London Borough of Croydon

Third Local Implementation Plan

Initial Draft V1.1 - October 2018

Foreword

Signature

Councillor Stuart King

Cabinet Member for Transport, Environment and Regeneration

Executive summary

1. Introduction and preparing a LIP

Introduction

The Local Implementation Plan (LIP) is a statutory document prepared under Section 145 of the GLA Act and sets out how the borough proposes to deliver the Mayor's Transport Strategy (MTS) in its area, as well as contributing to other local and sub-regional goals. It has been developed in accordance with the Revised Guidance for Borough Officers on Developing the Third Local Implementation Plan.

This document is the third LIP for the London Borough of Croydon. It covers the same period as the MTS (published in March 2018) and it also takes account of the transport elements of the draft London Plan, and other relevant Mayoral and local policies. The document sets out long terms goals and transport objectives for the London Borough of Croydon for the next 20 years, a three-year programme of investment starting in 2019/20, and includes delivery proposals for the period 2019/20 - 2021/22 and the targets and outcomes the borough are seeking to achieve. A more detailed delivery plan is provided for the financial year 2019/20.

This LIP identifies how the London Borough of Croydon will work towards achieving the MTS goals of:

- Healthy Streets and healthy people
- A good public transport experience
- New homes and jobs

The Council notes that the overarching aim of the strategy is for 80 per cent of all trips in London to be made on foot, by cycle or using public transport by 2041, compared to 63 per cent today, and there are different targets set for central, inner and outer London. The current mode share for Croydon is 49 per cent and a target of 63 per cent has been set for 2041. The LIP outlines how Croydon Council will set local priorities and targets in order to assist with achieving this aim.

This document also outlines how the Council will work with TfL to assist with delivering the outcomes, polices and proposals of the MTS.

Local approval process

A Labour Group policy development meeting on 'Implementing the Mayor's Transport Strategy in Croydon through the Local Implementation Plan' was held on the 19th June 2018. The discussions held at this meeting provided guidance to the borough officers for the development of the draft LIP.

This draft LIP was considered by the Cabinet Committee on 15th October 2018 and subsequently approved with delegated authority the Portfolio Holder on XX XXXX XXXX.

Statutory consultation

The GLA Act 1999 places a duty on boroughs, when preparing a LIP, to consult with the following organisations:

- The relevant Commissioner or Commissioners of Police for the City of London and the Metropolis
- TfL
- Such organisations representing disabled people as the boroughs consider appropriate
- Other London boroughs whose area is, in the opinion of the council preparing the LIP, likely to be affected by the plan
- Any other body or person required to be consulted by the direction of the Mayor

As part of the pre-consultation and engagement process and to involve representatives of potentially affected groups within the equalities impact analysis process, key stakeholders were invited to participate in two workshops on the 6th September 2018. The stakeholder workshop participants included local residents, council officers, councillors, and the representatives from the mobility forum and cycle forum.

The Croydon Cycling Forum is made up of representatives from the following organisations:

- Croydon Cycling Campaign (part of the London Cycling Campaign)
- Wheels for Wellbeing
- CyclingUK (Cyclist Touring Club)
- Right to Ride Network
- British Cycling

The Croydon Mobility Forum is made up of representatives from:

- Croydon Disability Forum
- Croydon Vision
- Disabled Motoring UK
- Access for All

An online engagement campaign1 was also undertaken asking staff, residents and visitors to complete an online survey giving their views on transport in Croydon in order to shape the LIP3 document. The surveys were active until the end of September 2018 and 992 people responded to the survey. A summary of results reveal that:

- 86% of respondents agreed that traffic levels are too high in Croydon.
- 44% of respondents agreed that traffic speeds are too high, with 37% disagreeing, 19% were not sure.
- Less than 5% agreed that the street environment encouraged them to

[1] https://getinvolved.croydon.gov.uk/KMS/DMart.aspx

cycle, whilst 77% disagreed, with over 52% disagreeing strongly.

- Over 55% agreed that children should be able to play in residential streets, 26% disagreeing.
- 74% stated that they are concerned about air quality.
- 72% agreed that traffic levels need to be lower.
- 40% agreed they would cycle more if conditions were right, with 43% disagreeing.
- 64% stated they would use public transport more if it was convenient.
- 61% would travel by car less if the alternatives were better.
- 78% agreed that less vehicles would mean better air quality.

The feedback and responses from both the workshops and the online survey were considered when developing the draft LIP3 objectives and proposals.

Copies of the draft LIP and consultation questionnaires were placed in libraries and on the Council's website for 6 weeks as part of a public consultation exercise, and will be available for any member of the public to respond.

A total of ZZZ bodies were directly consulted, including the statutory consultees mentioned above. All direct consultees were written to, drawing attention to the consultation, where it could be found on the borough's website, and the closing date.

The direct consultees fell into a number of broad categories as follows:

Statutory consultee	*Number consulted*
TfL	1
Police	1
Disability groups	5
Local authorities	7
Non-statutory consultee	
National agencies	5
Transport & environment groups and	4
Business groups	4
Community groups	9
Residents' groups and associations	15

There were XX responses. Bodies and individuals responding to the consultation were:

-
-
-
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A more detailed summary of the responses received and the borough's response to individual points raised can be found in the LIP3 consultation report at www.croydon.gov.uk

Statutory duties[2]

The borough has taken into account all the statutory duties and processes as set out in the requirements in the GLA Act in the preparation of this LIP.

The borough has met its statutory duty and conducted a Strategic Environmental Assessment (SEA) and, as recommended, an Equality Analysis (EA) and Health Impact Assessment (HIA) on the proposals contained in its LIP. The LIP Outcomes and programmes have been assessed for both purposes, and this process has not identified any necessary changes to the LIP and/or the following changes have been made to the LIP.

The SEA Scoping Report, including a non-technical summary, and a draft of the EA were available on the borough's website during the consultation period. The Environmental Report and Environmental Statement, and the final EA remain on the website at this link: www.croydon.gov.uk

LIP approval[3]

The draft LIP was submitted to the Mayor on XX XXXX and approved by the Mayor on XX XXX

[2] Requirement R5: There is a requirement to undertake a Strategic Environmental Assessment and it is recommended that an Equalities Impact Assessment is also done (which addresses the borough's Public Sector Equality Duty). The boroughs are required to consider whether it is appropriate for the LIP to be assessed against other matters, for example crime and disorder, health, economic and business issues, air quality and climate change.

[3] Requirement R6: Boroughs must meet all of the following requirements for the submission of their LIP set out below under the following headings: a. Name of document b. Submitting the document to TfL c. Submission milestones.

Borough Transport Objectives

Introduction

This chapter sets out the local policy context for the third round of LIPs. It covers the borough's detailed interpretation at a spatial level and the local policies and proposals which will help deliver the MTS. The chapter also considers the link between the LIP and other key frameworks against which the borough plans and delivers local services.

The LIP firmly demonstrates that it is informed by evidence and analysis of local needs and issues and that it is shaped by the wider context of the MTS vision, the MTS Healthy Streets Approach and the MTS policies, proposals and outcomes.

Local context

Overview

Croydon is the second most populous borough in London after Barnet with over 385,000 residents, a population that is projected to rise by 14% to 445,000 by 2031.[4] If Croydon was not part of Greater London it would be the 12th largest city by population in the United Kingdom.[5]

Croydon is one of the largest boroughs in London extending to 87 square kilometres. It is bordered by the London Borough of Bromley to the east, Lambeth to the north and Merton and Sutton to the west. To the south are the Surrey County districts of Reigate and Banstead, and Tandridge.

The Borough is strategically placed on the main rail connections between London and Gatwick Airport, and the South Coast. East Croydon is in the top 20 busiest stations in the UK and the second largest in the UK in terms of passengers interchanging[6]. Train services from East Croydon station provide direct connections to a number of London main line terminals including Victoria Station (15 minutes), London Bridge (15 minutes) and St Pancras International (30 minutes) and to Gatwick Airport (15 minutes). Croydon has good connections to the City, Docklands and East London via the London Overground.

Croydon Tramlink provides high quality and high capacity east-west connections across the borough and South London sub-region and carries 30 million passengers per annum. The connectivity and accessibility of Croydon 'city' centre, is only rivalled

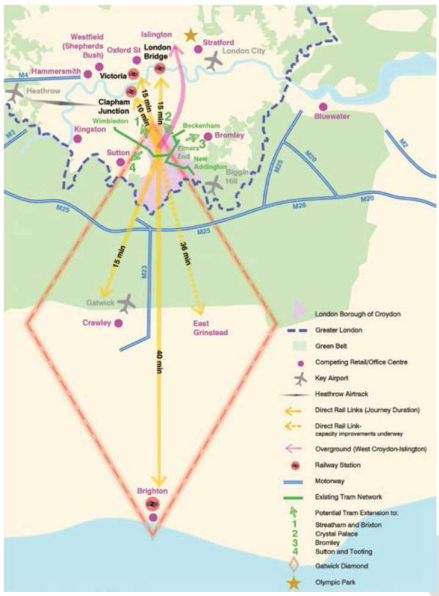
[4] https://www.croydon.gov.uk/sites/default/files/articles/downloads/DRAFT%20Corporate%20Plan%202018-22.pdf Page 6

[5] https://thegeographist.wordpress.com/2016/04/07/largest-cities-uk-population/

[6] https://www.croydon.gov.uk/sites/default/files/articles/downloads/DRAFT%20Corporate%20Plan%202018-22.pdf Page 6

by that of the City of London and West End. This connectivity has resulted in Croydon being a main focus for regional and sub-regional growth strategies.

Figure 1: Croydon in its wider sub region context [Source: Local Plan]



Local Policy Context

This section sets out the local and borough policy and strategy documents and plans that will influence or complement the Local Implementation Plan and vice versa.

Corporate Plan 2018-2022 – 'Ambitious for Croydon'

The key relevant themes in the Draft Corporate Plan include:

- Transport and environment –
    - Reliable public transport system that ensures safe and convenient travel
    - Easy, accessible, safe and reliable, making it more convenient to travel between Croydon's local places
    - Less reliance on cars, more willingness to use public transport
- Creating jobs and growing the economy - Increase the number of businesses in the borough and support existing business for sustainable economic growth
- A healthier Croydon – improving the health of residents

A Transport Vision for Croydon: Moving towards a more liveable place

The Council adopted this direction of travel document in 2015. The Vision provides a focus for our plans and actions and sets out how people will move in a growing Croydon over a 20 year period. Its approach is five fold:

- Increasingly connected - enhancing national and international links and ensuring Croydon is a place that is easy to get to and through.
- Better places – turning challenges into opportunities such as switching the many short car trips to walking and cycling; enhancing Croydon's important places such as using the planning system to guide development to the most accessible places and investment in urban realm schemes.
- Safer and calmer – reducing road user casualties such as through training and education and 20mph speed limits.
- Mixed Modality – achieving a walking and cycling environment with the aim for a more liveable city; reducing the need to own a car.
- A Healthy City – ensuring clean air is enjoyed by all by widening travel choices and ensuring active travel is available to all.

Croydon's Community Strategy 2016-21

The vision and key relevant outcomes from Croydon's Community Strategy are:

- Connected - a place that is well connected, easy to get to and around, and supported by infrastructure that enables people to easily come together; with one of the best digital, communications and transport networks in the country.
- Sustainable - a place that sets the pace amongst London boroughs on promoting environmental sustainability and where the natural environment forms the arteries and veins of the borough.

Croydon Local Plan 2018

The recently adopted Croydon Local Plan 2018 identifies 11 Strategic Objectives. The most relevant for this LIP are:

- A Place of Opportunity:
    - Strategic Objective 1 – establish Croydon as the premier business location in South London and the Gatwick Diamond.
    - Strategic Objective 4 – reduce social, economic and environmental deprivation, particularly where it is spatially concentrated, by taking priority measures to reduce unemployment, improve skills and education and renew housing, community and environmental conditions.
- A Place with a Sustainable Future:
    - Strategic Objective 8 – improve accessibility, connectivity, sustainability and ease of movement to, from and within the Borough.

The adopted 2018 Local Plan 2018[7] sets out the spatial vision for the Borough. It is focused on Croydon Town Centre, one of London's Metropolitan Centre, as an Opportunity Area with 16 local centres or places in the borough, as shown below in Figure 2.

Figure 2 Croydon's Places [Source: Local Plan]

The Local Plan also identifies the areas of specific growth which are primarily centred on Croydon Opportunity Area and the identified places in the Borough in Figure 2. The housing target set in the Local Plan for the Borough is to deliver 32,890 new homes by 2036. More than 10,000 of these homes would be delivered in Croydon Opportunity Area. A further 10,000 new homes will be delivered through small scale suburban 'Windfall' developments. With the remainder being provided in district and local centres and areas of 'Focused Intensification' that have been identified in the Draft Suburban Design Guidance Supplementary Planning Document (SPD2)[8].

[7] https://www.croydon.gov.uk/planningandregeneration/framework/localplan/clppolicies

[8] https://www.croydon.gov.uk/planningandregeneration/framework/localplan/spdandoapf

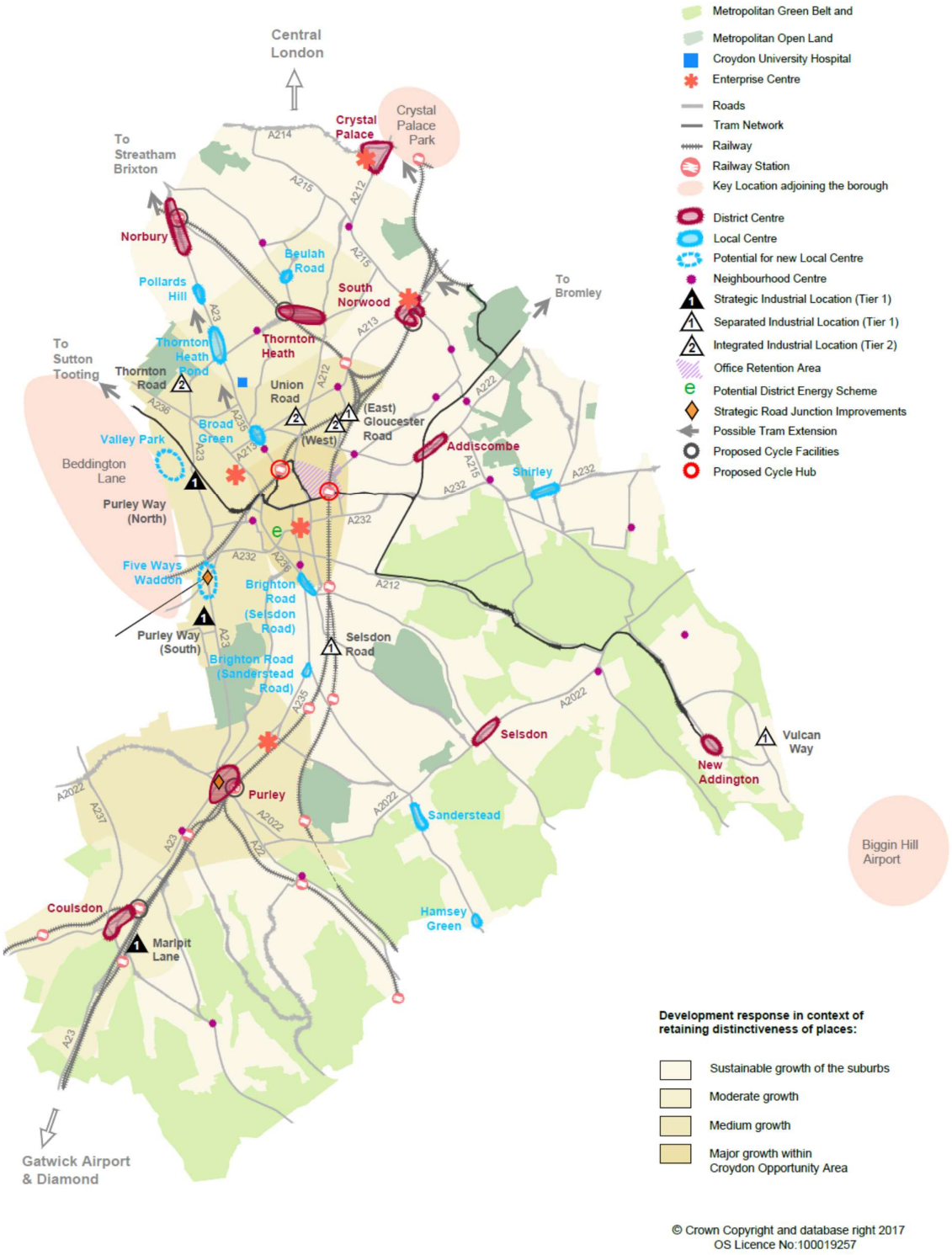


Figure 3 Key Borough Diagram [Source: Local Plan]

Croydon Opportunity Area Planning Framework (OAPF)

The Croydon Opportunity Area Planning Framework [OAPF][9] was adopted in 2013, it covers Croydon Metropolitan Centre and guides development over the 20 year period to 2031. The main objectives of the OAPF are to:

- Support the development of new homes
- Plan the delivery of the social infrastructure necessary to accommodate new residents
- Promote the redevelopment and renewal of the retail core
- Plan for the revival of prominent high streets
- Encourage the location of new office/commercial space around New Town and East Croydon
- Plan for, and enable the, delivery of new and improved streets and amenity spaces.
- Promote high quality architecture and built form
- Ensure enhanced transport and parking capacity

Croydon Growth Zone Strategy

The Croydon Opportunity Area (COA) is now referred to as the 'Growth Zone' and it provides the delivery framework for transport and other infrastructure measures for Croydon Opportunity Area. This will run for an initial 16 years and seeks to support delivery of the OAPF objectives, specifically:

- 23,594 new jobs
- A further 5,097 jobs during the construction phase
- At least 10,000 new homes
- The wholesale renewal of the retail core ensuring the metropolitan centre is an attractive place to live, work and invest

The value of developments and associated infrastructure works in central Croydon is estimated to be over £5.25 billion and the Council is providing over £300 million of funding, known as the Growth Zone programme for transport, public realm and social infrastructure to enable and support this growth. Much of the funding will be spent on improvements to public transport and enhancement to the streets to encourage more walking and cycling. In addition, the Growth Zone will ensure a range of schemes are put in place to reduce the impact of the construction using measures such as implementing construction & logistics plans, providing HGV holding areas, using technology to manage and regulate the flow of construction traffic entering the town

[9] https://www.london.gov.uk/what-we-do/planning/implementing-london-plan/opportunity-areas/opportunity-areas/croydon-opportunity

centre, enhanced signing and wayfinding measures and promoting electric and environmentally friendly vehicles.

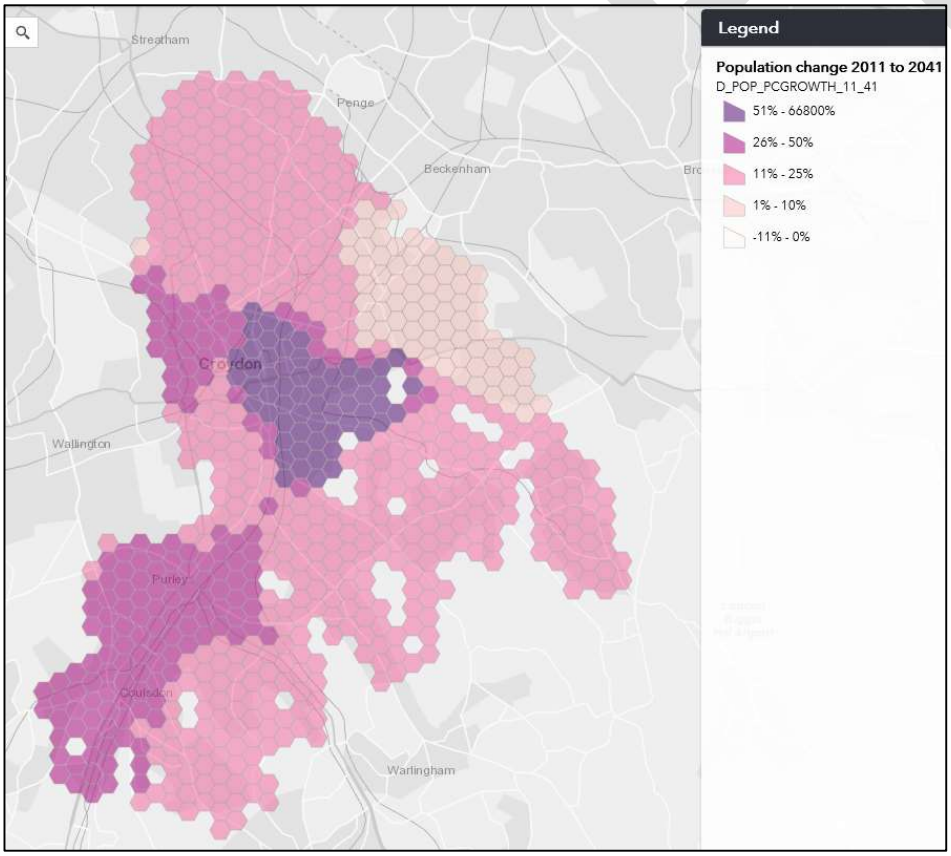
The projects and programmes being funded through the Growth Zone are detailed in the Delivery Plan for this LIP3.

Draft London Plan 2018

The Draft London Plan (minor amendments 2018) sets out new housing and growth targets for Croydon and requires the Borough to deliver 14,500 new homes and 10,500 new jobs in the Growth Zone between 2019 and 2041.[10]

The 10 year net target set in the Draft London Plan for Housing Completions for Croydon between 2019 and 2029 is 29,490 with an annualised average target of 2,949 per year.

Figure X: Location of population growth in Croydon from 2011 to 2041 [TfL Play Book]



Croydon Transport Investment Strategy

[10] https://www.london.gov.uk/what-we-do/planning/london-plan/new-london-plan/download-draft-london-plan-0 Table2.1

The Croydon Transport Investment Strategy (CTIS) was developed to support the Croydon Local Plan 2018; in particular, Strategic Objective 8: To improve accessibility, connectivity, sustainability and ease of movement to, from and within the borough.

The CTIS also supports the Growth Zone designation overlaying the Croydon Opportunity Area; and the Council's 'Transport Vision: Moving Towards a more Liveable Place'. The CTIS identifies a series of integrated strategic transport packages intended to transform travel and support growth across the borough and beyond. The CTIS outlines how Croydon, with its partner organisations, aims to build and enhance Croydon's transport network to support a borough that is well-connected, accessible and sustainable for all in the community by 2037, catalysing economic growth, social inclusion, a decrease in deprivation, improvements to the environment, and supporting health and wellbeing, population growth and future opportunities. Figure X provides an overview map of the strategic transport schemes considered as part of the CTIS.

