employment (Office)	4	14.893	7.763	7.13
Creekside (West)	Employment (Office)	3	8.087	4.118	3.969
Creekside (East)	Employment (Office)	2	21.929	11.255	10.674
College	Employment (Office)	6	27.226	13.67	13.556
Seagar	Employment (Office)	6	23.946	12.032	11.914
Surrey Canal	Employment (Office)	4	16.268	8.518	7.75
Grinstead Road	Employment (Office)	6	30.946	15.516	15.43
Plough Way	Employment (Office)	5	26.173	13.377	12.796
Oxestalls	Employment (Office)	5	26.173	13.377	12.796
Kent & Sun Whalf	Employment (Office)	3	25.592	13.212	12.38



Sainsbury STUDENT ACC **is analysised by TRICS as no data available from TRAVL. Original trip rate was analysed with Hector. Conversion was made in order to indicate with SQM.**

Trip Generation				Cycle		Car (Dr)		Car (Pax)		Motor Cycle		Taxi		Walk and Public		Total	
	FULL FLOOR SPACE	25% REDUCED SPACE		In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out
Arklow Road	Employment		**Trip Rate**	0.15	0.133	3.462	3.271	0.538	0.523	0.075	0.072	0.077	0.093	7.613	7.303	11.915	11.395
	24000	18000	**Trips**	27	24	623	589	97	94	14	13	14	17	1370	1315	2144.7	2051.1
	Residential		**Trip Rate**	0.132	0.141	1.267	1.203	1.145	1.047	0.009	0.01	0.025	0.03	1.637	1.588	4.215	4.019
	200	150	**Trips**	20	21	190	180	172	157	1	2	4	5	246	238	632.25	602.85
			Total	47	45	813	769	269	251	15	14	18	21	1616	1553	2777	2654
Convoys Wharf	Employment		**Trip Rate**	0.106	0.108	0.988	1.027	0.145	0.146	0.029	0.029	0.098	0.071	6.397	5.749	7.763	7.13
	72700	54525	**Trips**	58	59	539	560	79	80	16	16	53	39	3488	3135	4232.77575	3887.6325
	Residential		**Trip Rate**	0.049	0.043	0.619	0.567	0.148	0.147	0.021	0.019	0.011	0.007	1.044	1.043	1.892	1.826
	3514	2635.5	**Trips**	129	113	1631	1494	390	387	55	50	29	18	2751	2749	4986.366	4812.423
			Total	187	172	2170	2054	469	467	71	66	82	57	6239	5883	9219	8700
Creekside Village West	Employment		**Trip Rate**	0.128	0.109	1.16	0.991	0.504	0.539	0.016	0.02	0.006	0.003	2.304	2.307	4.118	3.969
	12815	9611.25	**Trips**	12	10	111	95	48	52	2	2	1	0	221	222	395.791275	381.470513
	Residential		**Trip Rate**	0.053	0.054	0.684	0.647	0.442	0.452	0.018	0.018	0.011	0.007	0.995	1	2.203	2.178
	380	285	**Trips**	15	15	195	184	126	129	5	5	3	2	284	285	627.855	620.73
			Total	27	26	306	280	174	181	7	7	4	2	505	507	1024	1002
Creekside Village East	Employment		**Trip Rate**	0.577	0.438	4.562	4.338	0.422	0.383	0.101	0.068	0.158	0.163	5.435	5.284	11.255	10.674