Figure X – Transport Investment Strategy Map

Demographics

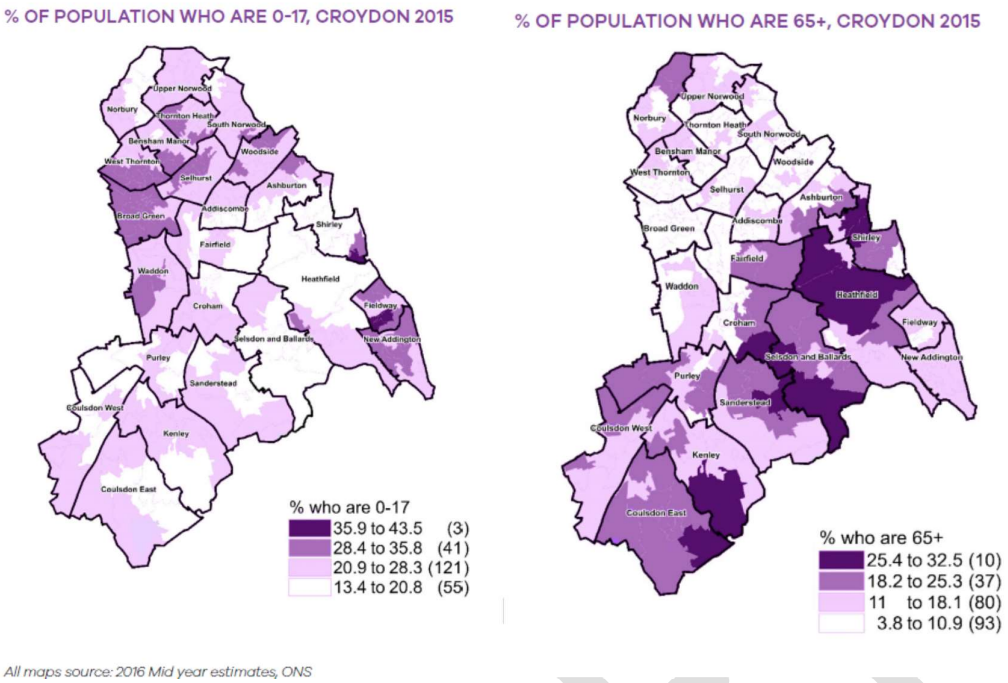
Demographically Croydon is young borough with 95,000 residents aged 17 or under, the highest number in London. It is also an ageing population with over 50,000 residents aged 65 and above, this figure is expected to increase by 41% by 2031. In contrast the population aged between 20 and 64 will have increased by just 2.5%.[11]

Croydon has a diverse population with 52% Black, Asian and Minority Ethnic (BAME) population[12]. This proportion is expected to rise to 55.6% by 2025. The younger population is more diverse than the older population. Over 100 different languages are spoken in the Borough.

As shown in figures X and X, the younger population is more concentrated in the north and New Addington, whereas the older population is more concentrated in the south and east of the borough.

[11] https://www.croydon.gov.uk/sites/default/files/articles/downloads/DRAFT%20Corporate%20Plan%202018-22.pdf Page 6

[12] GLA 2018 Ethnic Group Projections



All maps source: 2016 Mid year estimates, ONS

Figure X: Percentage of population aged 0-17 borough distribution

Figure X: Percentage of population aged 65+ borough distribution

[Source: Annual Report of the Croydon Director of Public Health 2017}

The north of Croydon is more densely populated than the south of the Borough and has many similar characteristics to other parts of inner London such as Lambeth. The south and east of the Borough are lower density and more suburban with similarities to neighbouring outer London areas such as Sutton, Bromley or adjacent settlements in Surrey. Refer to Figure X below.

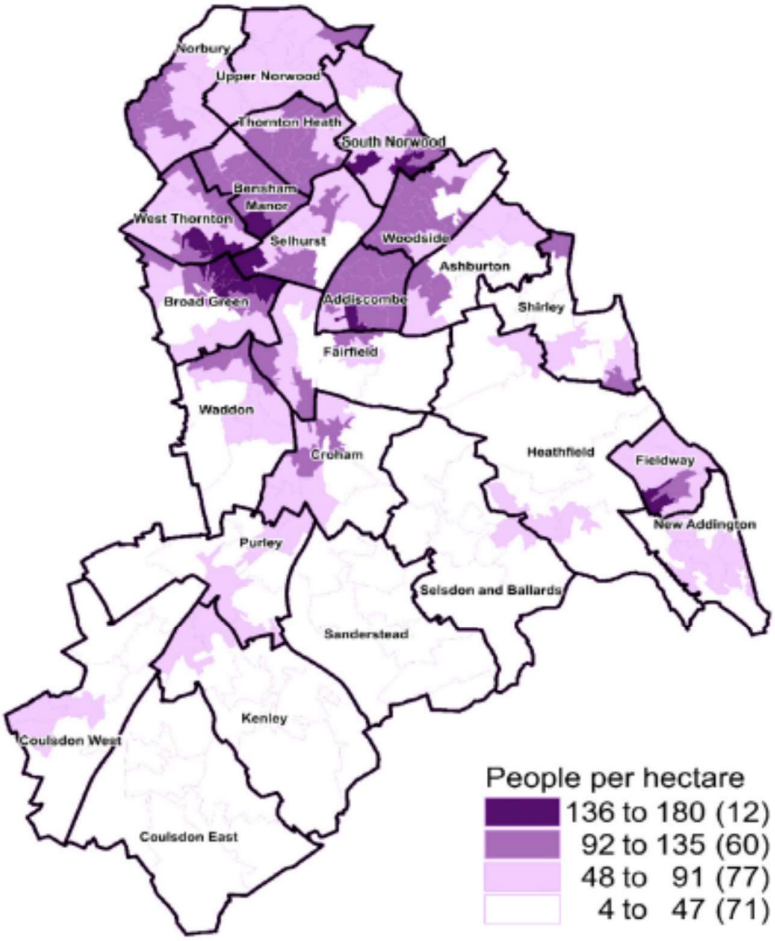
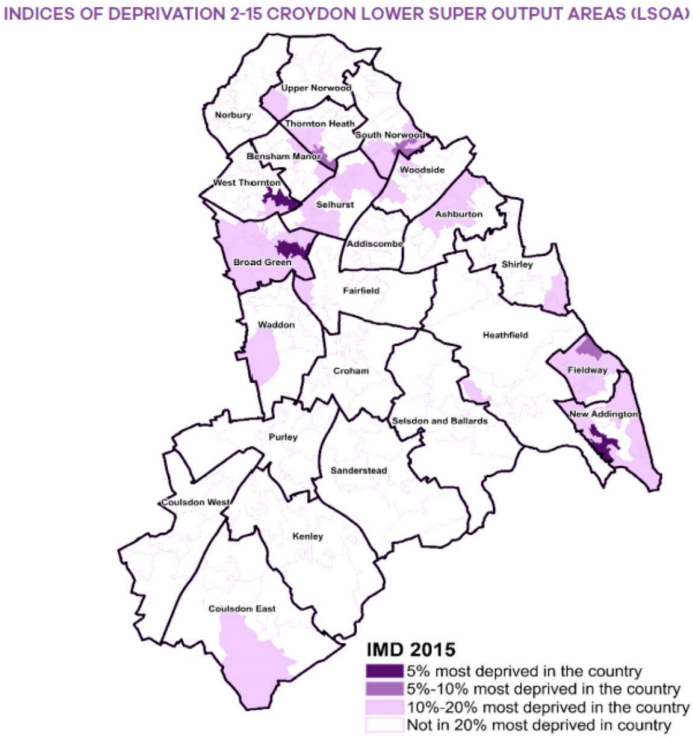


Figure X Population density in 2015 [Source: Local Plan]

Deprivation

Overall Croydon is the 17th most deprived borough in London and there is a significant variation in deprivation across the Borough with greater concentrations in the north of the borough and in Addington and Shirley.[13] About 10,000 people live in areas considered to be within the 10% most deprived in the whole country. Figure X below gives an overall picture of the pattern of deprivation across the Borough.

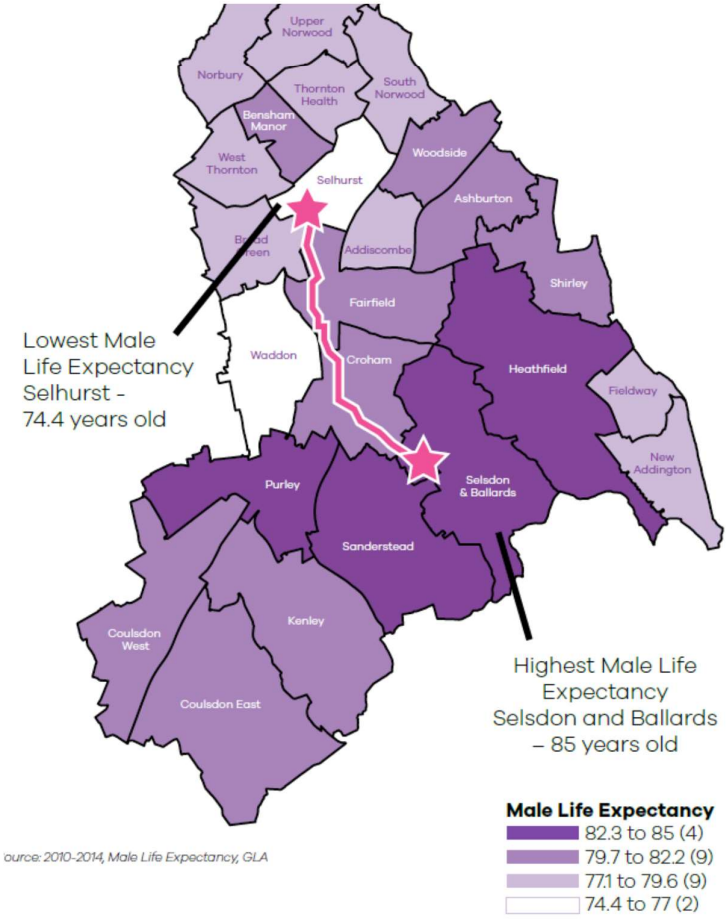
[13] https://www.croydonobservatory.org/wp-content/uploads/2016/11/Report_IMD2010-versus-IMD2015-LSOA-level_Full-ReportV2-1.pdf - Page 15



Source: 2015 Indices of Deprivation, Department od Communities and Local Government

Figure X Deprivation in Croydon relative to the rest of England [Source: 2015 Indices of Deprivation, Department of Communities and Local Government]

Life expectancy is linked to deprivation. Male life expectancy increases by 10.6 years on a 30 minute bus journey between Selhurst in the north and Selsdon in the south.



ource: 2010-2014, Male Life Expectancy, GLA

Figure X: Male Life Expectancy 2010-2014 (difference between lowest and highest in the Borough). [Source: Annual Public Health Director's Report 2017]

Croydon's Economy

Croydon town centre is one of London's Metropolitan Centres and is the only Outer London Borough with significant office-based employment. Croydon has the 5th largest financial centre in London with over 4000 people employed and is the fastest growing tech economy in London. Croydon is a major retail centre with more shops than anywhere else in London apart from the West End with a large out of town retail offer on Purley Way. Retail provides more than 15,000 jobs. However, Croydon faces strong competition from other centres such as Bromley, Kingston and Bluewater.

It is a major location for employment with 141,000 jobs in the borough although there are 11,000 fewer jobs than in 2007. It has the largest stock of offices outside the West End, City and Canary Wharf. However, there is a large quantity of older office stock which is obsolete and poor quality. Some of this will be demolished as part of the Westfield/Whitgift centre redevelopment and some are being converted to residential units to meet much needed housing. Croydon competes against more recent office developments in Docklands, Redhill and surrounding boroughs.

Overall Croydon has the 5th highest proportion of economically active population across London although the unemployment rate has been increasing over the last three years. Some demographic groups are more likely to be out of work and/or on benefits than others including the over 55s, BAME groups, people with disabilities and women. There are geographical variations with people more likely to be out of work and/or on benefits in the north of the Borough and in areas such as New Addington. Over 20% of Croydon's residents are in low paid work and over 25% of jobs in Croydon are low waged, leading to average annual pay in Croydon being lower than London as a whole.

Much of the employment growth in Croydon has taken place in areas with lower levels of public transport accessibility which has implications for future travel patterns and of people being able to access jobs by sustainable means of transport.

As a result of the loss of jobs in Croydon town centre there has also been an increase in commuting flows to other areas, particularly to Bromley, Sutton and Central London, as Croydon's residents have found jobs in other locations to replace those lost in the Borough[14].

[14] South London Sub-Regional Transport Plan – Page 38

Figure X: Employment growth changes for south London boroughs [Source: South London Sub-regional Transport Plan 2016; page 26]

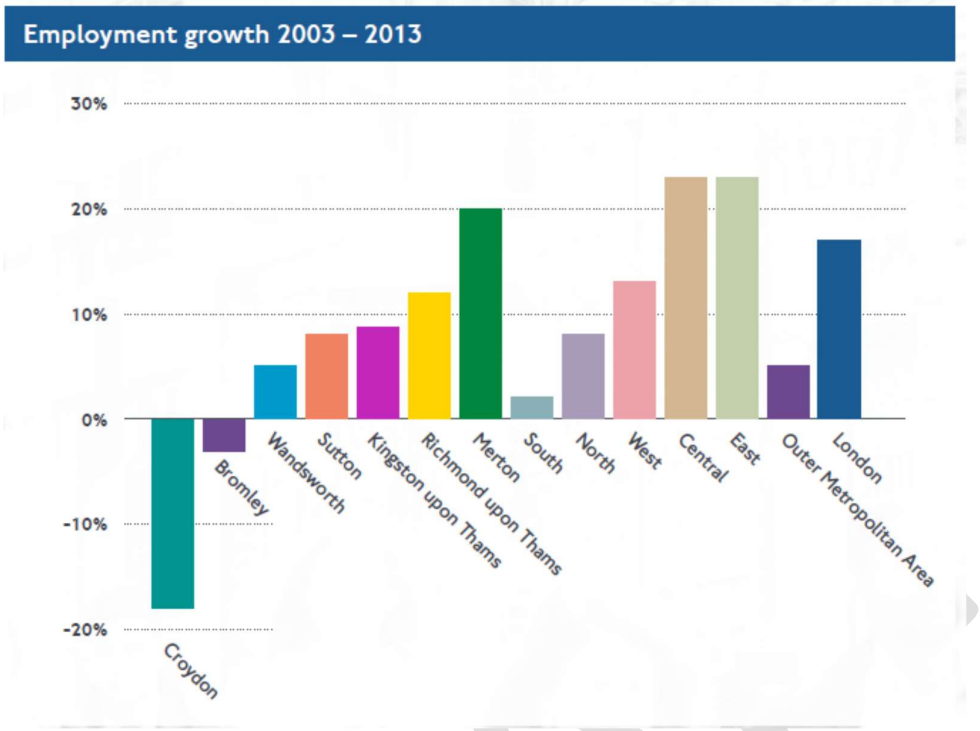
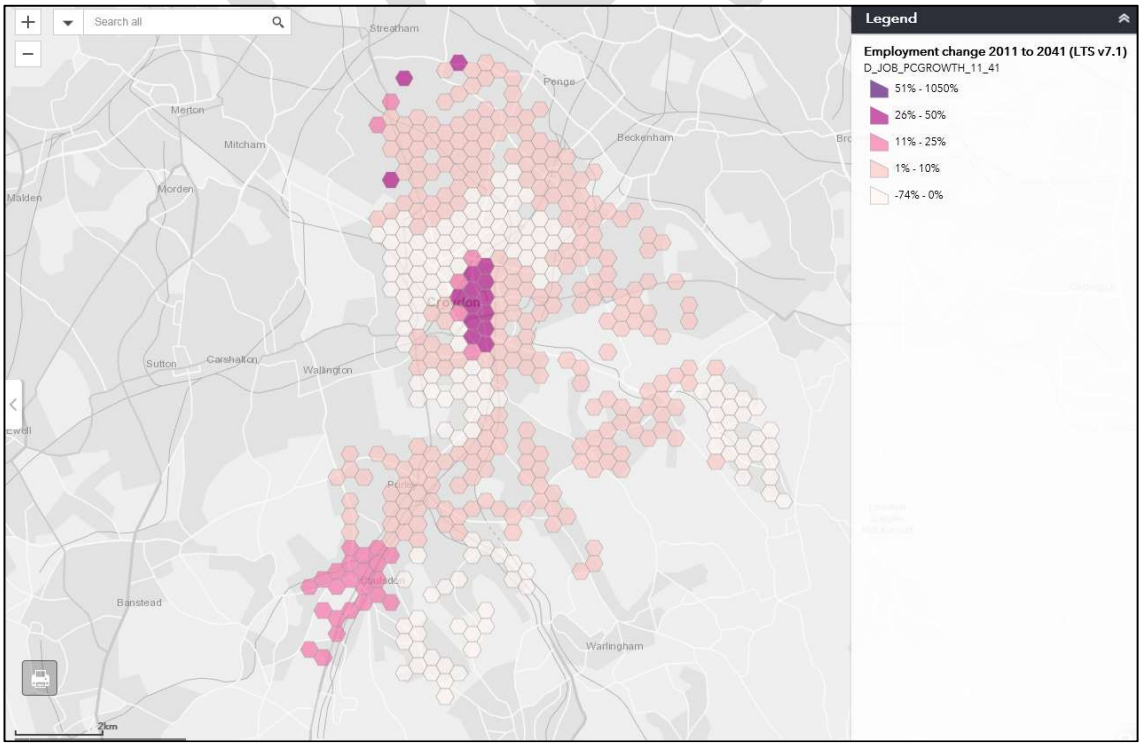


Figure X: Location of employment growth changes 2011 to 2041 [Source: TfL Playbook]



Transport and Travel in Croydon

Public Transport

There are 17 rail stations in the borough, of these ten have more than one million entries and exits each year.

Table X Croydon's busiest rail stations [Source: Office of Rail and Road]

Station	Entries and exits 2016/17 [million]	Step free accessibility
East Croydon	22.6	Yes
West Croydon	5.5	Partially
Norwood Junction	4.4	No
Norbury	3.5	Yes
Thornton Heath	3.4	Yes
Purley	3.0	Yes
Selhurst	1.5	No
Coulsdon South	1.3	No
South Croydon	1.1	No
Sanderstead	1.0	Yes

Rail services through the borough are operated by Govia Thameslink Railways who run both Southern Trains and Thameslink services. Fast non stopping services operated by both Southern and Thameslink offer frequent and fast journeys to London Bridge, Farringdon, Kings Cross St Pancras, Clapham Junction, London Victoria, Gatwick Airport and Brighton from East Croydon, Norwood Junction, Purley and Coulsden South stations. Other stations in the Borough are served by Southern local stopping services.

London Overground services operated by Arriva for TfL serve West Croydon and Norwood Junction connecting the Borough to East London, Canary Wharf and Highbury.

The Tramlink network focused on Croydon town centres has branches to Wimbledon, Elmers End and New Addington with a total of 39 stops. Patronage has grown from approximately ……2017/18.[15]

[15] DfT Light Rail and Tram Statistics, England 2017/18

The Borough is well served in certain parts by buses with 51 daytime routes and 7 night bus routes operating in the borough. The main bus corridors are on the north-south radial routes into and out of Croydon town centre particularly London Road, Brighton Road and Whitehorse Road. There are issues associated with bus congestion in the Croydon town centre area particularly around West Croydon. Some areas are considered to be poorly served by buses such as Waddon and some of the more suburban areas to the south of the Borough particularly with regards to east-west connectivity. Bus services are more heavily used to the north of Croydon town centre, predominantly in Norwood and Thornton Heath with more than 30% of residents using the available services to travel to work. In contrast, to the east and south of the Borough, buses are used by 10% or less of the population to get to work.

The map below [Figure X] shows the access to public transport across the borough. In general the north and centre of the borough is well served by public transport but large areas to the south and east of the borough are poorly served.

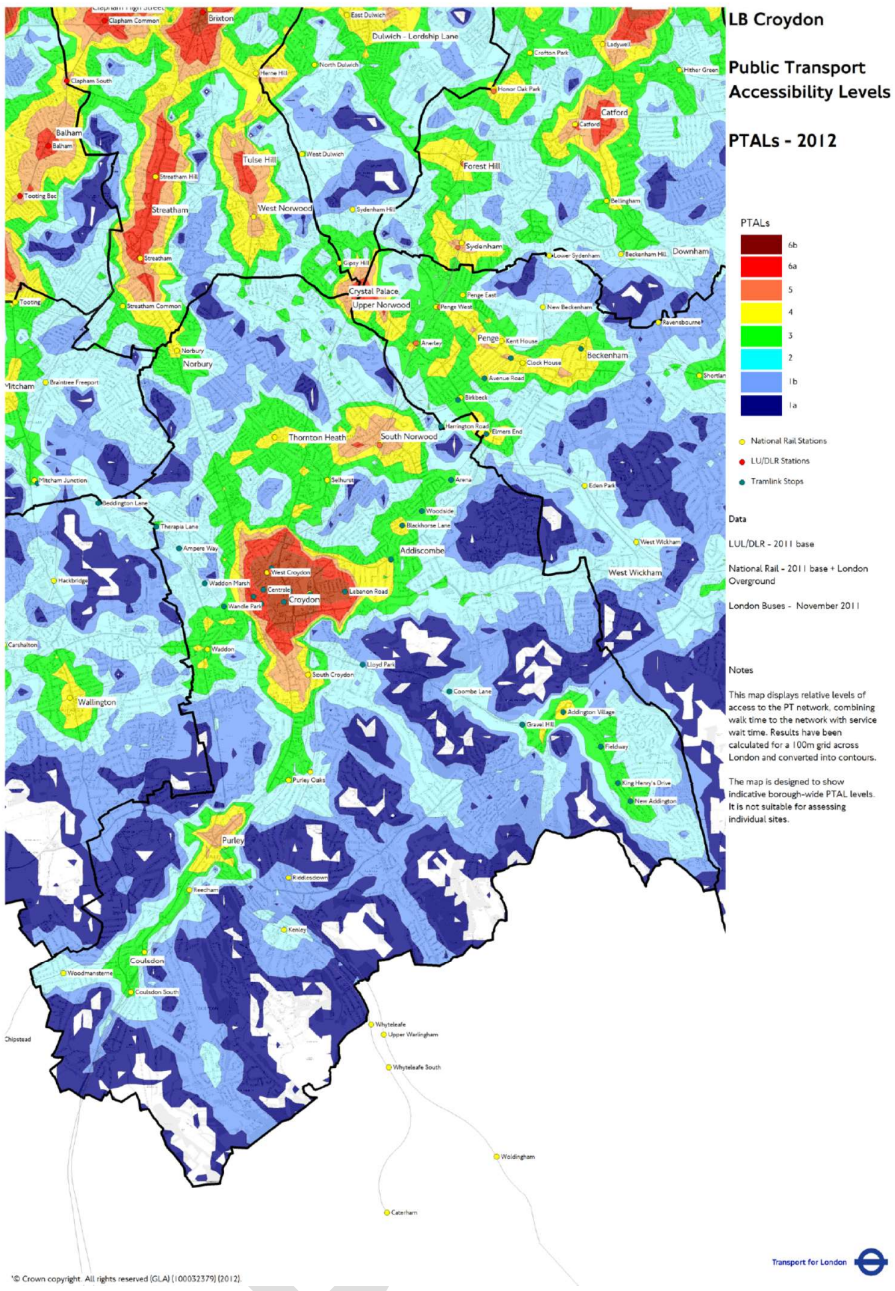


Figure X Public Transport Accessibility Level [PTAL] map [Source: TfL]

Road Network and Street Types

There are 777km of roads in the borough, of which 77km are 'A' roads including TfL Road Network. Figure X below shows the 'Street Type' map of the Borough according to the movement and place function matrix originally set out in the previous Mayor's Roads Task Force. The diagram reveals that the vast majority of streets are M1/P1 meaning they are 'Local Streets'. The M3/P1 or 'Core Roads' corresponds with the TfL road network and the Borough's main 'A' roads. The M2/P2

and M2/P3 streets correspond with pedestrianised North End and George Street outside East Croydon Station.

Figure X TfL Street Types - Croydon [Source: TfL]

Traffic volumes

As revealed in figure X below the highest flows of traffic observed on Croydon's road network are on the A23 TLRN corridor along the west side of the Borough, as well as on the Ring Road around the Metropolitan Centre including the A232 Croydon Flyover, Roman Way and Wellesley Road.

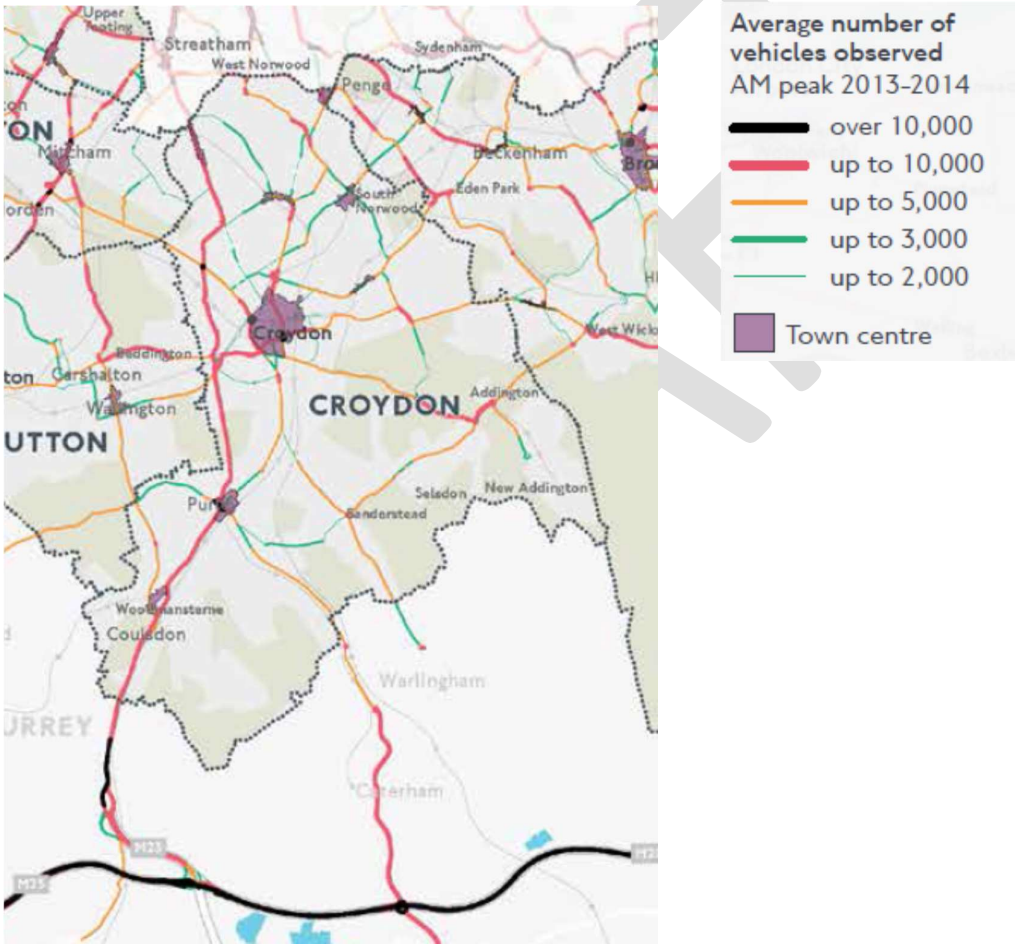


Figure X: Average number of vehicles observed on roads through Croydon AM peak 2013-14 [Source: South London Sub-regional Transport Plan 2016 Update; page 106]

Over the last 10 years the volume of traffic on the borough's roads initially decreased following the economic crisis of 2008 but has been increasing in recent years as shown in Figure X.

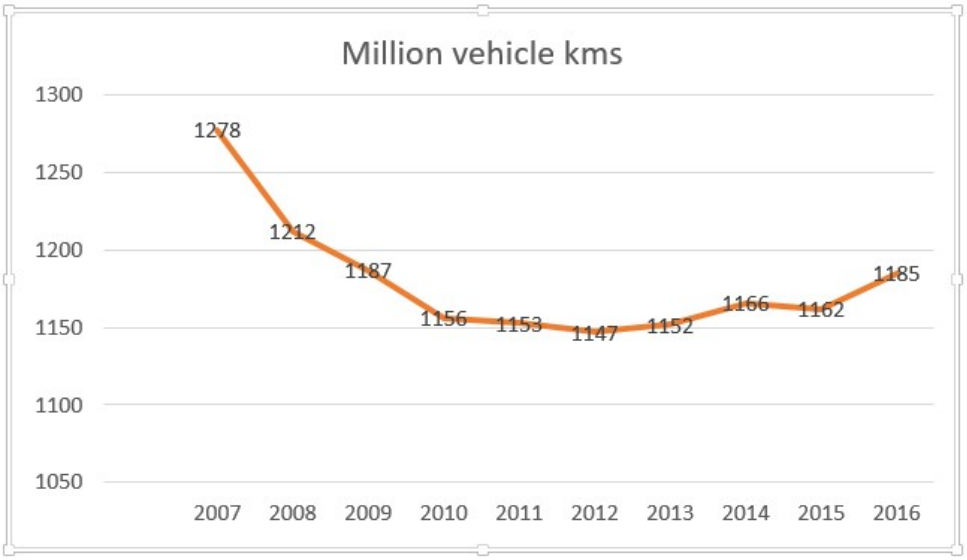


Figure X Volume of Traffic [Source: DfT]

The table below shows the change in traffic volume on the A roads over the same time period.

Type of Traffic	2007	2016	% change
Cycles	3,994	6,213	+55
Motorcycles	10,246	10,616	+4
Cars	496,356	437,040	-12
Buses/coaches	13,157	11,310	-14
LGVs	78,706	77,922	-1
HGVs	23,503	18,989	-19

Table X Traffic volume in Thousand Vehicle Kilometres [Source: DfT]

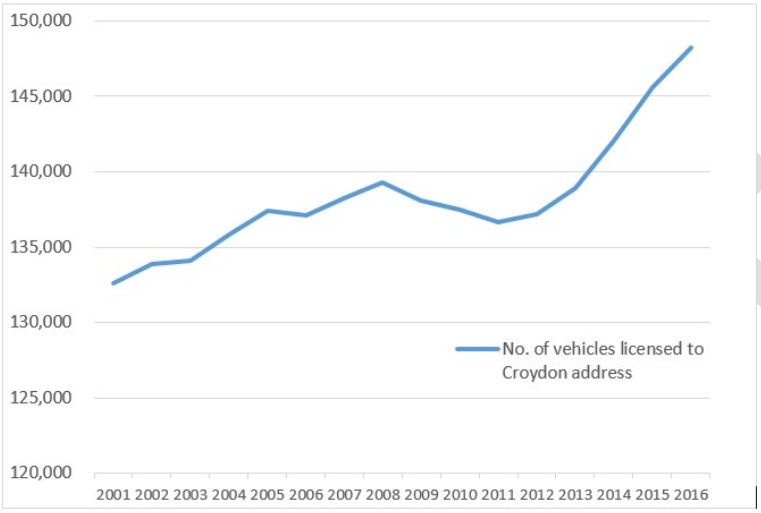
The most noticeable feature is the significant increase in cycle traffic albeit from a low base.

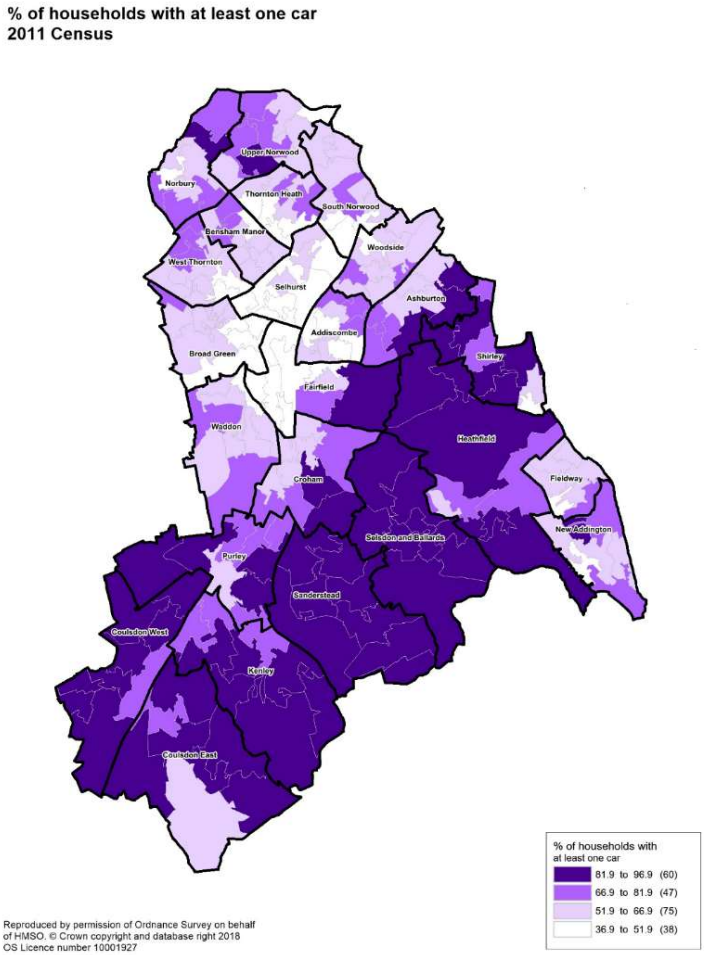
Car ownership

According to the 2011 Census 66.5% of Croydon households had access to a car or van which represents a 5% reduction compared to 2001 but is still higher than London as a whole (58%). However recent data provided by TfL from the DVLA shows that there has been a dramatic increase in the number of vehicles licensed to

addresses within the Borough. Figure X below shows that the number of vehicles licensed to an address in Croydon has increased from 132,572 in 2001 to 148,256 in 2016 with an increase of almost 10,000 vehicles alone in the three years up to 2016.

Figure X: **Number of Vehicles Licensed to Croydon addresses 2001-2016** [Source: TfL & DVLA]





There is a distinct variation in car ownership across the borough as Figure X shows, with much higher levels of ownership in the south and east of the Borough.

Figure X Car ownership by household [Source: Census 2011]

Travel to Work

Croydon has the largest within borough commuter flows in London and the census data for 2011 for method of travel to work is shown in Figures X & X below. It reveals that the general journey to work movement pattern is still dominated by the car for those that live and work in the Borough but is especially the case for those who live outside the Borough but work in Croydon.

According to the 2011 Census, 54.8% of the 88,300 people who were recorded as working in Croydon in 2011 also lived in Croydon. However this group only accounts for 34.4% of the 140,600 Croydon residents whose place of work was recorded in the 2011 Census. The main methods of transport to work varied between those who lived and worked in Croydon, those who lived in Croydon but worked outside of the borough, and those who lived outside of the borough but worked in Croydon. Most of those people who worked in Croydon and also lived within the borough drove to work in a car or van; caught a bus, minibus or coach; or walked to work as shown in Figure X below.

The method of travel to work for workers commuting in from outside of the borough was slightly different as can be seen from Figure X. Nearly half of these workers drove to work in a car or van. Considerably more workers used trains to commute in and far fewer walked to work, which is to be expected with the longer journey times likely to be involved

Figure X: Method of travel to work for those who live & work in Croydon [Source: ONS 2011 Census]

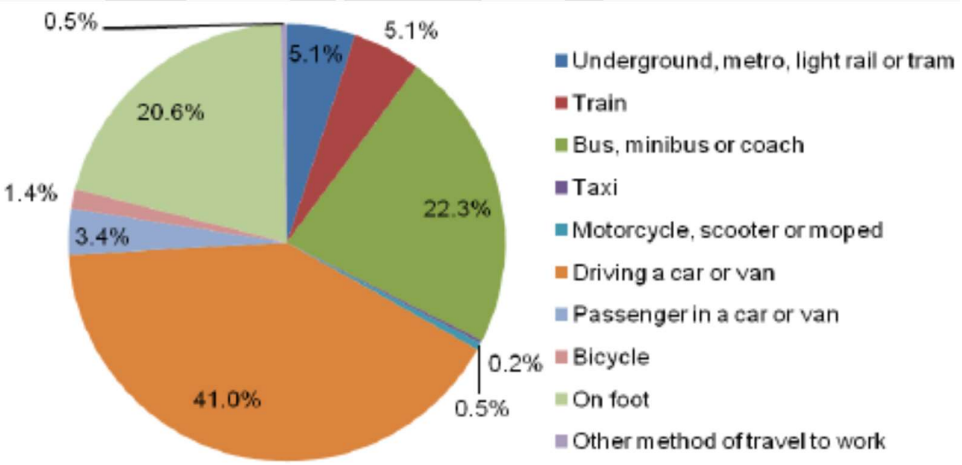


Figure X: Method of travel to work for those who live outside of the Borough and work in Croydon [Source: ONS 2011 Census]

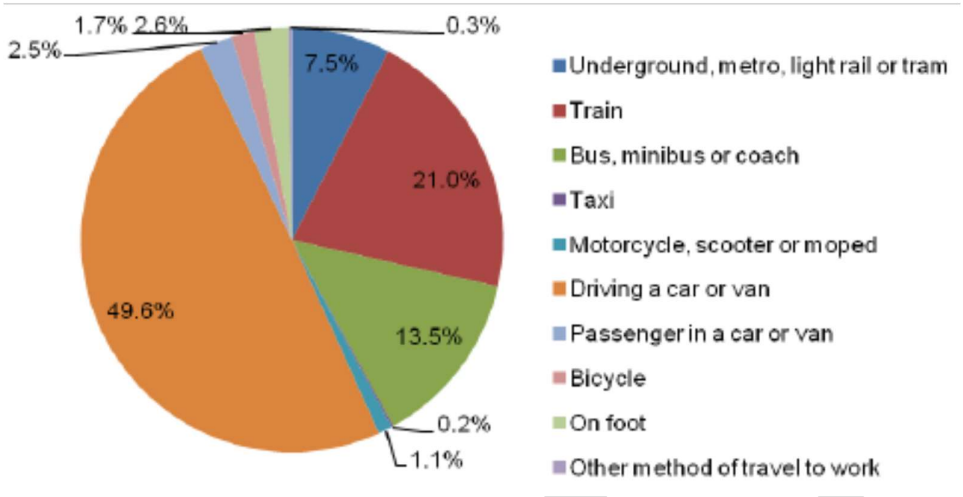
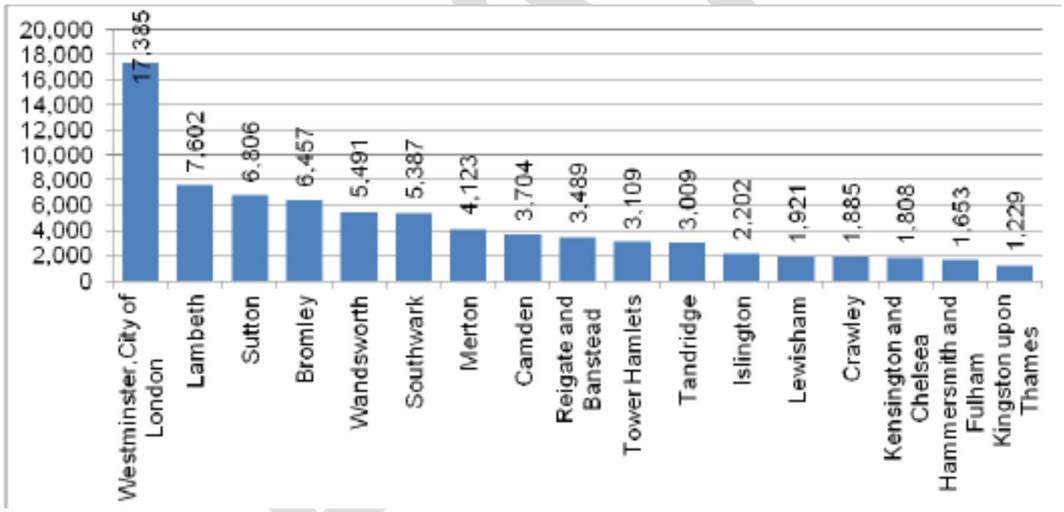


Figure X: Main places of work for residents who work outside of the Borough [Source: ONS 2011 Census]



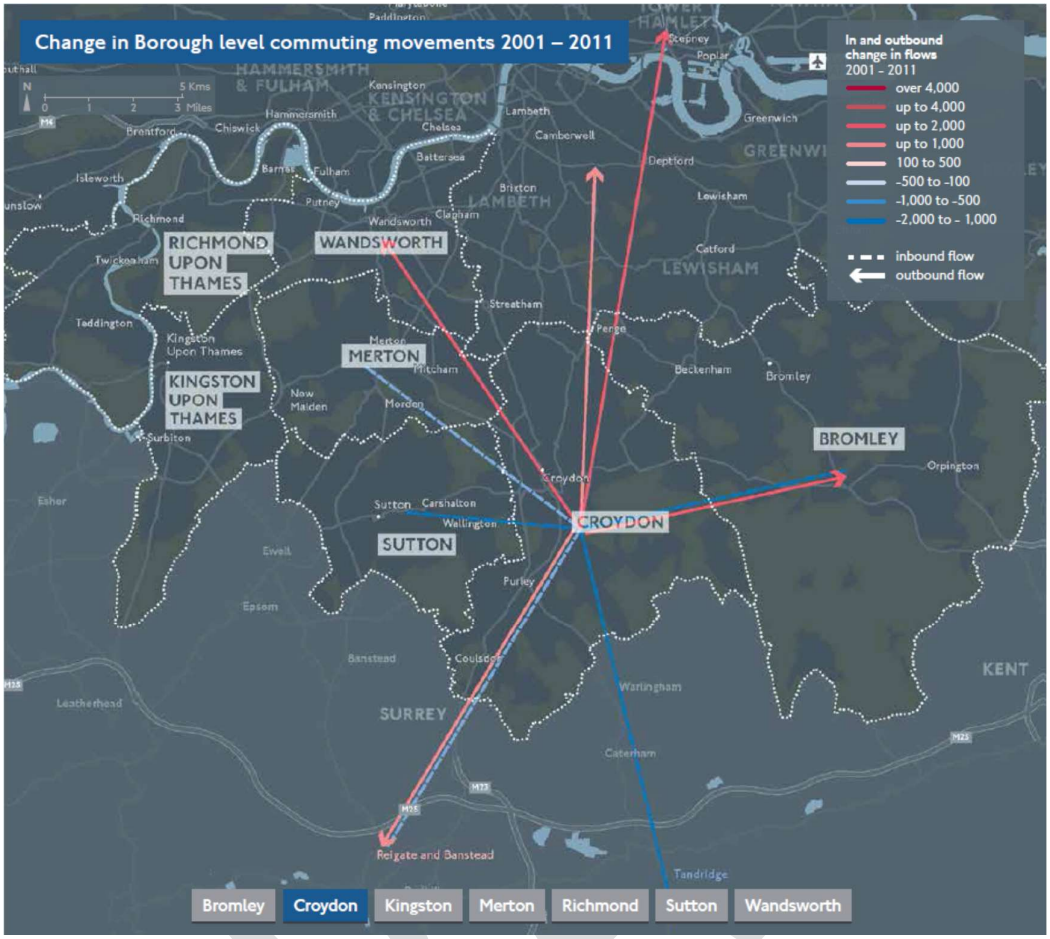


Figure X: **Changes in Croydon Borough level commuting movements 2001-2011** [Source: South London Sub-regional Transport Plan, 2016 Update; page 38]

Changing the transport mix

Challenges

There has been significant population growth in Croydon since the last Mayor's Transport Strategy (MTS) which has resulted in increasing demand for and pressure on the transport system. Croydon Metropolitan Centre is the focus of new economic development and has excellent public transport connectivity, however current travel trends and a dominance of car travel (51% of all journeys 7 days a week[16]) places pressure on the existing road network, the local environment and people's health.

The core transport challenge affecting the Borough is the level of car use and the resulting dominance of vehicular traffic, which gives rise to impacts including noise and air pollution, road danger and community severance. A shift away from car use, particularly for short (and medium-length) local trips is essential, if the growth, access and environmental objectives identified in the local policies and the Mayor's Transport Strategy are to be achieved.

Despite strong spatial policies to promote sustainable development, growth is predicted to increase demand on existing transport networks. Without transformative change, congestion, delay and pollution are predicted to increase on the strategic road network and crowding is predicted to rise on public transport. These changes mean that growth plans, the economy and quality of life will be adversely affected.

The loss of …… in Croydon Metropolitan centre in……. has resulted in residents having to travel further afield for work, many of them to neighbouring borough town centres such Bromley and Sutton[17]. Orbital public transport connections to these locations compare poorly with driving, for example travelling from Croydon to Bromley by public transport took 53 minutes in 2012 which is expected to increase to 55 minutes in 2031, by comparison driving took 39 minutes in 2012 which is expected to rise to 41 minutes in 2031[18].

All of the above challenges point to the need for new ways of managing traffic demand on the road network across Croydon but especially the Metropolitan Centre. At the same time there is a need to invest in and improve public transport to increase capacity and accommodate growth, but also to improve journey times and make it an attractive alternative to the private car.

Analysis of the London Travel Demand Survey (LTDS) 2006 to 2016 data by TfL for the South London Sub-regional Transport Plan (2016 Update) is shown in Table X below. It reveals that there has been a modest decrease in the mode share of car

[16] http://content.tfl.gov.uk/borough-local-implementation-plan-performance-indicators.pdf TfL LTDS
[17] South London Sub-Regional Transport Plan, 2016 Update, TfL;
[18] South London Sub-Regional Transport Plan, 2016 Update, TfL; Page 96

trips across South London boroughs. The decrease of -2.8% in Croydon is however below the Outer London average change of -4.8%.

Table X: Changes to mode share by car for South London boroughs 2006-2016

Borough	Car mode share 2006	Car mode share 2016	Difference
Croydon	**52.9%**	**50.1%**	**-2.8**
Merton	41.2%	40.4%	-0.8
Sutton	56.9%	52.8%	-4.1
Kingston	47.6%	45.8%	-1.8
Richmond	43.2%	38.5%	-4.7
Outer London	*50.1%*	*45.3%*	*-4.8*

Opportunities

Through the Growth Zone framework Croydon's Metropolitan Centre is undergoing a renaissance with new retail, leisure and office development planned to deliver 23,500 new jobs and 10,500 homes. New development within the Growth Zone will be high density to enable as many people as possible to live close to workplaces, fast public transport connections and to be able to use active travel to access the amenities they need.

Analysis undertaken by TfL as part of the South London Sub-regional Transport Plan 2016 Update reveals that the north and centre of Croydon has some of the highest potential for mode shift away from the private car in South London as shown by the diagram in Figure X below (red and orange hexcells reflecting areas with highest potential for mode shift). This is due to these areas having lower car ownership levels, higher densities and good public transport accessibility.

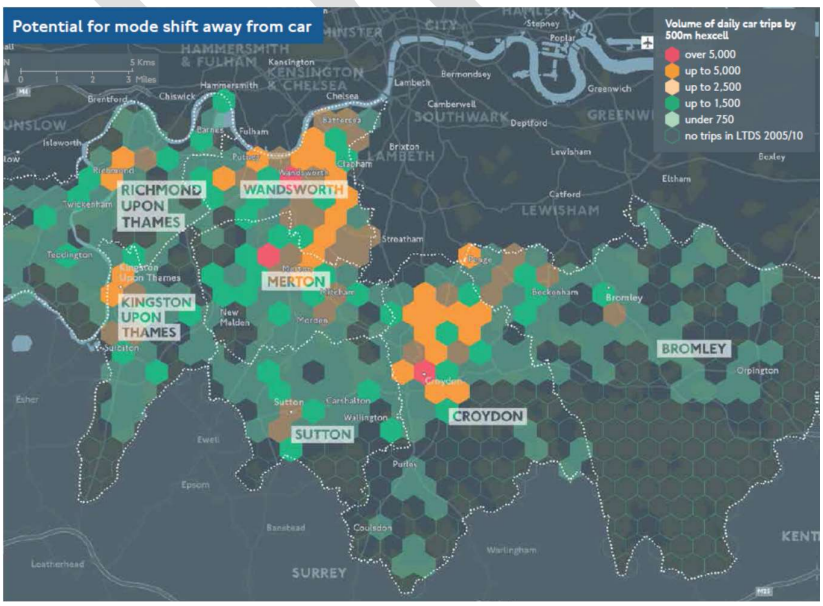


Figure X: Potential for mode shift away from private car [Source: South London Sub-regional Plan 2016; page 80]

It is apparent that the greatest opportunities for achieving mode shift from car to sustainable modes will be around the Growth Zone and in the north of the Borough. These areas have lower levels of car ownership with good public transport accessibility and younger demographic that exhibits higher propensity to shift away from car use. As such, these areas will be the priority for cycling, walking and liveable neighbourhood improvements delivered through the use of LIP funding and more importantly through the Growth Zone funding.