	9000	6750	**Trips**	38.9475	29.565	307.935	292.815	28.485	25.8525	6.8175	4.59	10.665	11.0025	366.8625	356.67	759.7125	720.495
	Residential		**Trip Rate**	0.102	0.093	1.764	1.658	0.322	0.325	0.055	0.046	0.023	0.017	2.163	2.231	4.429	4.37
	438	328.5	**Trips**	34	31	579	545	106	107	18	15	8	6	711	733	1454.9265	1435.545
			Total	72	60	887	837	134	133	25	20	18	17	1077	1090	2215	2156
Lewisham College	Employment		**Trip Rate**	0.212	0.135	0.944	1.125	0.039	0.039	0.109	0.134	0.222	0.092	12.144	12.031	13.67	13.556
	3200	2400	**Trips**	5	3	23	27	1	1	3	3	5	2	291	289	328.08	325.344
	Residential		**Trip Rate**	0.181	0.192	1.019	1.014	0.261	0.263	0.118	0.092	0.058	0.037	6.058	5.827	7.695	7.425
	21250	15937.5	**Trips**	29	31	162	162	42	42	19	15	9	6	965	929	1226.39063	1183.35938
	Colleqe		**Trip Rate**	1.194	1.146	1.417	1.407	0.24	0.31	0.075	0.068	0.047	0.047	15.642	15.657	18.615	18.635
	40000	30000	**Trips**	358	344	425	422	72	93	23	20	14	14	4693	4697	5584.5	5590.5
			Total	392	378	610	611	115	136	44	38	29	22	5950	5915	7139	7099
Sainsbury' site	Residential		**Trip Rate**	0.146	0.157	1.319	1.272	0.383	0.35	0.056	0.033	0.069	0.068	6.645	6.656	8.618	8.536
	3605	2703.75	**Trips**	3.947475	4.2448875	35.6624625	34.3917	10.3553625	9.463125	1.5141	0.8922375	1.8655875	1.83855	179.664188	179.9616	233.009175	230.7921
From Trics	Student Acc		**Trip Rate**	0.0001061	0.0000354	0.0053887	0.0058303	n/a	n/a					0.0020495	0.0023674	0.0075443	0.0082331
	12470	9352.5	**Trips**	1	0	50	55							19	22	70.5580658	77.0000678
			Total	5	5	86	89	10	9	2	1	2	2	199	202	304	308
Seagar Site	Employment		**Trip Rate**	0.101	0.055	0.718	1.007	0.081	0.063	0.102	0.121	0.2	0.091	10.83	10.577	12.032	11.914
	4697	3522.75	**Trips**	4	2	25	35	3	2	4	4	7	3	382	373	423.85728	419.700435
	Residential Affordable		**Trip Rate**	0.064	0.062	0.433	0.437	0.122	0.108	0.054	0.033	0.019	0.012	2.317	2.1	3.009	2.752
	96	72	**Trips**	4.608	4.464	31.176	31.464	8.784	7.776	3.888	2.376	1.368	0.864	166.824	151.2	216.648	198.144
	Residential Private		**Trip Rate**	0.064	0.062	0.433	0.437	0.122	0.108	0.054	0.033	0.019	0.012	2.317	2.1	3.009	2.752
	214	160.5	**Trips**	10.272	9.951	69.4965	70.1385	19.581	17.334	8.667	5.2965	3.0495	1.926	371.8785	337.05	482.9445	441.696
			Total	18	16	126	137	31	27	16	12	11	6	920	861	1123	1060