In the south of the Borough it will be more challenging to facilitate a shift away from car use because of the current relatively poor public transport coverage, high car ownership and older population demographic. However we will still strive to achieve mode shift in these areas, in particularly working with TfL to expand bus provision and to look innovatively at how public transport might be provided in areas with current poor provision. The Brighton Road A23 corridor through Purley and Coulsden has frequent bus and train services and Purley in particular has significant potential for mode shift. In the areas of suburban intensification in the south of the Borough where public transport accessibility is lacking we will be looking at supporting the uptake of newer innovative forms of shared mobility services such as e-bike hire schemes, demand responsive buses and autonomous minibus services.

Overarching Borough objectives and goals:

1. Croydon will reduce reliance on the car for local in-borough car journeys by creating streets and a transport network that prioritises walking, cycling and public transport.

2. We will reduce the number of local car trips and to ensure that by 2021/22 at least 50% of all journeys made residents are by walking, cycling and public transport. By 2041, 63% of all journeys made by residents are by walking, cycling and public transport.

Mayor's Transport Strategy outcomes

Outcome 1: London's streets will be healthy and more Londoners will travel actively

Challenges and opportunities

Key challenges

- Low physical activity amongst residents resulting impacts on obesity, poor physical health, mental health and social isolation
- Very low and decreasing cycling levels (unique in London)
- Poor access to cycles
- Hilly topography in north & south of borough
- Ageing population
- Accessibility through parks after dark
- Physical severance by road and rail infrastructure
- Traffic dominance and street environment designed for the car
- Fear of cycling and lack of safe cycle routes

Key Opportunities

- Youngest population in London
- Huge potential demand for active travel trips across the Borough but particularly in the Growth Zone
- Growth Zone funding framework offers once in lifetime opportunity to transform the public realm and remove pedestrian severance
- Growth Zone funding framework provides unique opportunity to create a comprehensive cycle network
- Increasing densities and new developments that can incorporate designs that support walking and cycling

Active Travel by Croydon Residents

In Croydon, the proportion of residents regularly undertaking travel by active methods (walking and cycling) is lower than the London average. According to TfL's 2017 London Travel Demand Survey between 2014 and 2016 the proportion of Croydon residents undertaking at least 20 minutes of active travel a day required to stay healthy is only 26%. For cycling for non-leisure purposes only 4.1% of the Croydon adult population cycle once a month compared to 8.7% for the London

average.[19] Croydon compares poorly with neighbouring London boroughs and has both the lowest cycling and walking rates of all South London boroughs as can be seen in Table X below.

Table X: Mode share comparison of neighbouring boroughs 2014-2016
[TfL 2017 Travel in London Report 10]

Borough	Public transport	Walk	Cycle	Total
Lambeth	39.2%	32.8%	4.7%	76.7%
Lewisham	34.4%	30.8%	2.7%	67.8%
Merton	27.1%	28.1%	2.6%	57.8%
Croydon	**24.6%**	**22.7%**	**0.7%**	**48.0%**
Sutton	20.5%	23.5%	1.7%	45.7%
Bromley	21.0%	22.8%	1.3%	45.1%

Inactivity is having profound health effects and is a major contributory factor to the levels of obesity in Croydon. One in five children in the school reception year is overweight or obese and this rate more than doubles between reception and year 6. Early childhood is a critical time to tackle childhood obesity as children are developing and learning healthy or unhealthy behaviours from a young age. By year 6 (age 10 to 11 years) a greater proportion of children in Croydon carry excess weight than in London or nationally. Two in five children aged 10 to 11 years in Croydon are overweight or obese and this proportion is increasing over time.[20]

For adults the situation is more serious. A staggering two in three adults or 62% of the population are overweight or obese and one in thirty one working age people in Croydon have diabetes, a figure which is predicted to increase by 10% by 2025. Amongst older adults (over 65) one in eight are predicted to have diabetes and one in four are obese.[21] Children in Croydon are growing up in a borough where it is normal to be overweight.

The annual cost of obesity in Croydon is £190m. Data from TfL shows that if people walked or cycled 20 minutes a day then the NHS would save about £1.7bn over 25 years.

Cycling

There is very little cycling currently in Croydon. Less than 1% of journeys by Croydon residents are by cycle. Similarly only about 1% of Croydon's residents cycles for at least 30 minutes five times a week. Table X below reveals that not only does

[19] https://files.datapress.com/sport/dataset/borough-physical-activity-and-sport-profiles-2017/2017-04-18T08:55:33.28/Borough%20Profile%20-%20Croydon%20(Feb%202017).pdf - Page 13

[20] https://www.croydon.gov.uk/sites/default/files/articles/downloads/Healthy%20Weight%20Action%20Plan%202017-2020.pdf Page 2

[21] https://www.croydon.gov.uk/democracy/dande/policies/health/annual-public-health-report Page 30

Croydon have the lowest cycle mode share of all London boroughs but we are also the only borough where it has decreased since 2006.

Table X: Change in cycling mode share in South London boroughs 2006-2016

Borough	2006 cycle mode share	2016 cycle mode share	Change in cycle mode share
Croydon	**1%**	**0.7%**	**-30%**
Merton	1.3%	2.6%	+100%
Sutton	0.8%	1.7%	+113%
Kingston	1.7%	3%	+76%
Richmond	3.1%	6.2%	+100%

Croydon's recently adopted Cycling Strategy[22] identified four main barriers to cycling:

- Culture – need to change the perception that cycling is not for everyone and want people to think cycling is something people of all ages and abilities can do.
- Safety- the fear of traffic and road safety in general deter most people from cycling. People feel vulnerable although DfT figures show that the health and fitness benefits of cycling outweigh the risk of injury.
- Availability – availability of cycles in the household is lower in Croydon than most other outer London boroughs. The lack of cycle parking at the home end and at the destination is also a problem for many potential cyclists.
- Topography – Croydon is hilly in the northern and southern areas of the borough which puts some people off cycling.

The street environment and severance

The reconstruction of the centre of Croydon in the 1950s and 1960s resulted in a traffic dominated road environment that prioritised access by car. As a result the Growth Zone is currently constrained by urban motorways that were built in the 1960s as a ring road around Croydon town centre. The Ring Road is formed of Roman Way to the immediate west, and the Croydon Flyover to the south and Wellesley Road to the east. These roads are up to six carriageway lanes wide in places. When they were built they severed the local residential communities from the town centre, making it inhospitable and difficult to walk or cycle into the town. The general environment for walking and cycling can be unpleasant, with noise and air quality issues alongside fast moving traffic.

[22] https://www.croydon.gov.uk/sites/default/files/Cycling_strategy_2017.pdf

Vehicle dominance around Croydon Metropolitan Centre limits pedestrian permeability and reduces the visual appeal and aesthetics of the town centre as an active travel-friendly environment. The 1960's Ring Road flyovers and underpasses not only act as a physical barrier to active travel but they are also a psychological barrier resulting from the noise generated by the fast moving traffic, the fear of crossing the road and intimidating subways, affecting the health and mental well-being of residents.

To meet the outcomes set in the MTS, Croydon will need to implement proposals that reverse the traffic dominance around the Growth Zone and create healthy streets that prioritise active travel.

Opportunities

The fact that Croydon has the largest number of residents aged 17 and under in London means there is an excellent opportunity to influence a generation that embraces new technology, active travel and does not necessarily aspire to drive their own car.

There are two other factors that suggest Croydon has huge potential to dramatically increase the level of active travel amongst its residents. The first is that the typical weekday car journey into Croydon Metropolitan Centre is only 5km, a distance most people could easily cycle.[23] The second is that analysis undertaken by TfL has shown that Croydon has the highest potential for cycling and walking amongst all of the Outer London boroughs.

TfL have estimated that there are 400,000 trips potentially cycleable trips made in Croydon yet there are just 6,000 cycle trips currently made per day[24]. For walking, currently 222,100 trips are undertaken but an additional 125,600 potential additional walking stages could be made, the highest in London as shown in Figure X below. 29,000 of these are to or from the Croydon Metropolitan Centre. Combined with walking trips associated with accessing public transport TfL estimate that there are nearly 180,000 potentially walkable trips and stages by Croydon residents, the highest figure in London as shown in Figure x[25].

The analysis undertaken by TfL looking at demographic propensity to walk and cycle, and the type of trips being made reveals the areas of Croydon that have the greatest potential for active travel. Figures X,X,X & X shown in the next few pages suggest that the key target areas should be in and around the Growth Zone, the areas to the north of the Growth Zone and area to the south along the A23 corridor to Purley. These locations overlap with the areas of largest growth and development in the next decade.

[23] Croydon Cycling Strategy 2018

[24] http://content.tfl.gov.uk/analysis-of-walking-potential-2016.pdf

[25] http://content.tfl.gov.uk/analysis-of-cycling-potential-2016.pdf

Figure X Potentially walkable stages by borough of origin/destination
[Source: TfL Analysis of Walking Potential 2016; page 41]

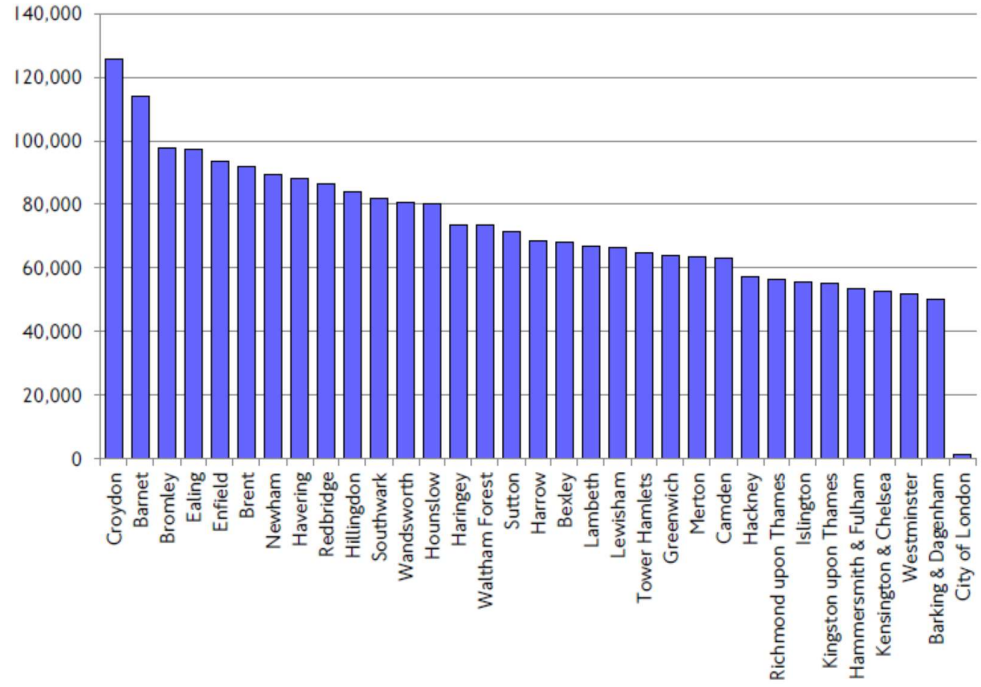


Figure X Potentially walkable trips and stages by borough of residence
[Source: TfL Analysis of Walking Potential 2016; page 48]

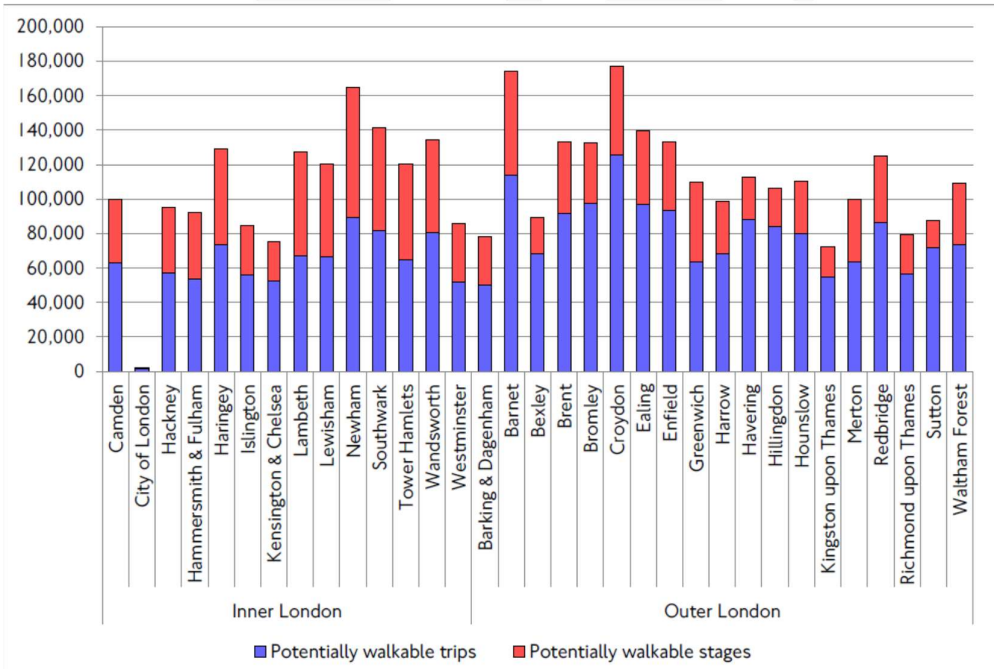


Figure X Active travel potential in Croydon vs future demand

[Source: TfL South London Sub-regional Transport Plan 2016 Update]

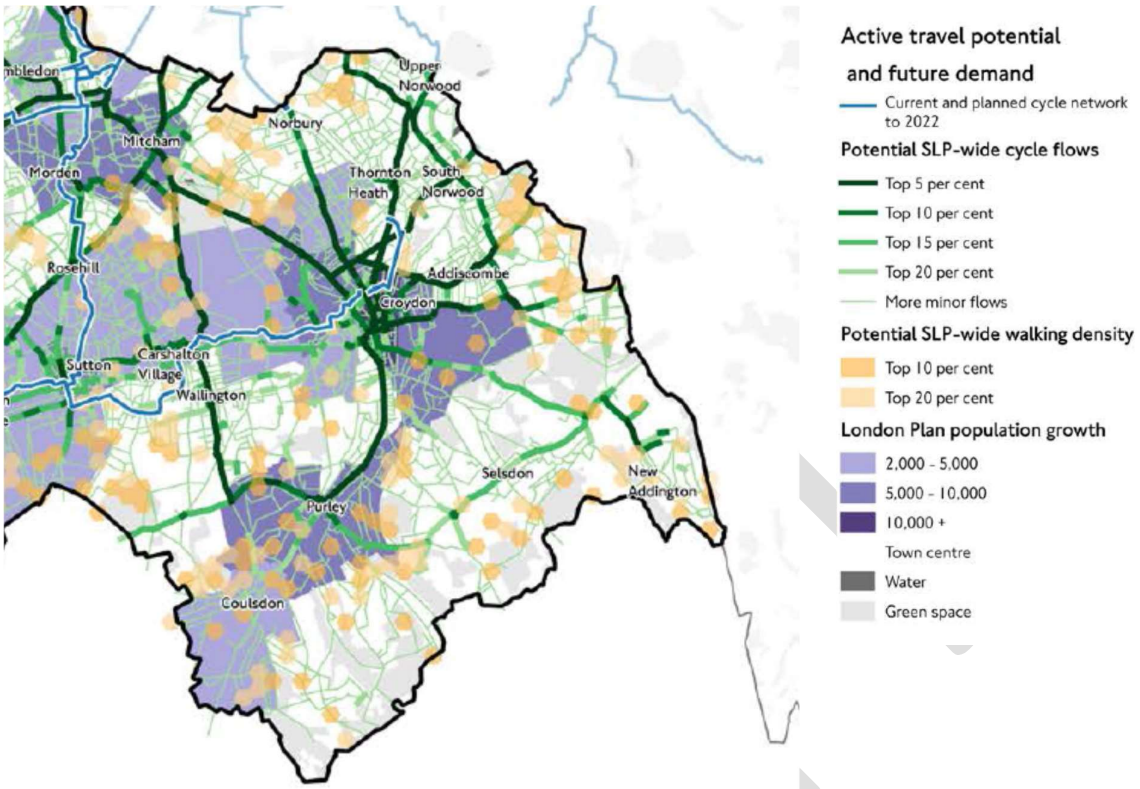


Figure X – Areas of greatest cycling potential

[Source: TfL Playbook/LTDS 2010-2015]

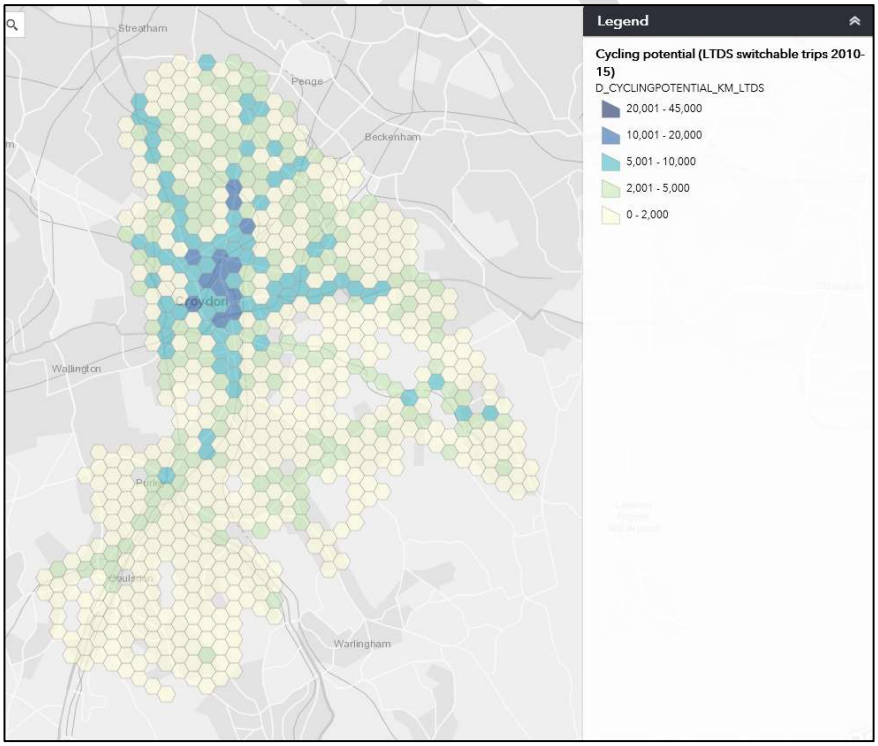
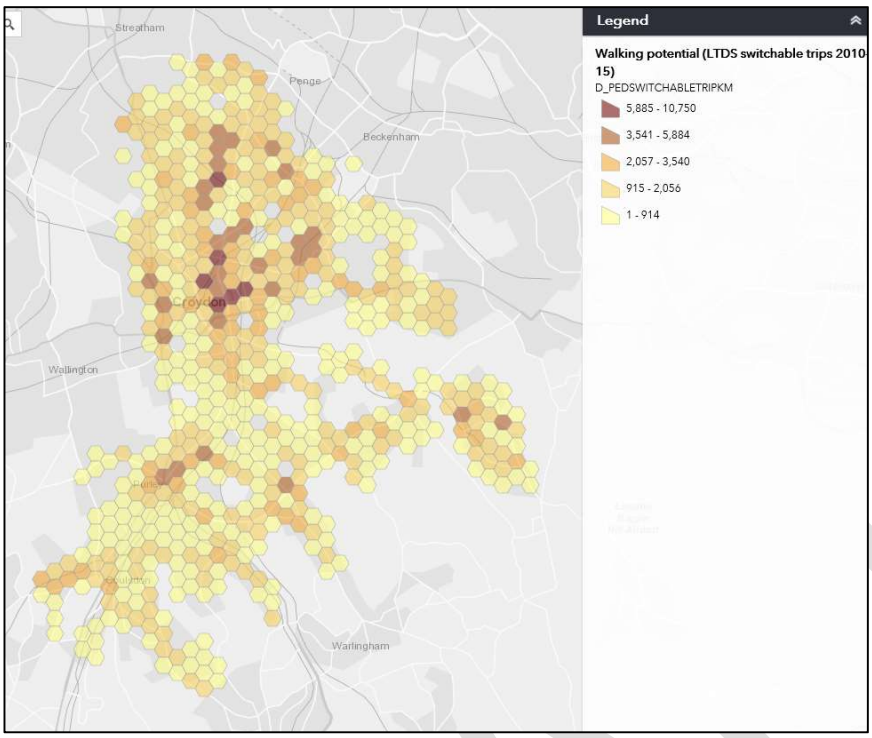


Figure X – Areas of greatest walking potential
[Source: TfL Playbook/LTDS 2010-2015]



Borough objectives:

3. Croydon will create healthy streets and neighbourhoods that encourage walking and cycling, and where traffic volumes and speeds are low.
4. Croydon will improve accessibility for pedestrians and cyclists through increased priority at key junctions and reduce severance caused by major roads, railway lines and parks.
5. Croydon will implement and deliver the network of cycle routes and proposals outlined in the Croydon Cycle Strategy.

Short to medium term delivery objectives and proposals:

- Deliver direct, safe and high quality cycle highways between central Croydon and local centres by 2023.
- Deliver a network of safe and quiet cycle routes through low traffic residential neighbourhoods to encourage new cyclists.
- Secure funding & deliver a Liveable Neighbourhood scheme to the west of the Growth Zone area.
- Reduce severance by removing or improving intimidating subways and

underpasses.

- Improve access for pedestrians and cyclists through our parks and open spaces after dark by introducing lighting and improving security.
- Improve access to cycles for our residents by introducing a shared cycle hire scheme that includes e-bikes.
- Expand and upgrade our network of greenways and public rights of way to encourage more leisure walking and cycling trips.
- Continue to create attractive high streets and district centres with high quality public realm, good signage and legibility.
- Continue the delivery of visitor cycle parking at key destinations and secure residential cycle parking.
- Pilot the Healthy Schools Neighbourhoods programme to work with schools, parents and local residents to increase walking and cycling trips in these neighbourhoods.

Long term goals

- By 2041 Croydon will have a well-developed cycling culture and cycling will be seen as the norm rather than the exception.
- By 2041 Croydon Metropolitan Town Centre will be renowned for attractive and high quality public realm, and people choose to walk and cycle to get there.

Walking and Pedestrian Improvements

This programme area will include continued provision of safe and secure pedestrians crossing facilities, with dedicated pedestrian phases and pedestrian countdown where appropriate. There will continue to be funding for accessibility improvements to the public realm to ensure residents with mobility issues are able to access local amenities and public transport. It also includes funding to improve and upgrade Public Rights of Way in the borough.

Liveable Neighbourhood – Old Town & Western Growth Zone Accessibility

The Liveable Neighbourhood proposal will involve reducing traffic dominance of the Ring Road by reallocating roadspace to pedestrians and cyclists and introducing new green infrastructure, innovative lighting and public art. These interventions will help counter the grey concrete, traffic noise and air pollution, and transform the perception of the underpasses, turning them into an attraction in their own right.

The proposal includes a number of the schemes outlined in the Old Town Masterplan including the plans to enhance the urban realm, particularly around the

historic Croydon Minster and to create a new public space at Reeves Corner.

A Super Zone concept is being developed by Public Health in partnership with other departments in the Council and will focus on the 400 metres around a school whose student catchment area is within the proposed Liveable Neighbourhood area.

Croydon Cycling Strategy

Croydon's Cycling Strategy[26] was approved in January 2018 and includes a plan for addressing the barriers to cycling in the borough including the delivery of a comprehensive cycle network as shown in Figure X. We will target our efforts at delivering a cycle route network initially focused on the town centre; providing cycle training; delivering Liveable Neighbourhood and Healthy Streets schemes; continue to provide cycle parking; improving safety such 20mph speed limits on local roads and reducing risks from construction traffic and establishing a shared cycle hire schemes. The proposals and infrastructure schemes agreed through the Croydon Cycling Strategy will be progressed and funded as part of the LIP3 alongside Growth Zone funding.

The proposal to introduce a dockless and hub based bike share scheme that will include electric bikes will help contribute to improving accessibility in areas to the south of the Borough that have hillier terrain and poorer public transport coverage. A dockless and e-bike hire scheme will be a key means for supporting the intensification areas identified in the Croydon Local Plan.

TfL's regular 'attitudes towards cycling' surveys repeatedly tell us that it is fear of road danger that is preventing most people from cycling. Therefore this five year strategy has as its focus an initial core network of good quality cycle routes (Quietways on quieter streets and Cycle Highways with segregated or semi-segregated cycle lanes on busier roads) to help overcome those fears and release the considerable cycling potential in Croydon. The strategy was informed by the TfL Strategic Cycling Analysis Report and is aligned with the strategic cycle connections and future routes identified in this report.

The strategy also includes increasing cycle storage and parking, working within schools to further promote cycling and a range of other actions to help deliver a cycling culture in Croydon.

Figure X – Croydon Cycle Strategy Network

[26] https://www.croydon.gov.uk/sites/default/files/Cycling_strategy_2017.pdf

Outcome 2: London's streets will be safe and secure

Key challenges and opportunities

- Speeding traffic and poor driver behaviour resulting in road danger and fear of cycling and walking
- Lack of enforcement and traffic police presence on London's roads
- Lack of safe pedestrian provision at key junctions
- Accommodating cycle routes alongside bus priority on main movement corridors

Road safety concerns are key reasons preventing many more people cycling and walking in the borough. Lack of safe cycle routes, obstructed pavements and lack of safe and convenient pedestrian provision at key road junctions and links deters people from making active travel journeys. This in turn curtails independent mobility, particularly of children, young people, older and people with disabilities, with resulting inactivity and health consequences.

There is a Mayoral target for a 65% reduction in killed or seriously injured casualties by 2022 from a 2005-2009 average, and a 70% reduction in KSIs by 2030 compared to a 2010-14 baseline.

The average KSI for 2005-2009 is 141 with a target of 49. The graph below shows that Croydon is broadly on track to meet this target however the changes to the way the Metropolitan Police count road casualties means that this is unlikely to remain the case.

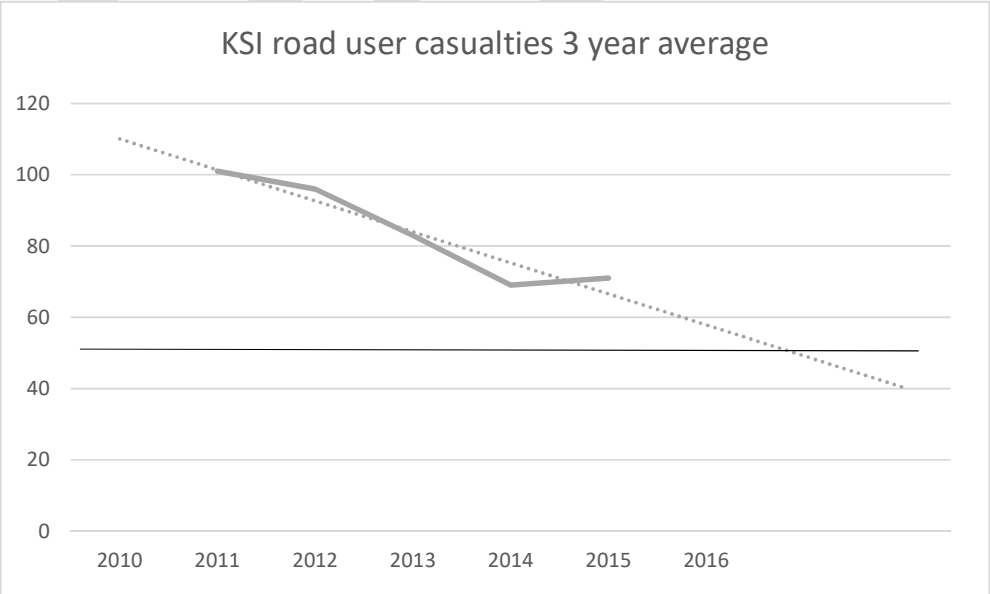


Figure X KSI casualties [Source: TfL]

The map in Figure X below provides an overview of personal injury collisions across the borough (2014-2016). It is noticeable that many of the collisions are on the main road network particularly along the A23 and along the London Road in particular. The other main roads in and around Croydon Metropolitan Centre also have a high proportion of the Borough's personal injury collisions.

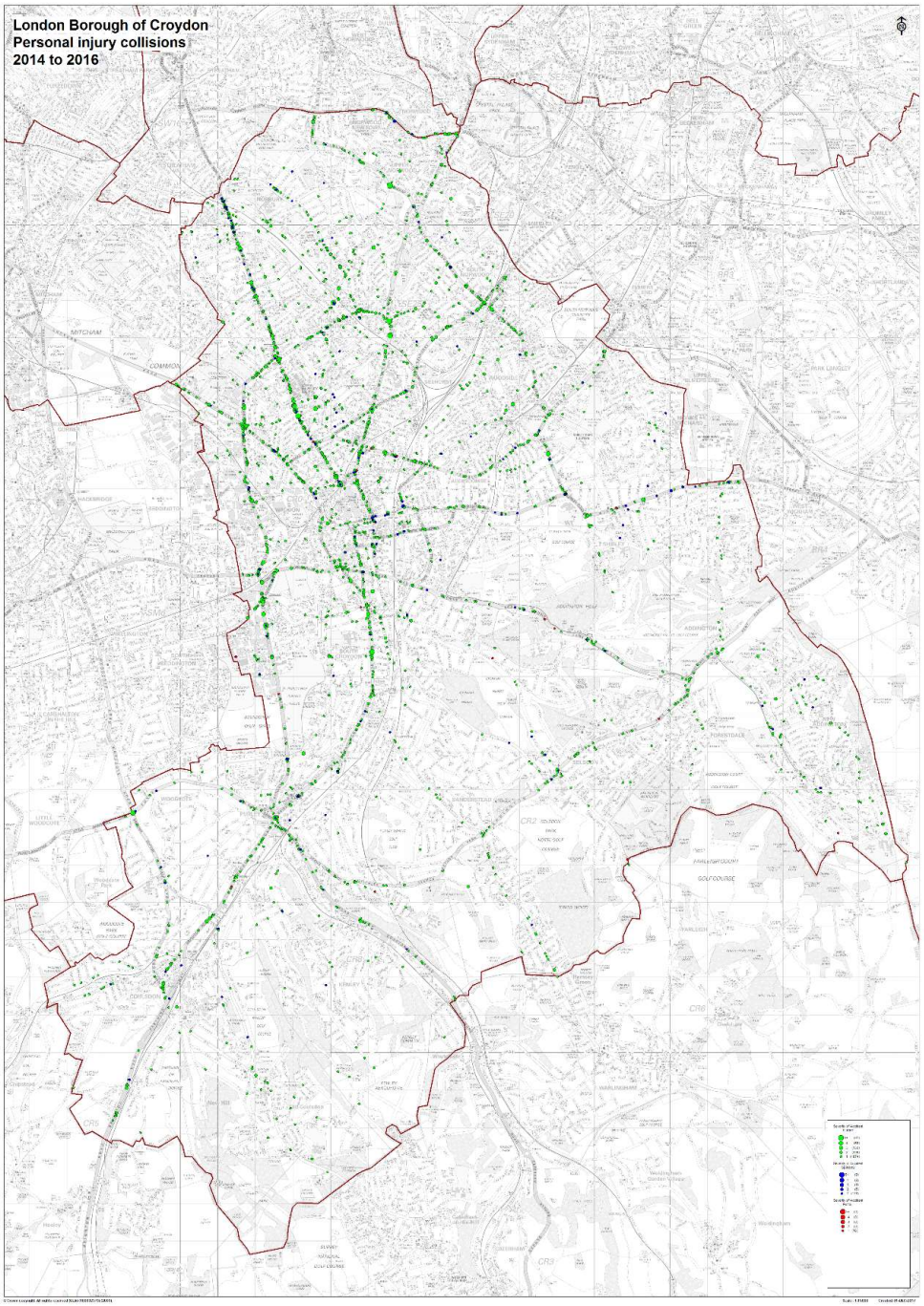


Figure X: Personal Injury Collisions 2014-16 [Source: TfL]

The map below shows the priority link and junctions for vulnerable road users (pedestrians, cyclists and powered 2 wheelers). Again it is noticeable that the London Road corridor is identified as a priority and the north of the Borough has a much higher incidence of priority 1 and 2 sites and links than the south of the Borough. This is likely to be reflective of the lower levels of active travel and higher levels of driving in the south compared to the north of the Borough.

Figure X: Priority Junctions and Links for Vulnerable Road User Collisions [Source: TfL]

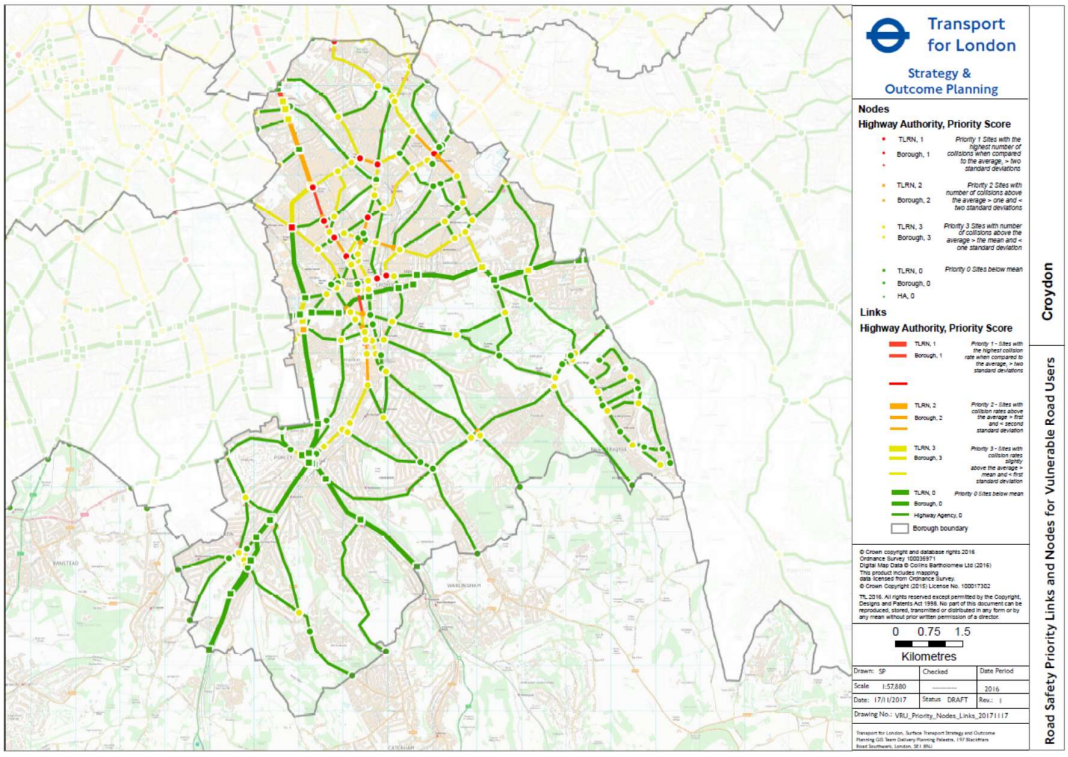


Table x Priority Links – Number of Killed or Seriously Injured (KSI)
[Source: TfL 2017]

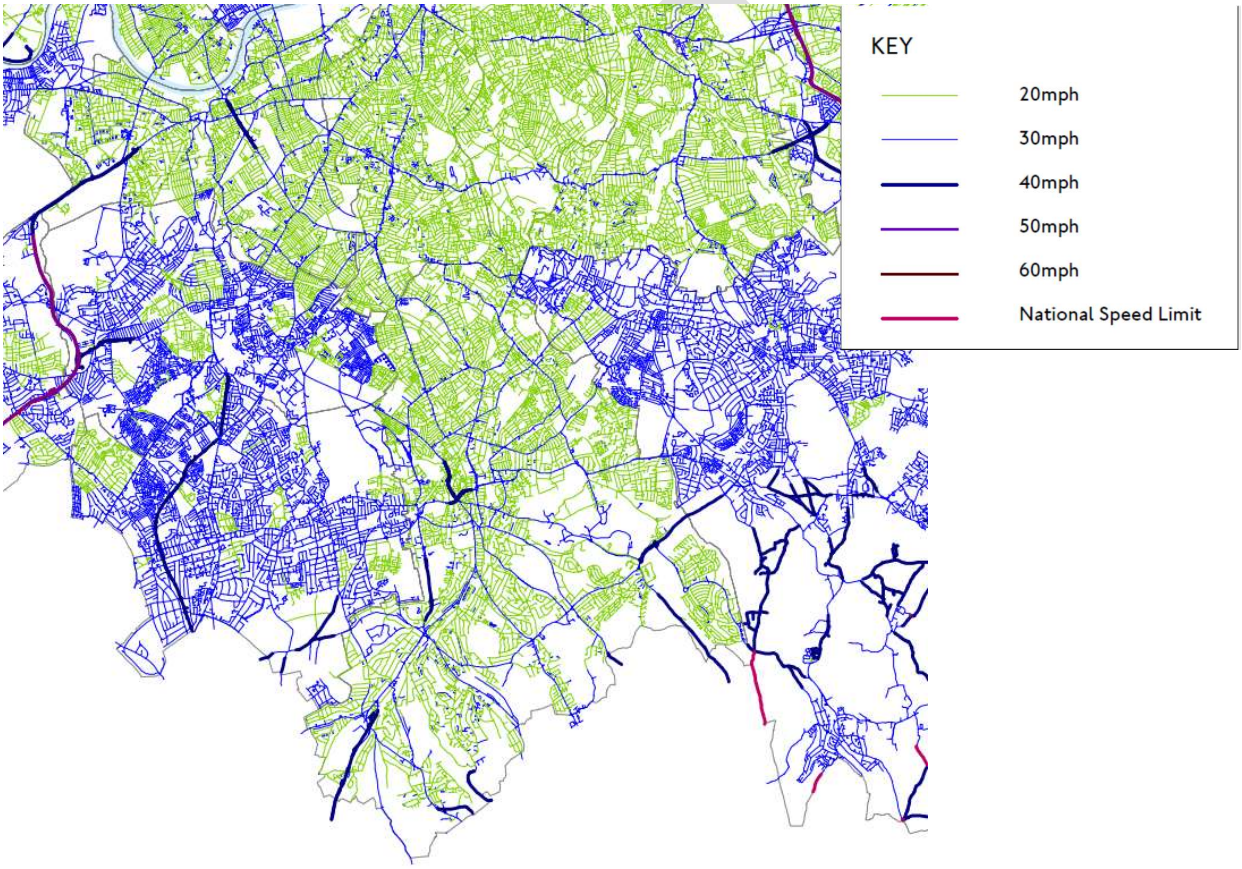
Table x **Priority Junctions - Number of Killed or Seriously Injured (KSI)**
[Source: TfL 2017]

Figure X and Tables X and X show a clear pattern of vulnerable road user casualties on the main road network in the centre and north of the borough.

The Vision Zero aim seeks to achieve zero people killed or seriously injured on London's streets by 2041. This requires a different approach to reducing road collision casualties in which road danger is reduced at source and a more pro-active approach is taken to identify and mitigate road danger. By managing traffic speeds through 20mph speed limits the severity of road collisions can be reduced and offers more scope for more cycling as the perception of danger from road traffic is reduced.

Croydon has delivered an ambitious programme of 20mph speed limit zones on our residential roads meaning that at least 85% of Borough controlled roads are now covered by a 20mph speed limit. Figure X below taken from TfL's Digital Speed Map of London shows the coverage of 20mph roads shown in green. The remaining roads shown in blue within the Borough form the main road network including the TLRN. It is evident however from the above collision maps shown in Figures X that it is on the main road network where the majority of personal injury collisions of all kinds occur.

Figure X: London Speed Limit Map (Croydon and adjacent boroughs) - Extent of 20mph limits shown in green. [Source: TfL June 2018[27]]



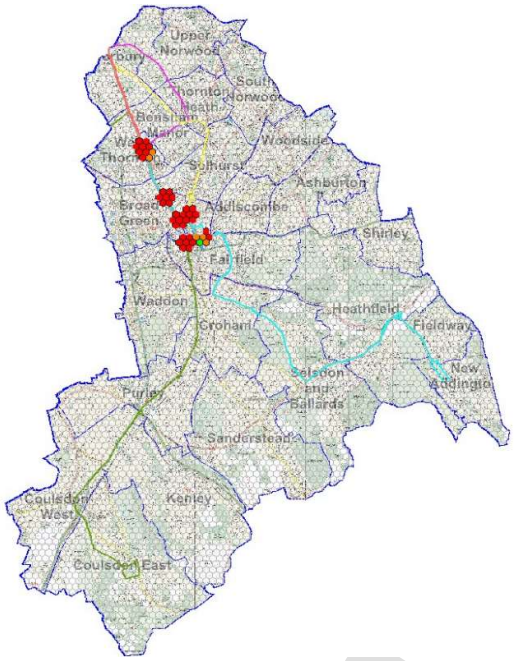
Crime

British Transport Police have produced data for crime on buses and trains, trams and stations.

Crime on buses

[27] http://content.tfl.gov.uk/digital-speed-limit-map.pdf

Figure X Crime Plots on Buses [source: Croydon Strategic Assessment, 2016]



BTP (train tram and station)		
Offence	Total offences	1075
	Violence	316 (29.40%)
	Disorder	303 (28.19%)
	Theft	203 (18.88%)
	Fraud	113 (10.51%)
	Criminal Damage	61 (5.67%)
	Drugs Offences	40 (3.72%)
	Sexual Offences	26 (2.42%)
	Burglary	7 (0.65%)
	Robbery	6 (0.56%)
Location	Hot spot	445 (41.40%) East Croydon
		75 (6.89%) Norwood Junction
		60 (5.58%) West Croydon
		49 (4.56%) Norbury
	Secondary hot spots	364 (33.86%) On train
		156 (14.51%) Platform
		100 (9.30%) On tram
Times	Peak	82 (7.63%) 18:00 to 19:00
	Focus	487 (45.30%) 13:00 to 20:00
Days	Hot	196 (18.23%) Wednesday
		185 (17.21%) Friday

Crime on trains, trams and stations

The maps show particular crime hotspots in central Croydon and areas to the north of the town centre and around South Norwood/Norwood Junction with smaller pockets around Thornton Heath and Fieldway / New Addington.

BTP (train tram and station)		
Offence	Total offences	1075
	Violence	316 (29.40%)
	Disorder	303 (28.19%)
	Theft	203 (18.88%)
	Fraud	113 (10.51%)
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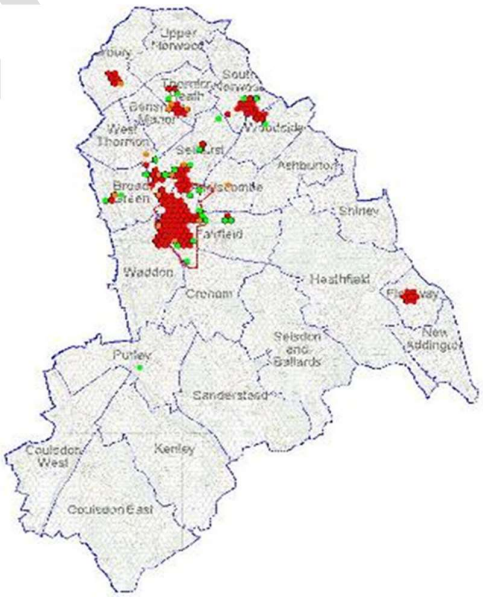


Figure x Crime plots on trains, trams and stations [Source: Croydon Strategic Assessment, 2016]

Borough objectives:

6. Croydon will Croydon will support and deliver the principles of the Vision Zero Action Plan and work towards ensuring we have the safest roads in London with no killed or serious injuries on our roads by 2041.

Short to medium term delivery objectives and proposals:

- Lobby the Metropolitan Police to enforce 20mph limits on all our residential streets and introduce speed reduction measures on streets where there is evidence of an ongoing speed and safety issue.
- Extend 20mph speed limits onto our main roads in busy pedestrian areas such as district and town centres, and other locations with specific safety concerns.
- Provide safe and secure crossing facilities with dedicated pedestrian phases at all key junctions in the borough, including pedestrian countdown where appropriate.
- Work with local residents to reduce external through traffic in residential areas using the Low Traffic Neighbourhoods principles.
- Undertake targeted behavior change campaigns to encourage safer behaviours amongst drivers.

Long term goals

- By 2041 Croydon will have the safest roads in London with zero fatalities on our roads.

Achieving Vision Zero – Safer Streets & District Centres

This will be an evidence led approach to road danger reduction and safer streets in accordance with the Vision Zero Action Plan.

Our Safer Streets programme will start with a focus upon improving safety in our district centres with the highest collision rates.

These schemes will include the introduction of 20mph limits on the main roads in these centres including speed management and safety measures such as junction treatments and pedestrian crossing improvements.

Outcome 3: London's streets will be used more efficiently and have less traffic on them

Key challenges and opportunities

- External traffic cutting through residential areas
- School run car trips are a key cause of traffic congestion in the borough
- Increasing car ownership in recent years
- High levels of journey to work by car for trips into and within the borough
- High numbers of staff driving to and from work
- Increase in online deliveries & associated freight traffic
- Increasing population
- Advent of autonomous vehicles

A high volume of short journeys by private cars are made at peak hours to schools, contributing to significant congestion and carbon emissions. These short journeys may also be a consequence of a perceived risk of accidents due to unsafe roads and poor accessibility making parents feel concerned about allowing children to walk or cycle to school. This has a direct impact on children's health and well-being due to becoming physically inactive. Sustainable alternatives to the car are also less appealing as the south of the Borough is hillier than in the north. This is a deterrent, especially for more vulnerable and elderly people, to travel by bicycle or on foot.

Private cars are very inefficient users of road space. Across London 60% of car trips are made with just the driver alone. Much of Croydon's road network was built in the days before cars existed and are narrow with many competing demand on its space.

Traffic congestion

For Croydon the most significant delays are generally on the main road network in and around the town centre, as shown below in Figure X. Across the South London sub region traffic delay increased by 9% in the morning peak period between 2007/8 and 2013.