Surrey Canal Road	Employment		**Trip Rate**	0.1	0.093	1.586	1.561	0.233	0.219	0.045	0.045	0.157	0.113	6.397	5.749	8.518	7.78
	44700	33525	**Trips**	33.525	31.17825	531.7065	523.32525	78.11325	73.41975	15.08625	15.08625	52.63425	37.88325	2144.59425	1927.35225	2855.6595	2608.245
	Residential		**Trip Rate**	0.084	0.081	1.427	1.322	0.35	0.34	0.041	0.037	0.018	0.015	1.99	1.996	3.91	3.791
	2700	2025	**Trips**	170.1	164.025	2889.675	2677.05	708.75	688.5	83.025	74.925	36.45	30.375	4029.75	4041.9	7917.75	7676.775
			Total	204	195	3421	3200	787	762	98	90	89	68	6174	5969	10773	10285
Grinstead Road	Employment		**Trip Rate**	0.174	0.137	1.472	1.606	0.13	0.095	0.131	0.155	0.036	0	13.573	13.437	15.516	15.43
	2800	2100	**Trips**	4	3	31	34	3	2	3	3	1	0	285	282	325.836	324.03
	Residential		**Trip Rate**	0.045	0.036	0.445	0.447	0.174	0.148	0.037	0.018	0.012	0.012	2.105	1.934	2.818	2.595
	160	120	**Trips**	5	4	53	54	21	18	4	2	1	1	253	232	338.16	311.4
			Total	9	7	84	87	24	20	7	5	2	1	538	514	664	635
Plough way	Employment		**Trip Rate**	0.244	0.22	1.166	0.984	0.31	0.334	0.095	0.1	0.16	0.126	11.402	11.032	13.377	12.796
	10000	7500	**Trips**	18	17	87	74	23	25	7	8	12	9	855	827	1003.275	959.7
	Residential		**Trip Rate**	0.054	0.063	0.688	0.595	0.136	0.109	0.031	0.028	0.027	0.026	1.797	1.751	2.733	2.572
	750	562.5	**Trips**	30	35	387	335	77	61	17	16	15	15	1011	985	1537.3125	1446.75
			Total	49	52	474	408	100	86	25	23	27	24	1866	1812	2541	2406
Oxtestalls Road	Employment		**Trip Rate**	0.244	0.22	1.166	0.984	0.31	0.334	0.095	0.1	0.16	0.126	11.402	11.032	13.377	12.796
	17000	12750	**Trips**	31	28	149	125	40	43	12	13	20	16	1454	1407	1705.5675	1631.49
	Residential		**Trip Rate**	0.054	0.063	0.688	0.595	2.862	2.747	0.031	0.028	0.027	0.026	1.797	1.751	5.459	5.21
	950	712.5	**Trips**	38	45	490	424	2039	1957	22	20	19	19	1280	1248	3889.5375	3712.125
			Total	70	73	639	549	2079	2000	34	33	40	35	2734	2654	5595	5344
Kent and Sun Wharf	Employment		**Trip Rate**	0.524	0.392	5.291	4.931	0.656	0.596	0.086	0.063	0.09	0.09	6.565	6.308	13.212	12.38
	8300	6225	**Trips**	33	24	329	307	41	37	5	4	6	6	409	393	822.447	770.655
	Residential		**Trip Rate**	0.139	0.148	2.033	1.933	1.078	1.107	0.023	0.027	0.037	0.016	2.507	2.502	5.817	5.733
	300	225	**Trips**	31	33	457	435	243	249	5	6	8	4	564	563	1308.825	1289.925
			Total	64	58	787	742	283	286	11	10	14	9	973	956	2131	2061