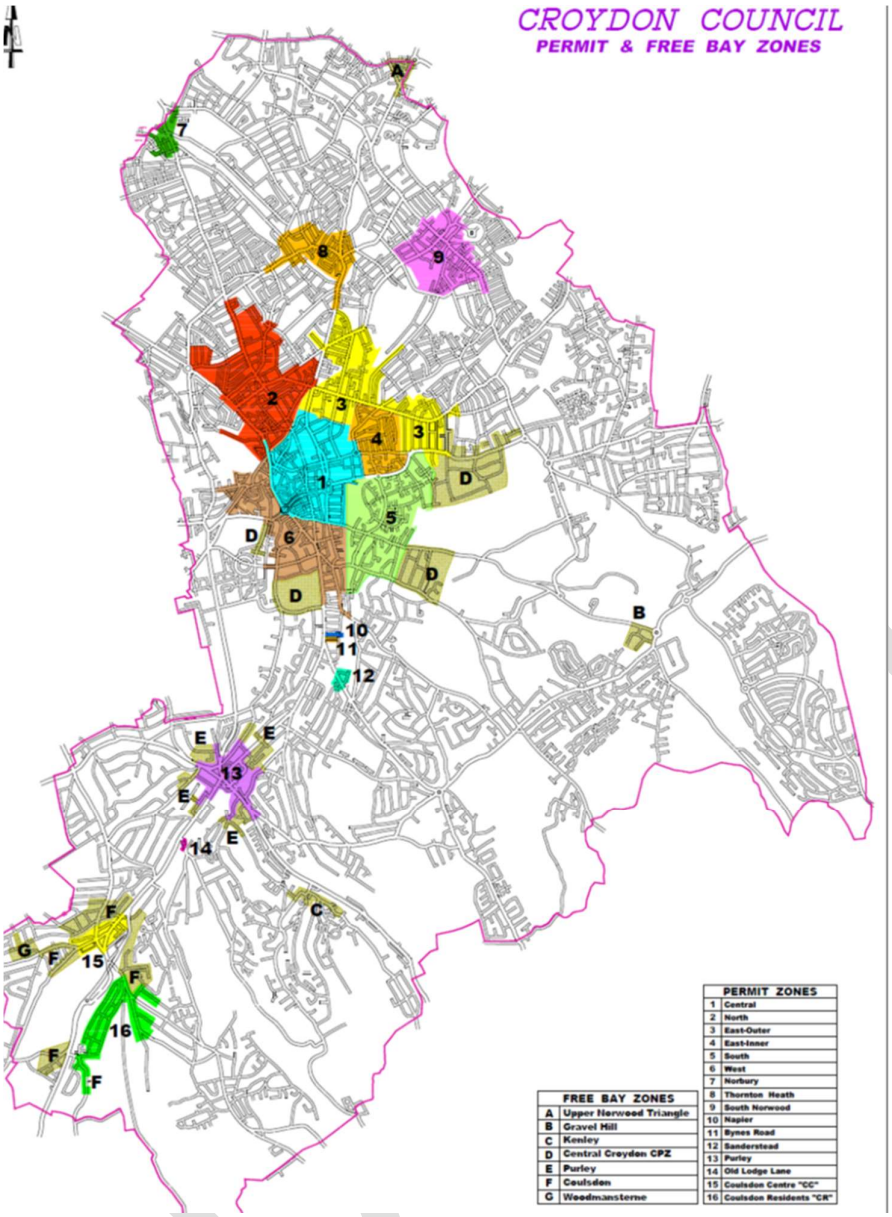
Figure X - Road Performance – Speed change % Medium-term (AM 13/14 – 15/16)

Table X: Average Vehicle Speed (km/h)

Parking Management

At present, the Council operates 22 car parks across the Borough, seven of which are located within Croydon town centre.

Controlled parking zones cover about a third of the Borough with most being in and around the Metropolitan Town Centre and the rest located in and around district and local centres as shown in Figure X below.



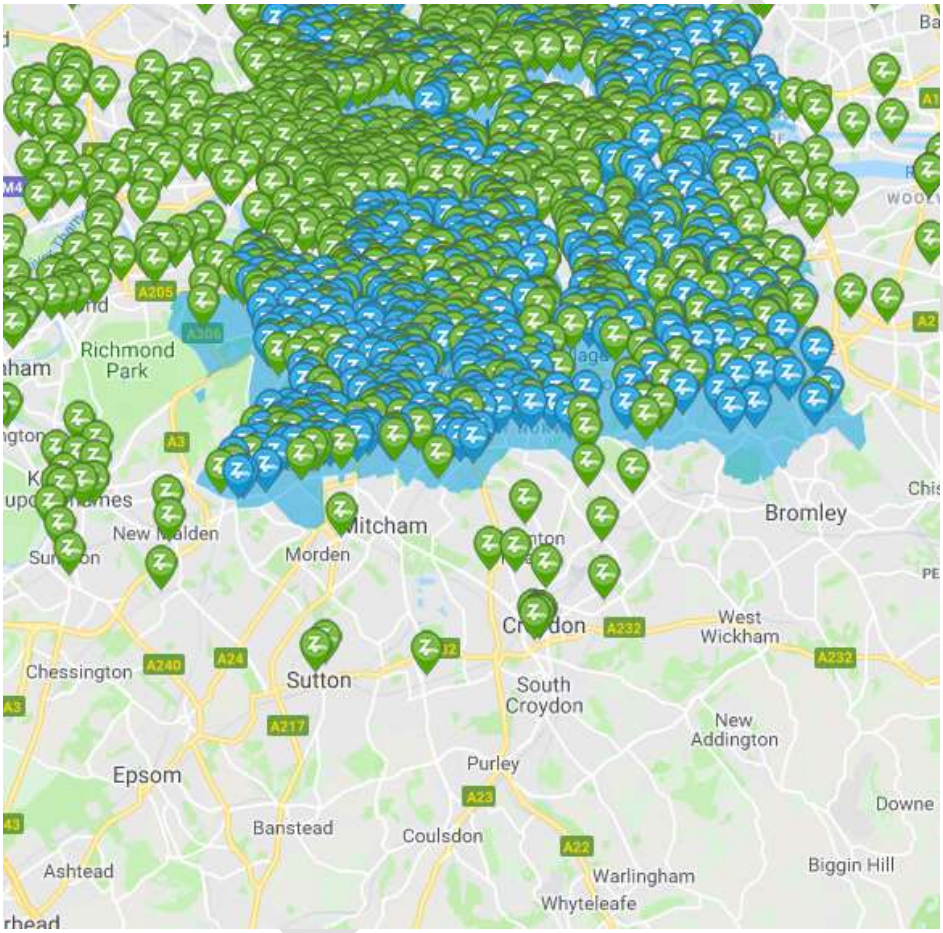
Car Clubs

Car clubs can contribute to traffic reduction by reducing individual car ownership and usage. By supporting car free developments in appropriate locations and setting maximum car parking standards for new developments, car club membership and usage can be encouraged. Croydon is at an early stage in establishing a car club network with about 30 car club vehicles available. Figure x below shows current car club locations. With the concentration of growth in Croydon Opportunity Area which is well served by public transport there is the opportunity for new developments to be car free complemented by expansion of the car club network. Our Local Plan policy

is to require provision of car club bays as part of new developments and that half of these should have electric charging points.

Croydon will continue with the expansion of Car Clubs in the Borough including electric vehicle charging provision and the introduction of flexible Car Clubs in the north of the borough. This will reduce the need for individual car ownership by increasing access to shared car club vehicles.

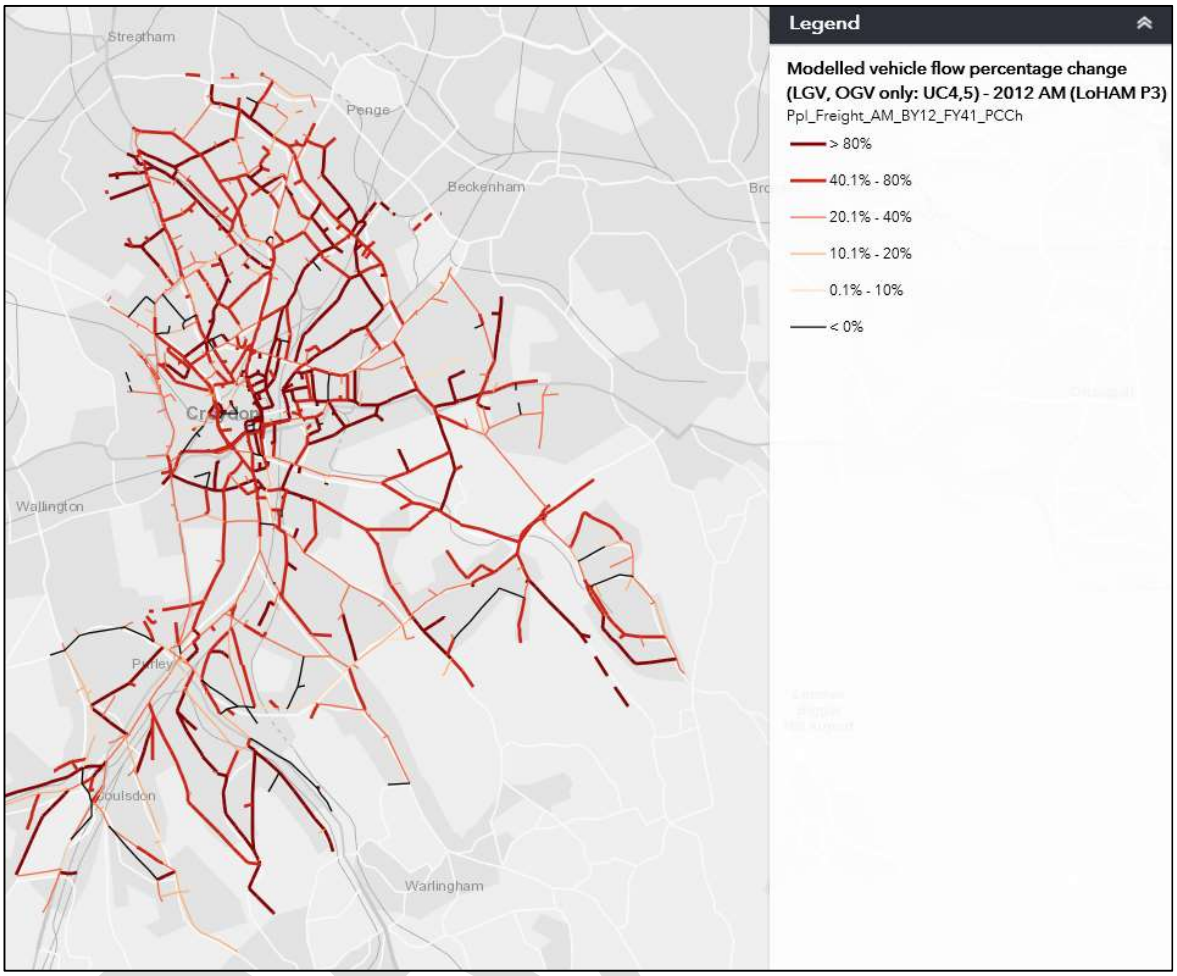
Figure X – Zipcar bays (green) and Zipcar Flex vehicle (blue) locations in South London [Source: www.zipcar.co.uk]



Freight

Freight movement forms a significant component of traffic flows on Croydon's road network with demand generated by Croydon town centre and the extensive retail and business park areas in the west of the borough. The Borough also has many Local and District Centres whose businesses rely on deliveries being made on-street by a multitude of suppliers. LGVs and HGVs comprise about 17% of traffic volume with HGVs alone forming 3% of traffic volume although the amount of HGV traffic has decreased over the last 10 years or so.

Figure X - Transport Modelling – Modelled freight flow (2012 – 2041 AM)



Borough objectives:

7. Croydon will reduce the volume of traffic on our roads and associated congestion through better management of our roads and kerbside space, and by offering pleasant, practical and safe alternatives to private cars and vans.

Short to medium term delivery objectives and proposals:

- Implement and deliver the Healthy Schools Neighbourhoods programme to work with schools, parents and local residents to reduce school run vehicle trips and tackle the associated congestion and air pollution.

- Work with businesses and residents to reduce the impact of deliveries and the growth in the online economy on our road network.
- Investigate and deliver new strategies for reducing traffic volumes and congestion in the borough.
- Review the number of Council staff needing to drive their own car for work and reduce the impacts of parking stress around the Council offices.
- Reduce the need for residents to own their own car by increasing access to car club vehicles, and enabling the expansion of flexible car clubs into the borough.
- Manage the impacts of parking demand on our roads by continuing the introduction of parking controls where supported by the local community, and ongoing review of existing schemes.

Long term goals

- By 2041 Croydon will be a place of mixed modality with a world class walking and cycling environment, and a reduced reliance on the car.
- By 2041 we will have safely and sustainably accommodated autonomous vehicles on our road network and they will have contributed to the reduction of traffic on our roads.

Proposals

Traffic Reduction Strategy

This programme area will investigate and deliver new strategies for reducing traffic volumes and congestion in the borough as required by the MTS. It will include reviews of parking management in the borough, with a focus upon reducing the number of staff driving for work through the implementation of a Council Staff Travel Management Plan.

The work stream will also consider the demand management tools recommended in the MTS,

Any traffic demand management options will be considered with the goal of reducing congestion and pollution, and encourage trips by walking, cycling and public transport.

Healthy School Neighbourhoods

This programme will be a holistic approach to tackling the school run and encouraging walking and cycling to and from school whilst also helping everyone in the neighbourhood to undertake more active travel.

It will include a package of measures such as school pedestrian zones, bikeability training, school safety schemes, neighbourhood traffic reduction schemes and behaviour change measures, all focused upon a cluster of schools in the same neighbourhood at the same time.

Two areas that have been identified as having clusters of schools suitable for piloting the concept are Broad Green and Upper Norwood.

Construction Logistics & Freight Management

This work will consider options for better managing construction traffic through the establishment of a Construction Consolidation Centre. It will also continue the work to monitor and enforce construction and logistics plans for development sites. It further piece of work will involve assessing the feasibility of micro-consolidation, micro-distribution centres and cargo bike delivery schemes in the borough in order to reduce freight movements and deliveries. There is scope for more local, small scale deliveries to be by cargo bike.

Outcome 4: London's streets will be clean and green

Key challenges and opportunities

- Air pollution along main radial roads from traffic sources
- School run congestion
- Idling engines outside schools and town centres
- Significant flooding risk across the borough

Air Quality

In Croydon an Air Quality Management Area (AQMA) has been declared for the whole of the borough. The AQMA has been declared for the following pollutants: Nitrogen dioxide because we are failing to meet the EU annual average limit for this pollutant at some of our monitoring stations and modelling indicates it is being breached at a number of other locations.

An Air Quality Focus Area is a location that has been identified as having high levels of pollution and human exposure. There are five focus areas in the borough. These are:

- London Road, Norbury
- Purley Cross and Russell Hill
- Thornton Heath / Brigstock Road/ High Street / Whitehorse Lane
- London Road between Thornton Heath Pond and St James Road
- Wellesley Road

Hospital admissions for asthma amongst Croydon children aged 0-9 years old was the worst in London in 2017. [28]

With the planned growth in Croydon town centre (about 50 major schemes over the next 5 years) there is a particular concern in relation to emissions from construction traffic. The air quality priorities are:

- Tackling emissions from construction sites and construction vehicles through compliance with the Town Centre Construction Logistics Plan.
- Tackling emissions due to servicing and freight vehicles – 17% of transport emissions are from vehicles associated with delivery and servicing.
- To reduce exposure to air pollution and to raise awareness for residents and those who work in Croydon – it has been estimated that up to 40% of pollution

[28] https://www.croydon.gov.uk/democracy/dande/policies/health/annual-public-health-report Page 27

in Croydon is from outside London and Europe so actions to reduce pollution in Croydon are limited.

Figure X Modelled map of annual mean NO_2 concentrations and Air Quality Focus Areas (from the LAEI 2013)

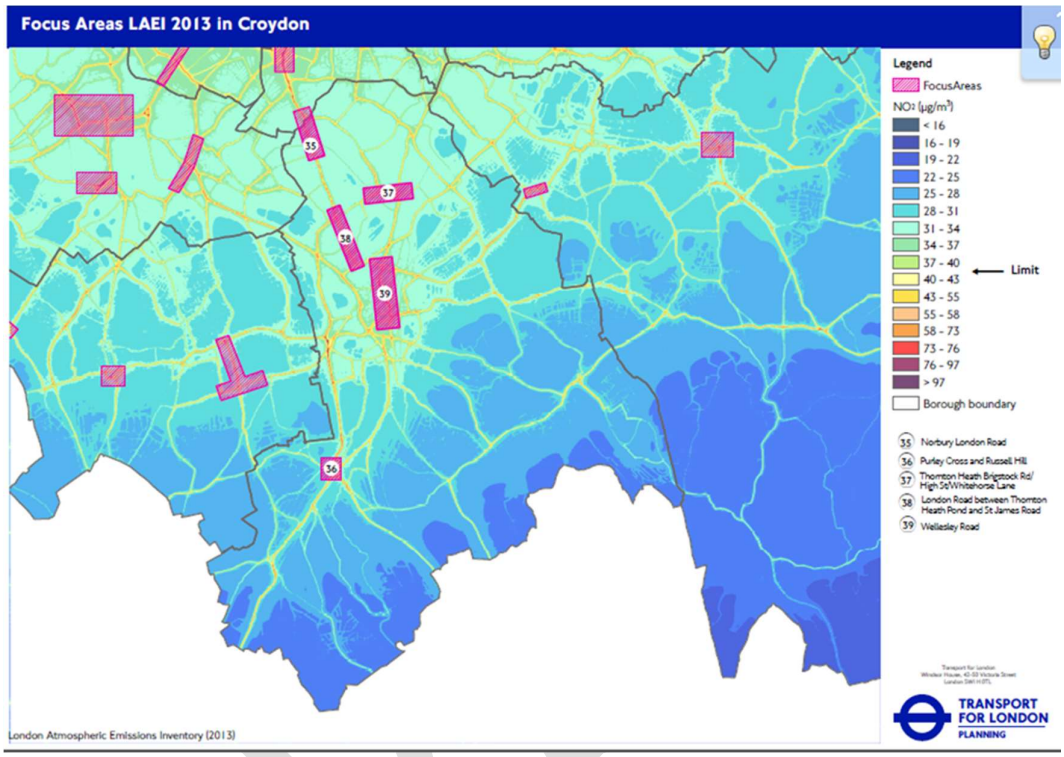


Figure X Modelled map of annual mean PM_{10} (from the LAEI 2013)

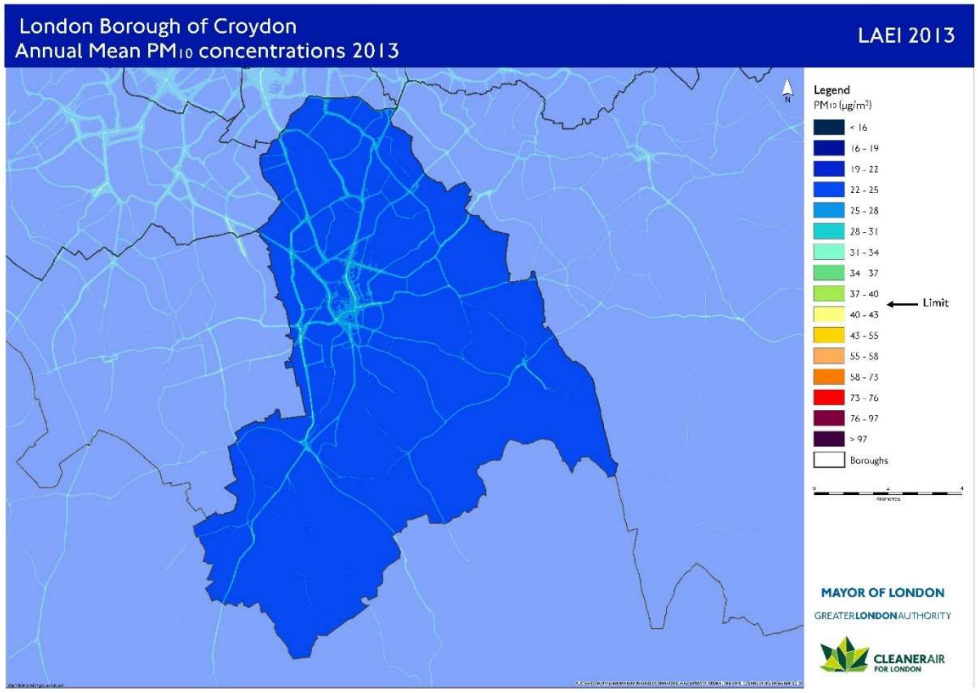


Figure x NOx Emissions by source and vehicle type (from the LAEI 2013)

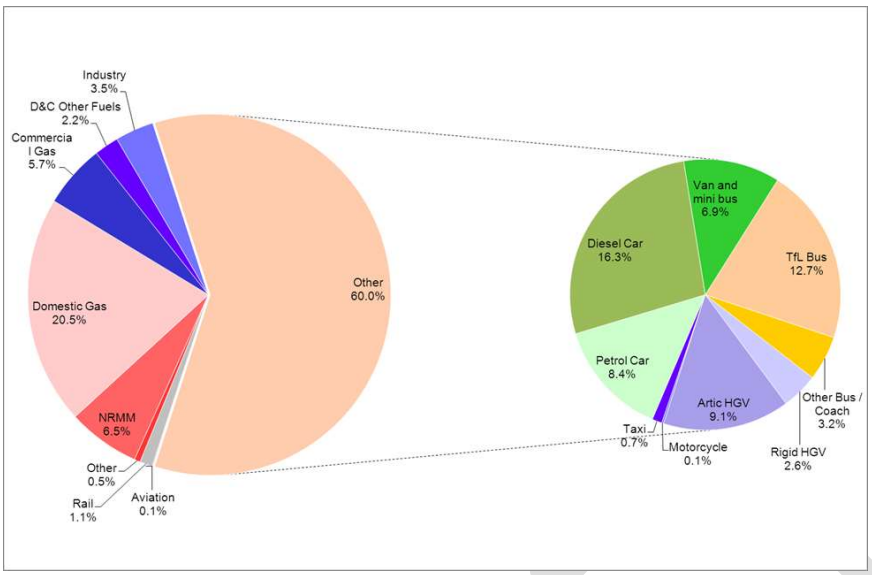
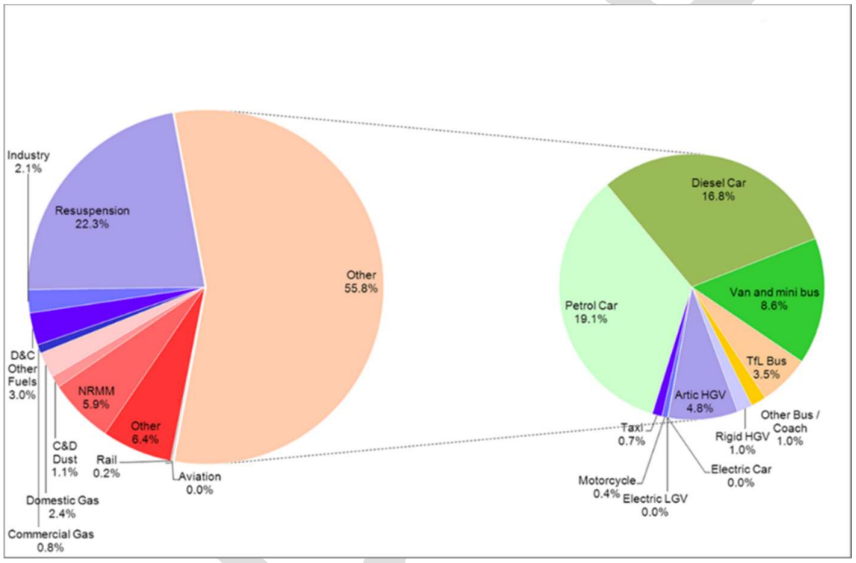


Figure x PM_{10} Emissions by source and vehicle type (from the LAEI 2013)



Climate Change

Road transport produces 24% of total carbon dioxide emissions in Croydon. However the total emissions from road transport has decreased consistently since 2005. Cars emit about one third of road transport carbon dioxide emissions and the challenge is to reduce car use and continuing the move away from fossil fuel powered private vehicles.

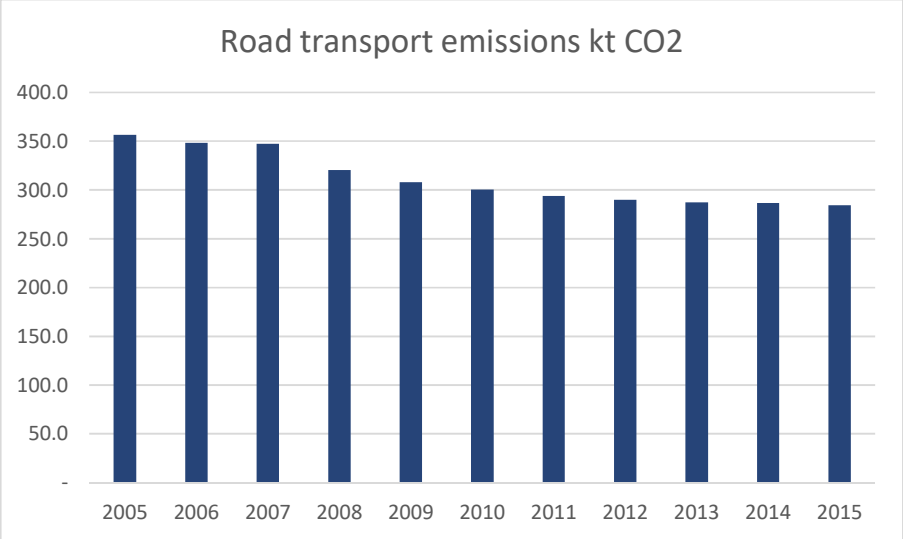


Figure X Carbon emissions [Source: DfBEIS]

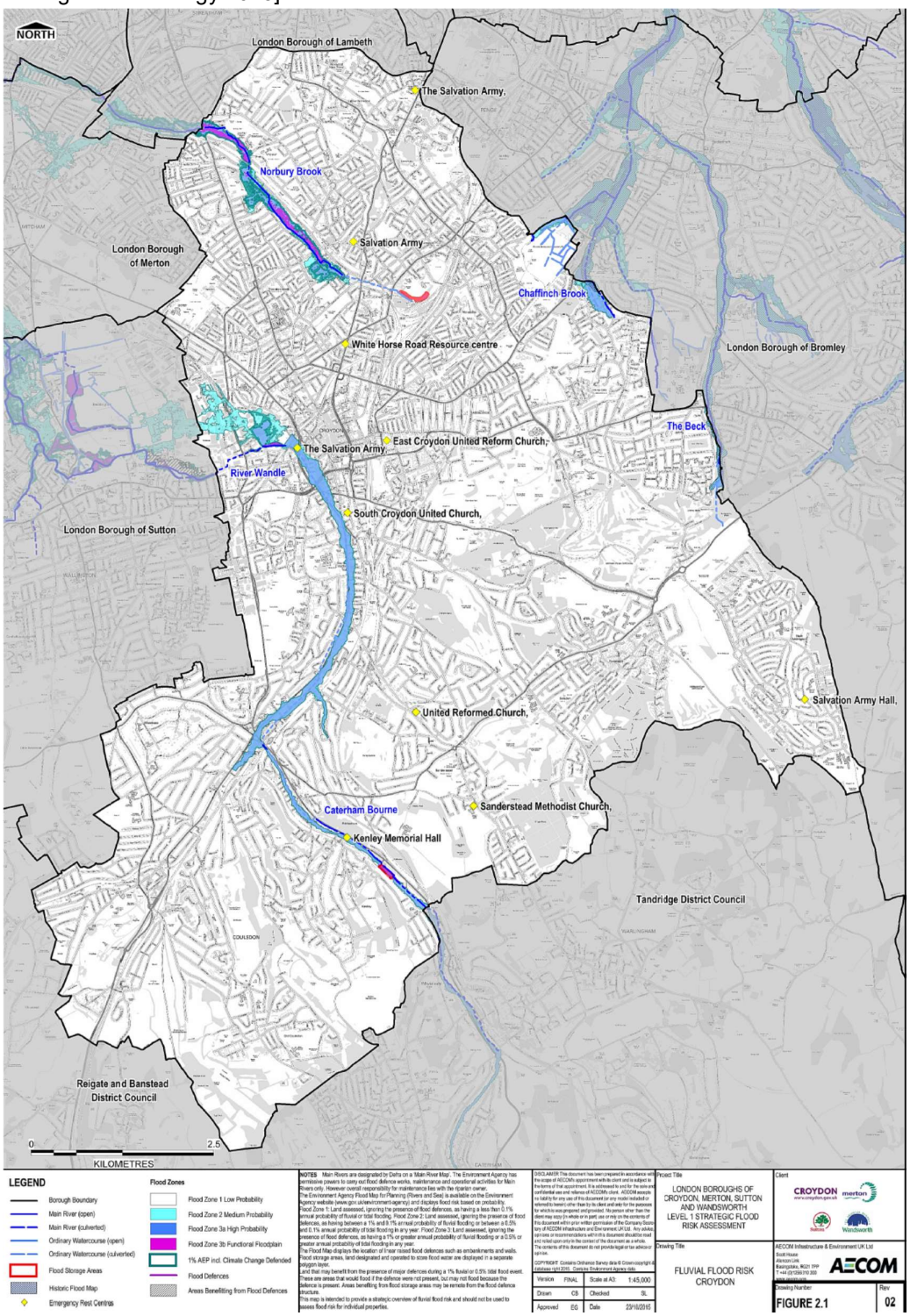
For carbon dioxide emissions as a whole there has been a decrease of 38% per head of population over the same period. The Council has adopted a target of reducing carbon dioxide emissions by 34% from 2005 level by 2025. Carbon dioxide emissions have already been reduced by 32% by 2015.

Flood Risk

Croydon Council is the Lead Local Flood Authority for the London Borough of Croydon. ….has a history of severe flooding. Most recently Purley and Kenley experienced significant flooding from the Caterham Bourne due to extremely high groundwater during January to March 2014, when properties and businesses were impacted and an emergency situation was declared. Severe surface water flooding during July 2007 flooded into properties and brought Purley town centre to a standstill.

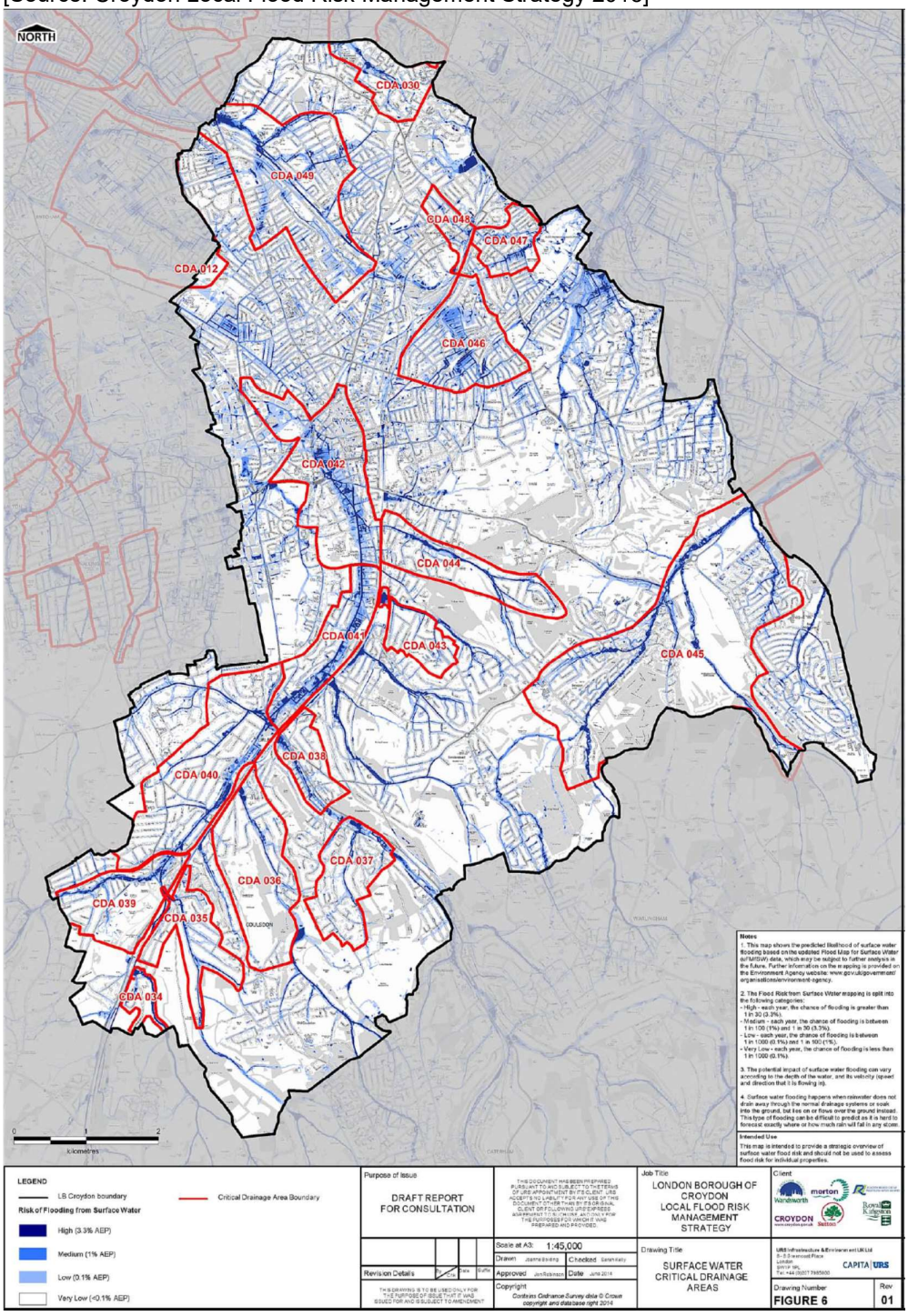
The Preliminary Flood Risk Assessment (PFRA) and Surface Water Management Plan (SWMP) identify parts of Croydon to be particularly susceptible to surface water flooding, including Brighton Road through Purley up to Central Croydon and the A22 Godstone Road.

Figure X: Map of Fluvial Flood Risk in Croydon [Source: Croydon Local Flood Risk Management Strategy 2015][29]



[29] https://www.croydon.gov.uk/environment/flood-water/flood-management

Figure X: Map of Surface Water Flooding Critical Drainage Areas
[Source: Croydon Local Flood Risk Management Strategy 2015][30]



[30] https://www.croydon.gov.uk/environment/flood-water/flood-management

Borough objectives:

8. Croydon will tackle road based air pollution by reducing traffic volumes, supporting the shift to zero emission vehicles and introducing new green infrastructure.

Short to medium term delivery objectives and proposals:

- Support the shift to electric and low emission vehicles by introducing over 400 electric vehicle charging points in the next 4 years.
- Facilitate the expansion of rapid electric vehicle charging hubs for particular use by taxis and freight vehicles.
- Investigate the feasibility for micro-consolidation and micro-distribution hubs around the Growth zone and in our industrial areas & a cargo bike delivery scheme.
- Introduce 3500 new street trees and new green infrastructure along our main roads with known air pollution issues.
- Investigate the creation of localised Zero Emission Zones around vulnerable sites in the borough such as Croydon University Hospital and schools that include no idling enforcement.
- Ensure that construction and development related traffic in the Growth Zone does not negatively impact on air quality and the safety of pedestrians and cyclists through strict enforcement of Construction and Logistics Traffic Management Plans.

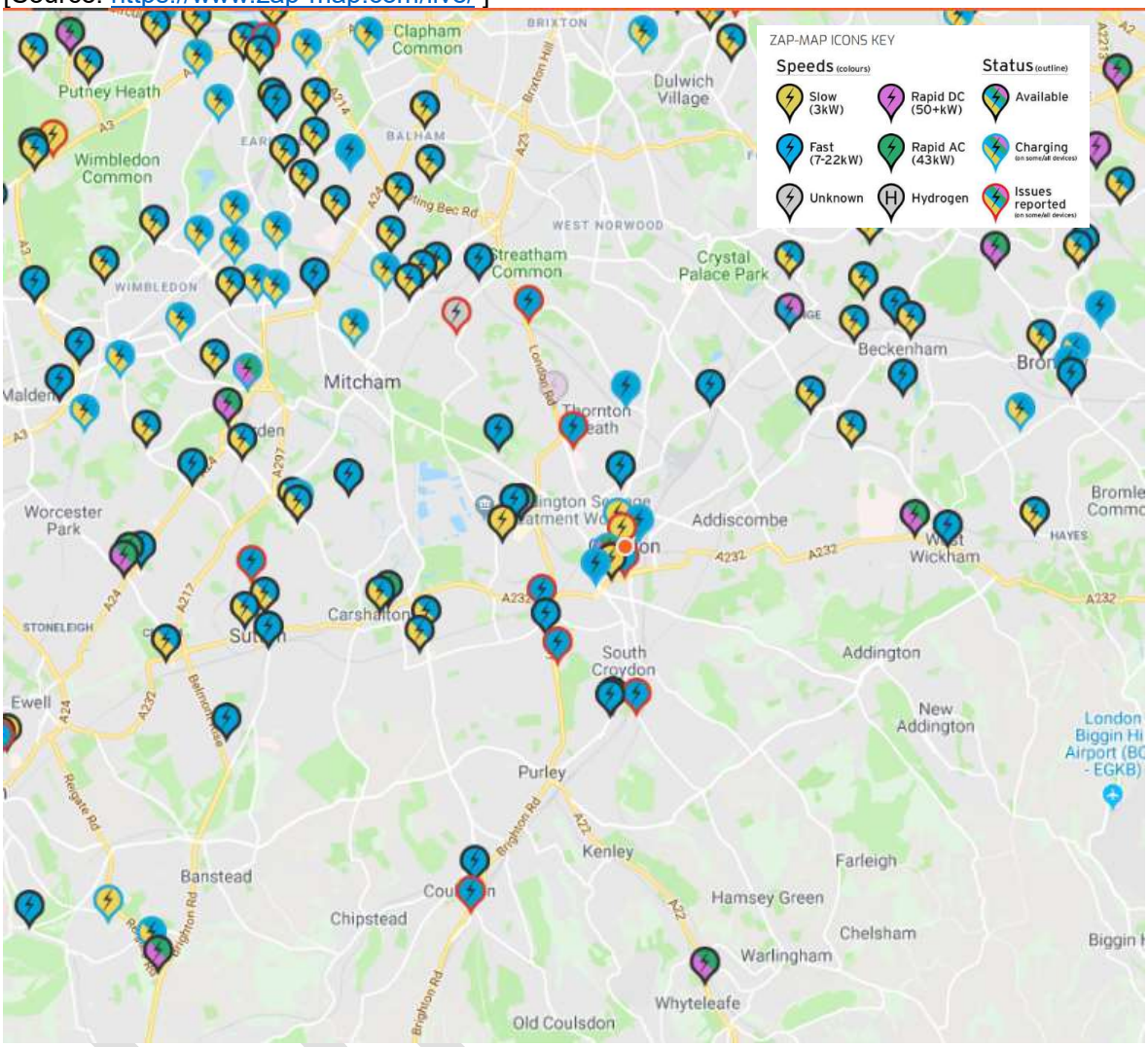
Long term goals

- By 2041 we will have worked with neighbouring boroughs to have delivered innovative and efficient ways of managing freight and logistics that minimizes the number of vehicles on our roads.
- We will have adapted the public realm and transport systems to cope with the changes to our climate, and the integration of Sustainable Urban Drainage (SUDs) across the public realm has mitigated the impacts of surface water flooding.

Electric Vehicle Charging Points

The Council's ambition to install 400 electric vehicle charging points across the borough by 2022 and enable the shift to zero tailpipe emission vehicles resulting in improved air quality.

Figure x – Map showing location of public EV charging points in and around Croydon
[Source: https://www.zap-map.com/live/]



Outcome 5: The public transport network will meet the needs of a growing London

Key challenges and opportunities

- Overcrowding on the tram network
- Overcrowding at East Croydon station
- Slower bus journey times due to road congestion
- Poor bus accessibility and east –west connections in the south of the borough
- Significant population growth

Although some areas of the borough are well served by public transport there is little difference in the geographic area within Croydon covered by the higher PTAL rating (level 4 and above) in 2021 and 2031 compared to the 2015 base year. This would be a reflection of the limited extent of the committed public transport investment by TfL over the next 15 years or so.

Rail services performance and overcrowding

Some sections of the rail network serving Croydon are crowded with high levels of standing by passengers during peak periods, particularly on services from East Croydon into central London.

Figure X National rail crowding 2011 [Source: Sub Regional Transport Plan, 2016]

However, crowding on local and regional rail services is predicted to get much worse over the period of the MTS with only currently committed investment.

Figure ? Crowding on rail, tube, DLR and tram network in 2041 with only committed investment [morning peak] [Source: MTS]

Tramlink

Croydon's Tramlink network has doubled the number of passengers since its opening in 2000. Passenger standing in the peak periods is commonplace particularly on the approaches to the town centre from the New Addington/Elmers End/Beckenham Junction branches, as shown below.

Figure X Crowding on Tramlink [morning peak 20..][Source: TfL Sub Regional Transport Plan, 2016]

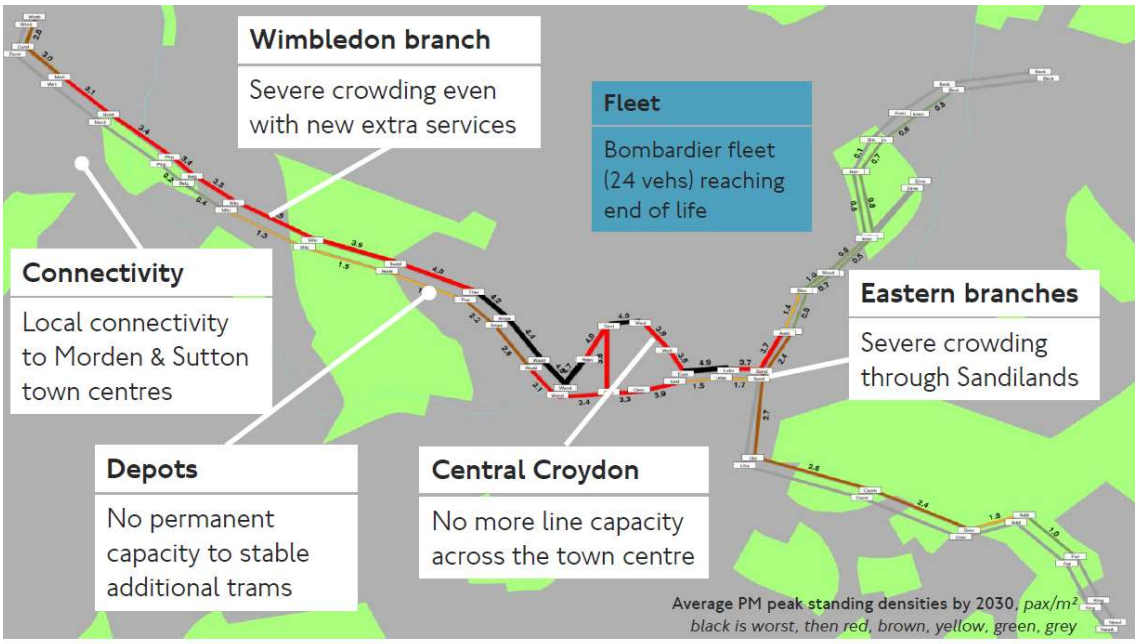


Figure X – Key challenges on the Tramlink network by 2030 without investment [Source: Trams for Growth, TfL 2016]

According to TfL the number of passengers is predicted to nearly double again by 2031 however in reality passenger numbers have actually dropped since 2013/14 from 31 million journeys to 29 million journeys in 2017/18.

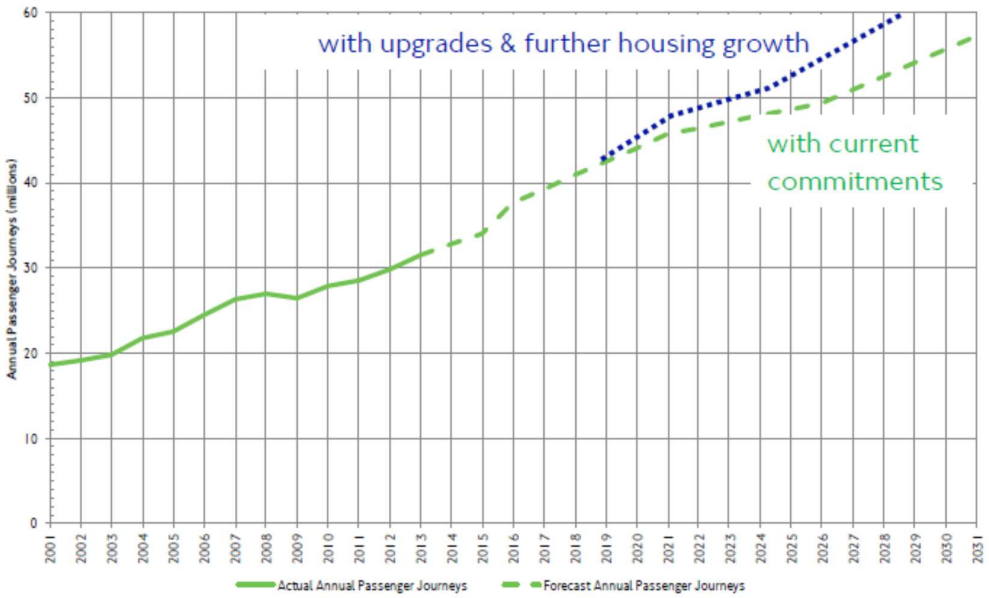
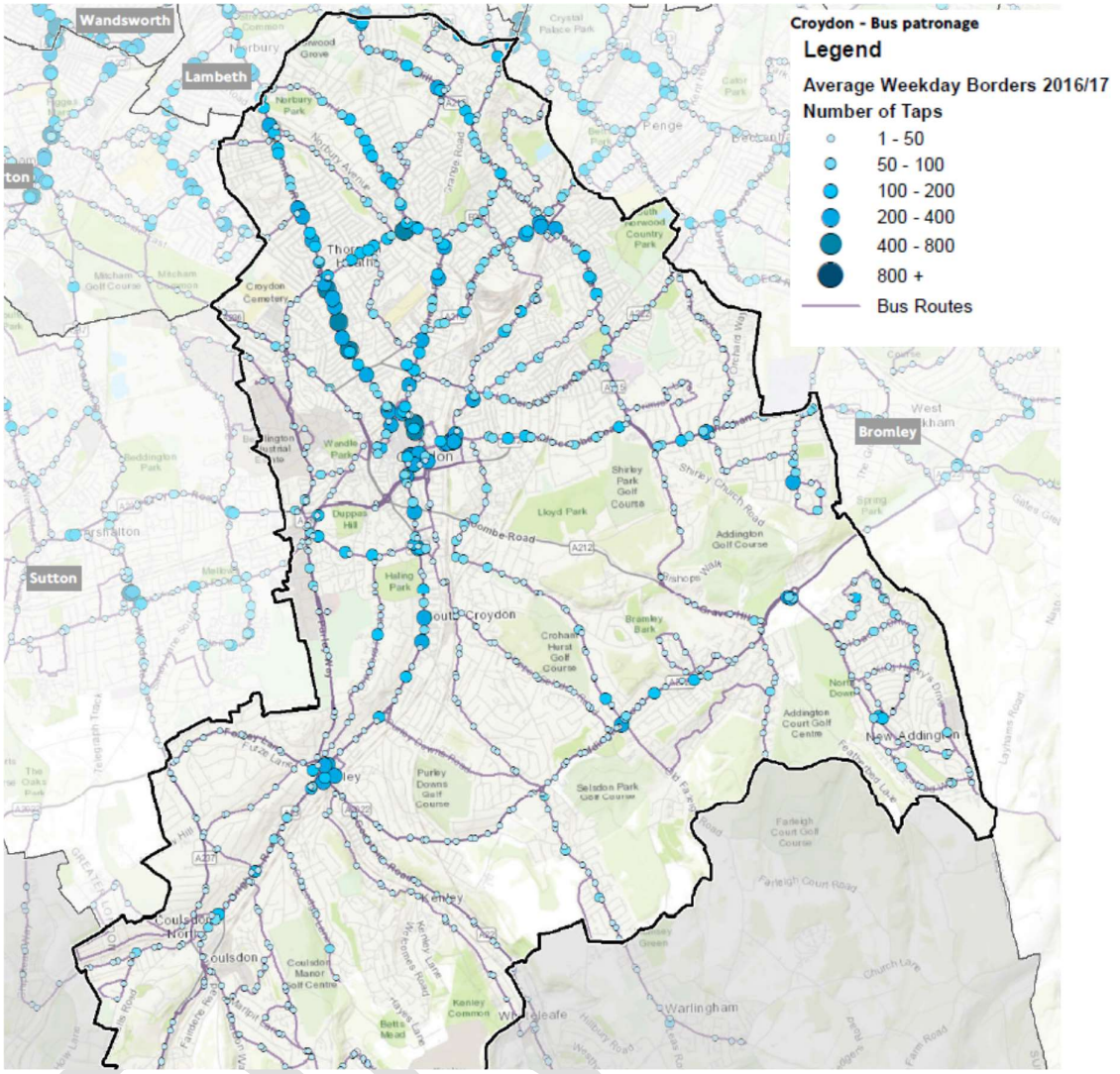


Figure X Predicted growth in Passengers [Source: TfL Tram 2030]

TfL has adopted a 15-year plan, Trams 2030, which seeks to address the growing demand and support development in Croydon Opportunity Area. Growth pressures are expected to occur on the Wimbledon branch [66% more capacity required] and on the eastern branches [36% more capacity required]. This capacity increase is required to avoid passengers being unable to board in peak periods. The main challenge for reliability and journey times is in central Croydon. A number of infrastructure s0lutions were identified:

- A loop around Dingwall Road
- Double-tracking of the single track tramway between Wandle Park and Reeves Corner tram stops
- An Old Town Loop/Reeves Corner turnback proposal
- A Reeves Corner westbound tram stop
- Double tracking of all or part of the line between Harrington Road and Beckenham Junction
- Elmers End line enhancements
- Additional stabling

TfL Trams has recently introduced a new timetable with a more even interval between trams with the aim of improving reliability and increasing capacity on the network.