Total	Cycle		Car (Dr)		Car (Pax)		Motor Cycle		Taxi		Walk and Public		Total	
	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out
	1144	1087	10405	9765	4475	4358	354	320	336	265	28791	27916	45505	43710



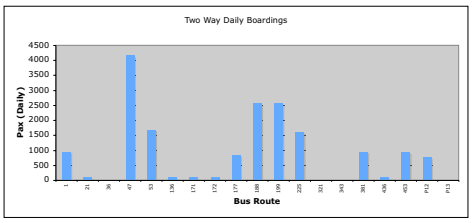
Bus Loading with Weighting – 25%

Transport accessibility		Bus		31%	Bus (31%)																			
					1	21	36	47	53	136	171	172	177	188	199	225	321	343	381	436	453	P12	P13	
Arklow Road	PT accessible= 1					1		1	1	1	1	1	1	1	1	1				1	1			
	Staion name																							
In	Out	In	Out	IN		42		42	42	42	42	42	42	42	42	42				42	42			
Total increase(Walk+TP) 1616	1553	501	481	OUT		40		40	40	40	40	40	40	40	40	40				40	40			
Convoys Wharf	PT accessible= 1							1						1	1									
	Staion name																							
In	Out	In	Out	IN				645						645	645									
Total increase(Walk+TP) 6239	5883	1934	1824	OUT				608						608	608									
Creekside Village West	PT accessible= 1							1						1	1									
	Staion name																							
In	Out	In	Out	IN				52						52	52									
Total increase(Walk+TP) 508	507	157	157	OUT				52						52	52									
Creekside Village East	PT accessible= 1							1						1	1									
	Staion name																							
In	Out	In	Out	IN				111						111	111									
Total increase(Walk+TP) 1077	1099	334	338	OUT				113						113	113									
Lewisham College	PT accessible= 1							1	1				1			1					1			
	Staion name																							
In	Out	In	Out	IN				369	369				369			369					369			
Total increase(Walk+TP) 5950	5915	1844	1834	OUT				367	367				367			367					367			
Sainsbury' site	PT accessible= 1					1	1	1	1	1	1	1	1				1	1		1	1		1	
	Staion name																							
In	Out	In	Out	IN		5	5		5	5	5	5	5				5	5		5	5		5	
Total increase(Walk+TP) 199	202	62	63	OUT		5	5		5	5	5	5	5				5	5		5	5		5	
Seagar Site	PT accessible= 1							1	1				1			1					1			
	Staion name																							
In	Out	In	Out	IN				57	57							57					57			
Total increase(Walk+TP) 920	861	285	267	OUT				53	53							53					53			
Surrey Canal Road	PT accessible= 1				1			1	1										1			1		
	Staion name																							
In	Out	In	Out	IN	383			383	383										383			383		
Total increase(Walk+TP) 6174	5969	1914	1850	OUT	370			370	370										370			370		
Grinstead Road	PT accessible= 1							1						1	1	1								
	Staion name																							
In	Out	In	Out	IN				42						42	42	42								
Total increase(Walk+TP) 538	514	167	159	OUT				40						40	40	40								
Plough way	PT accessible= 1				1			1						1	1	1			1					
	Staion name																							
In	Out	In	Out	IN	96			96						96	96	96			96					
Total increase(Walk+TP) 1866	1812	578	562	OUT	94			94						94	94	94			94					
Oxtestalls Road	PT accessible= 1							1						1	1	1								
	Staion name																							
In	Out	In	Out	IN				212						212	212	212								
Total increase(Walk+TP) 2734	2656	848	823	OUT				206						206	206	206								
Kent and Sun Wharf	PT accessible= 1							1						1	1									
	Staion name																							
In	Out	In	Out	IN				101						101	101									
Total increase(Walk+TP) 973	956	302	296	OUT				99						99	99									
		In	Out		1	21	36	47	53	136	171	172	177	188	199	225	321	343	381	436	453	P12	P13	Total
		8925	8654	IN	479	47	5	2109	856	47	47	47	416	1300	1300	818	5	5	479	47	473	383	5	8868
				OUT	464	45	5	2041	836	45	45	45	412	1251	1251	799	5	5	464	45	465	370	5	8600
				Total	943	92	10	4150	1691	92	92	92	828	2551	2551	1617	10	10	943	92	938	753	10	17469

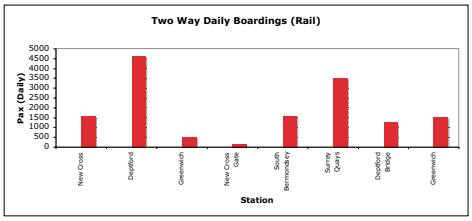
Rail Loading with Weighting – 25% Reduction

Transport accessibility		Rail			Rail (26%)								
				26%	South Eastern			Southern train		East London Line	DLR		
Arklow Road	**PT accessible= 1**				1	1							
	Staion name				new cross	Deptford							
In	Out	**In**	**Out**	**IN**	210	210							
Total increase(Walk+TP) 1616	1553	**420**	**404**	**OUT**	202	202							
Convoys Wharf	**PT accessible= 1**					1							
	Staion name					Deptford							
In	Out	**In**	**Out**	**IN**		1622							
Total increase(Walk+TP) 6239	5883	**1622**	**1530**	**OUT**		1530							
Creekside Village West	**PT accessible= 1**					1	1					1	
	Staion name					Deptford	greenwich					Greenwich	
In	Out	**In**	**Out**	**IN**		44	44					44	
Total increase(Walk+TP) 505	507	**131**	**132**	**OUT**		44	44					44	
Creekside Village East	**PT accessible= 1**					1	1					1	
	Staion name					Deptford	greenwich					Greenwich	
In	Out	**In**	**Out**	**IN**		93	93					93	
Total increase(Walk+TP) 1077	1090	**280**	**283**	**OUT**		94	94					94	
Lewisham College	**PT accessible= 1**				1						1	1	
	Staion name				new cross						Deptford bridge	Greenwich	
In	Out	**In**	**Out**	**IN**	516						516	516	
Total increase(Walk+TP) 5950	5915	**1547**	**1538**	**OUT**	513						513	513	
Sainsbury' site	**PT accessible= 1**				1			1					
	Staion name				new cross			new cross gate					
In	Out	**In**	**Out**	**IN**	26			26					
Total increase(Walk+TP) 199	202	**52**	**53**	**OUT**	26			26					
Seagar Site	**PT accessible= 1**				1	1	1	1			1	1	
	Staion name				new cross	Deptford	Greenwich	new cross gate			deptford bridge	Greenwich	
In	Out	**In**	**Out**	**IN**	40	40	40	40			40	40	
Total increase(Walk+TP) 920	861	**239**	**224**	**OUT**	37	37	37	37			37	37	
Surrey Canal Road	**PT accessible= 1**								1	1			
	Staion name								South Bermondsey	Surrey Canal			
In	Out	**In**	**Out**	**IN**					803	803			
Total increase(Walk+TP) 6174	5969	**1605**	**1552**	**OUT**					776	776			
Grinstead Road	**PT accessible= 1**									1			
	Staion name									Surrey Canal			
In	Out	**In**	**Out**	**IN**						140			
Total increase(Walk+TP) 538	514	**140**	**134**	**OUT**						134			
Plough way	**PT accessible= 1**									1			
	Staion name									Surrey Quays			
In	Out	**In**	**Out**	**IN**						485			
Total increase(Walk+TP) 1866	1812	**485**	**471**	**OUT**						471			
Oxtestalls Road	**PT accessible= 1**					1				1			
	Staion name					Deptford				Surrey Quays			
In	Out	**In**	**Out**	**IN**		355				355			
Total increase(Walk+TP) 2734	2654	**711**	**690**	**OUT**		345				345			
Kent and Sun Wharf	**PT accessible= 1**						1				1	1	
	Staion name						greenwich				deptford bridge	greenwich	
In	Out	**In**	**Out**	**IN**			84				84	84	
Total increase(Walk+TP) 973	956	**253**	**248**	**OUT**			83				83	83	
		In	**Out**		**New Cross**	**Deptford**	**Greenwich**	**New Cross Gate**	**South Bermandsey**	**Surrey Quays**	**Deptford Beidge**	**Greenwich**	**Total**
		7486	7258	**IN**	791	2365	261	66	803	1783	640	777	7486
				OUT	778	2252	258	64	776	1726	633	771	7258
				Total	1569	4617	520	129	1579	3509	1273	1548	14744

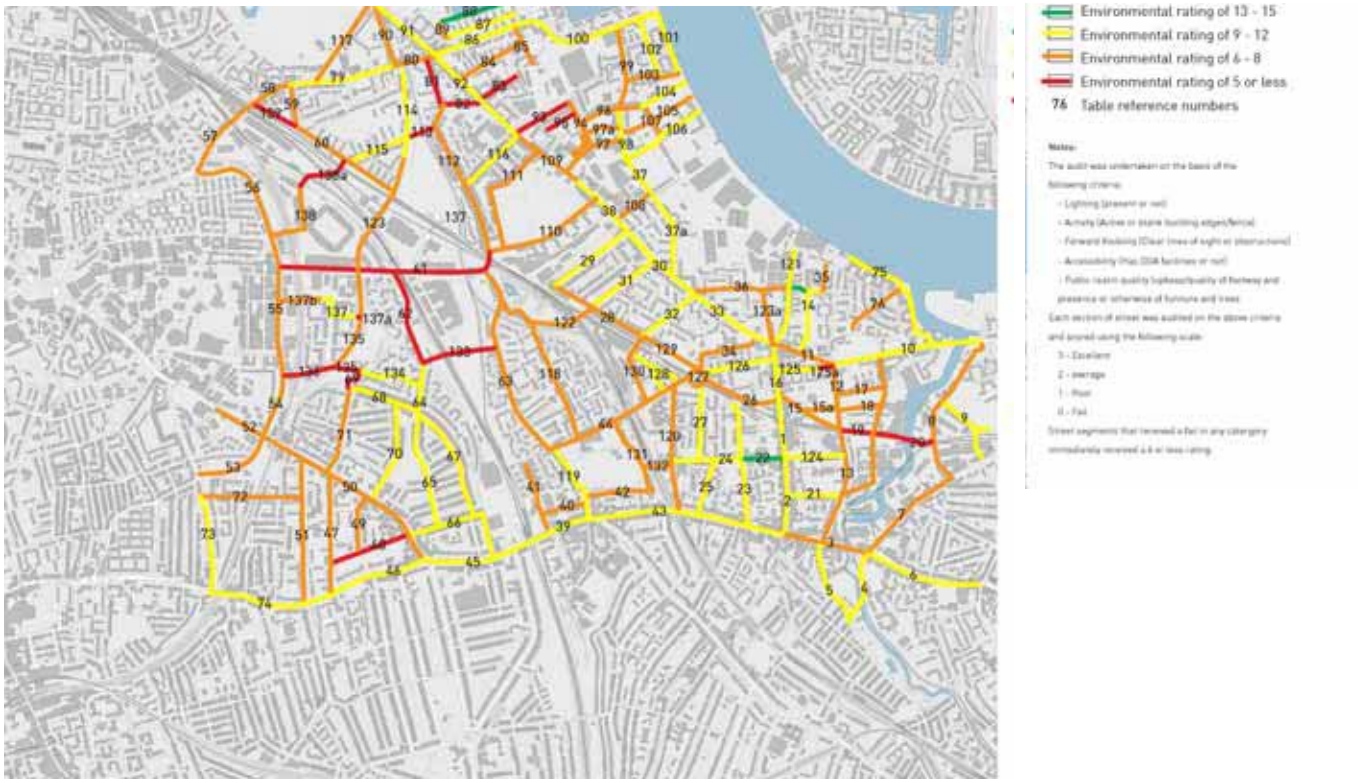
Bus Route	1	21	36	47	53	136	171	172	177	188	199	225	321	343	381	436	453	P12	P13	Tota
Two Way Daily Boardings	943	92	10	4150	1691	92	92	92	828	2551	2551	1617	10	10	943	92	938	753	10	1746



Station	New Cross	Deptford	Greenwich	New Cross Gate	South Bermondsey	Surrey Quays	Deptford Bridge	Greenwich	Total
Two Way Daily Boardings	1569	4617	520	129	1579	3509	1273	1548	14744



APPENDIX 2
(CHAPTER 8)



Appendix 2: Priority route scoring map and matrix (opposite page)