Borough objectives:

9. Work with the Mayor, TfL, Network Rail, bus operators and TOCs to improve public transport links, reduce overcrowding on the public transport network and ensure Croydon is the best connected Metropolitan Town Centre in Outer London.

Short to medium term delivery objectives and proposals:

- Partner with Transport for London and Network Rail to improve public transport links to our local high streets, including introducing new bus routes to better

connect Croydon's places

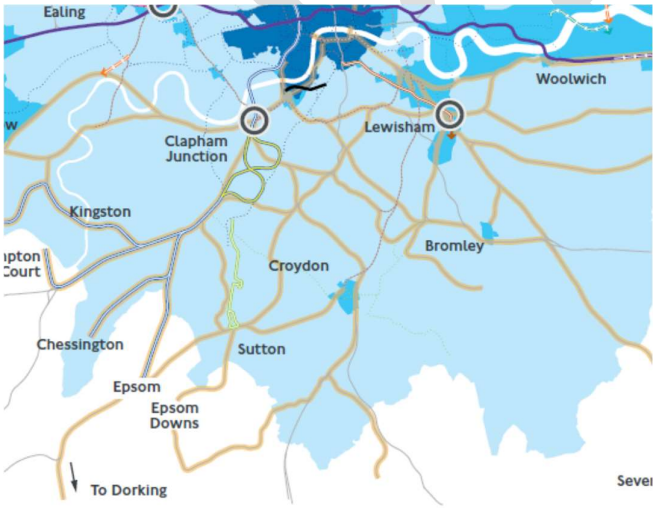
- Work with the Mayor, TfL, Network Rail, bus operators and TOCs to improve public transport links and reduce overcrowding on the public transport network.
- Work with TfL and the Mayor to increase capacity and reduce overcrowding on the tram network.
- Continue to work with partners in the Capital2Coast LEP including Gatwick Airport to enhance our national and international links making Croydon one of the best connected and best places to do business in London and the South East.
- Work with TfL and the Mayor to ensure Overground rail metroisation meets needs of Croydon's residents and boosts the local economy.

Long term goals

- By 2041 Croydon's economy is thriving and businesses flock to the Town Centre because it is the best connected in South London.

Improving access to stations

Metroisation

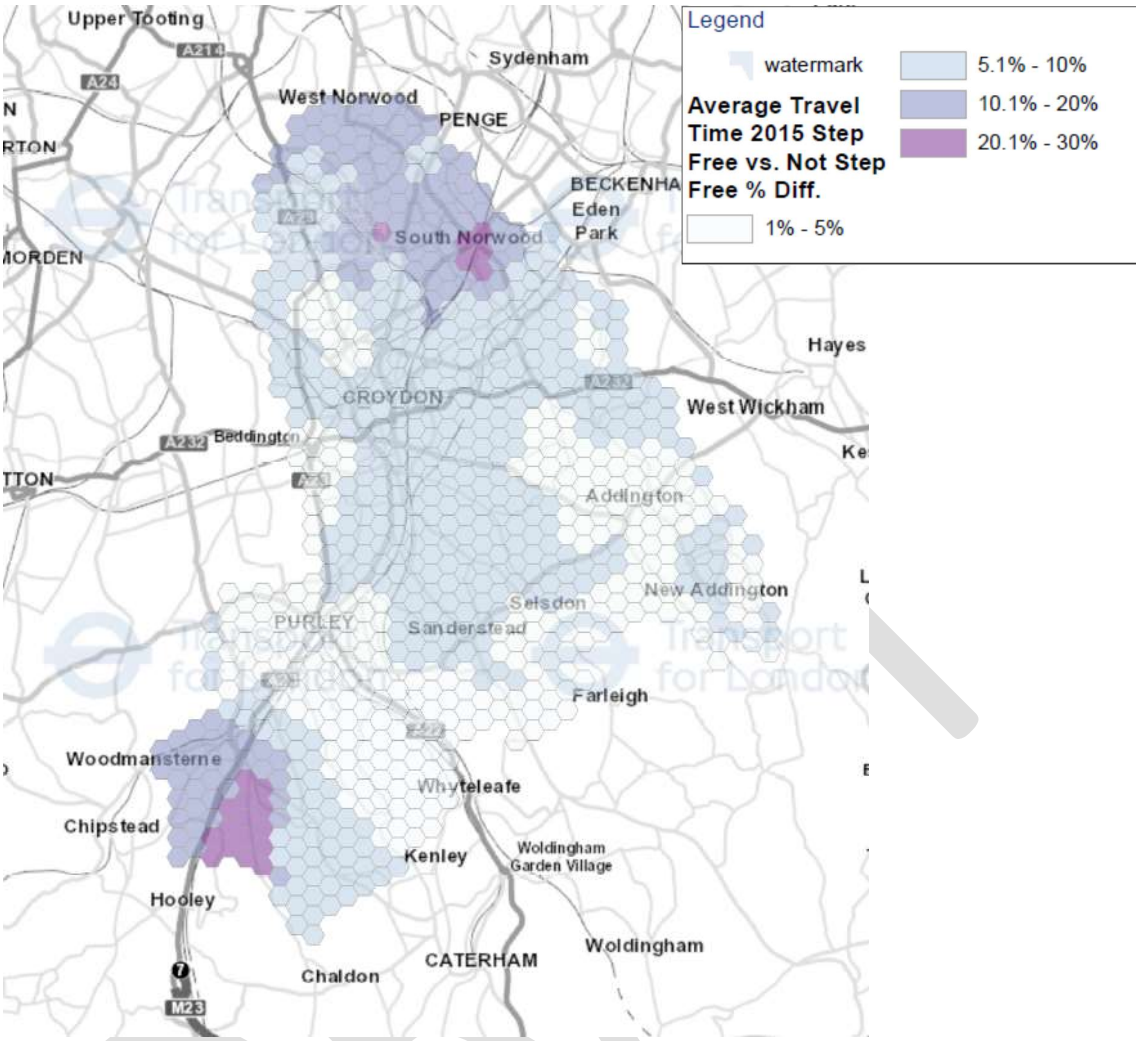


Outcome 6: Public transport will be safe, affordable and accessible to all

Key challenges

- Affordability of public transport
- Lack of step free access at rail stations in the borough particularly West Croydon
- General accessibility of the wider public transport network lacking
- Recommendations from the tram incident
- Bus casualties in town centre area
- Anti-social behaviour on buses at school exit times

Almost all of the Borough's bus stops are accessible which complements the fully accessible London bus network. All tram stops in the borough are step free. However, it is a different picture for rail stations. Of the borough's 17 rail stations, currently only East Croydon, Thornton Heath, Coulsdon Town and Purley are step free. Network Rail has proposals to make Selhurst and Coulsdon South stations step free by 2019. With an ageing population who will become more infirm a fully accessible public transport network will become increasingly important.



Borough objectives:

10. Work with the Mayor, TfL, Network Rail, bus operators and TOCs to ensure the entire public transport network is accessible, safe and step free.

Short to medium term delivery objectives and proposals:

- Work with TfL and technology partners to pilot autonomous and demand responsive vehicles to improve public transport accessibility in harder to reach areas of the borough.
- Lobby TfL to ensure the adoption of safety recommendations from the tram derailment investigation.
- Work towards ensuring all rail stations in Croydon are fully accessible and step free.

- Ensure the bus network is accessible in Croydon by tackling the few remaining bus stops that are not accessible.
- Work with TfL, the Metropolitan Police and secondary schools to reduce anti-social behaviour and crowding on buses at school closing times.
- Improve connections between modes at public transport interchange hubs, ensuring it is easy and safe to walk and cycle to and from them.

Long term goals

- By 2041 every station and stop will be step free and fully accessible.

Norwood Junction Station

Improvements to the public realm around Norwood Junction Station, including widening of footpaths and removal of street furniture clutter, have so far been incorporated in the Streets Improvement Scheme for South Norwood. £1.65 million has been made available, with the focus being on improvements to Station Road, Market Parade on Portland Road and the junction of the High Street and Portland Road.

Improvements to the station itself, are being sought by Croydon Council, including accessibility for all users (step-free access) as part of the Brighton Mainline Upgrade, if not before.

West Croydon Station

West Croydon is the point of arrival and departure for Overground rail line through East London to Highbury and Islington and……...

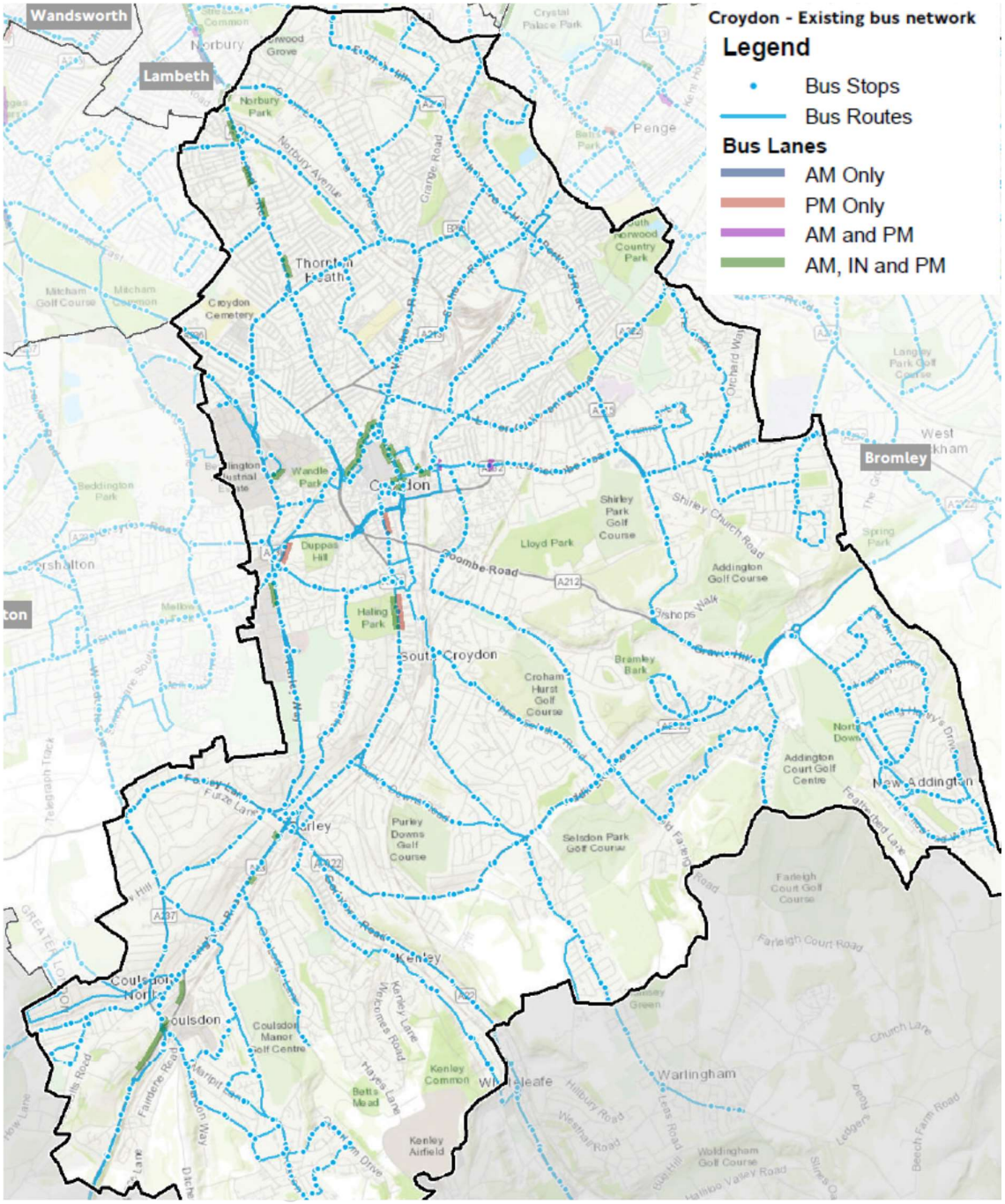
.

Outcome 7: Journeys by public transport will be pleasant, fast and reliable

Key challenges and opportunities

- Bus congestion in town centre
- Increasing bus wait times
- Poor performance of train operating companies (TOCs)
- Frequency of stopping services at certain times of day and week

Table X – Average bus speed (km/h)



Shaping and growing the bus network

A recent bus priority study highlighted the delays to bus journeys on key corridors into the town centre which can make bus travel less appealing. There is evidence of bus patronage falling partly due to the longer journey times. The map below shows the delays in the evening peak period to bus journeys for routes into the town centre. The picture is much the same for Saturday journeys.

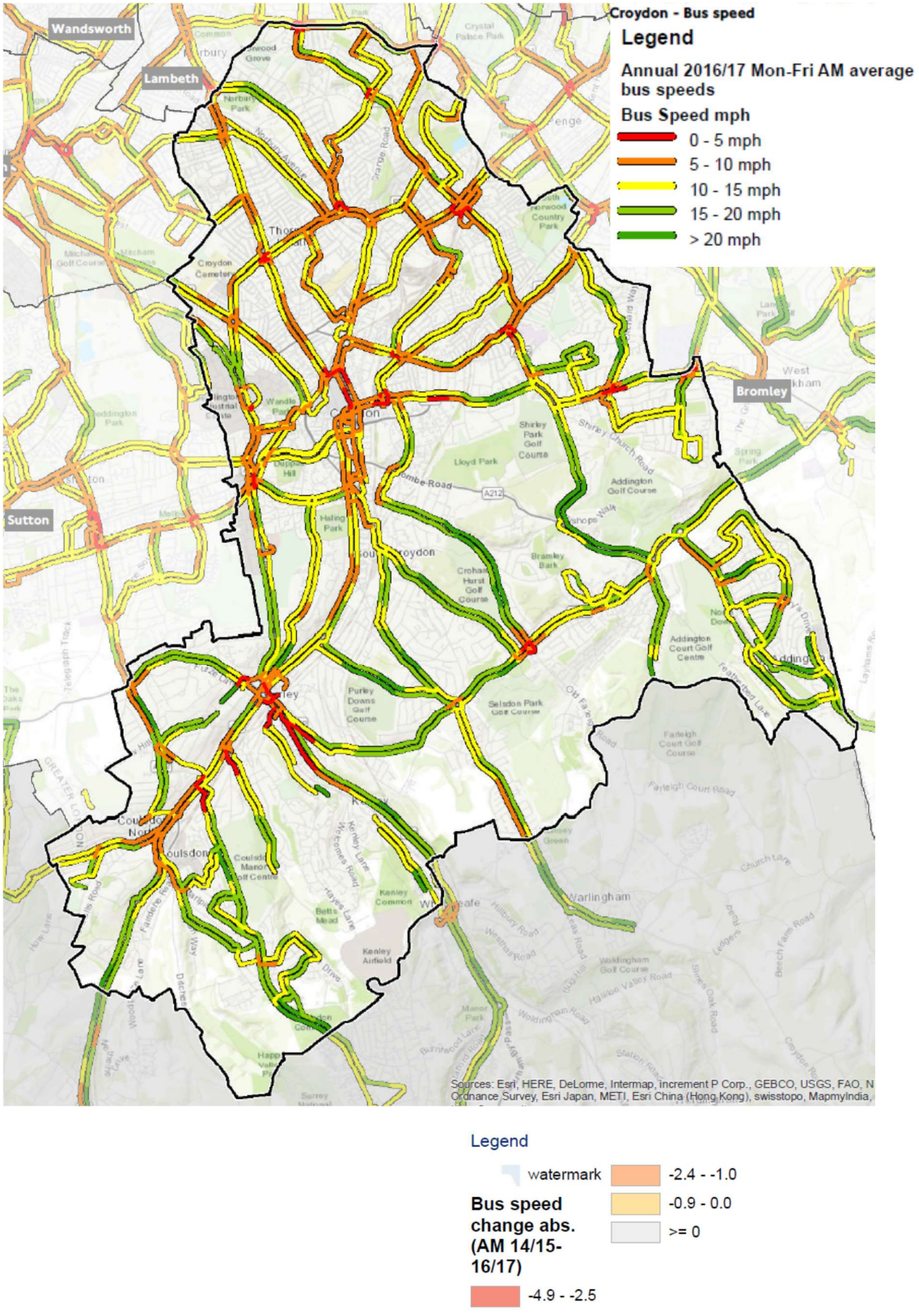
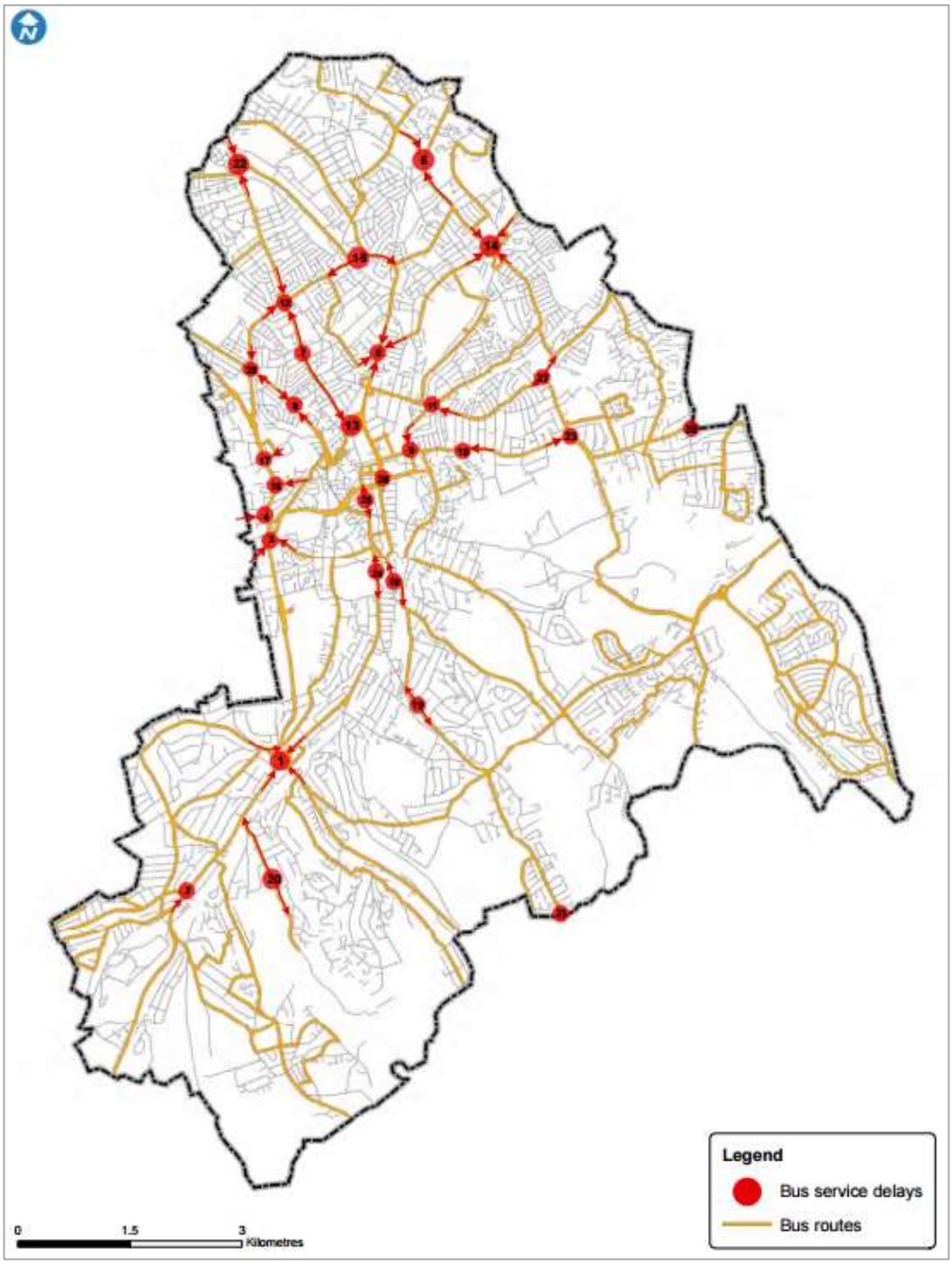

Croydon - Bus speed
Legend
Annual 2016/17 Mon-Fri AM average bus speeds
Bus Speed mph
0 - 5 mph
5 - 10 mph
10 - 15 mph
15 - 20 mph
> 20 mph
Wandsworth
Lambeth
Sutton
Bromley
Sources: Esri, HERE, DeLorme, Intermap, increment P Corp., GEBCO, USGS, FAO, N
Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), swisstopo, MapmyIndia,
Legend
watermark
Bus speed change abs. (AM 14/15-16/17)
-4.9 - -2.5
-2.4 - -1.0
-0.9 - 0.0
>= 0

Figure X: Croydon Bus Network – Capacity Constraints



Source: LB Croydon (https://www.croydon.gov.uk/sites/default/files/articles/downloads/busservices.pdf)

Figure X - Road Performance – Bus speed change % (AM 14/15-16/17)

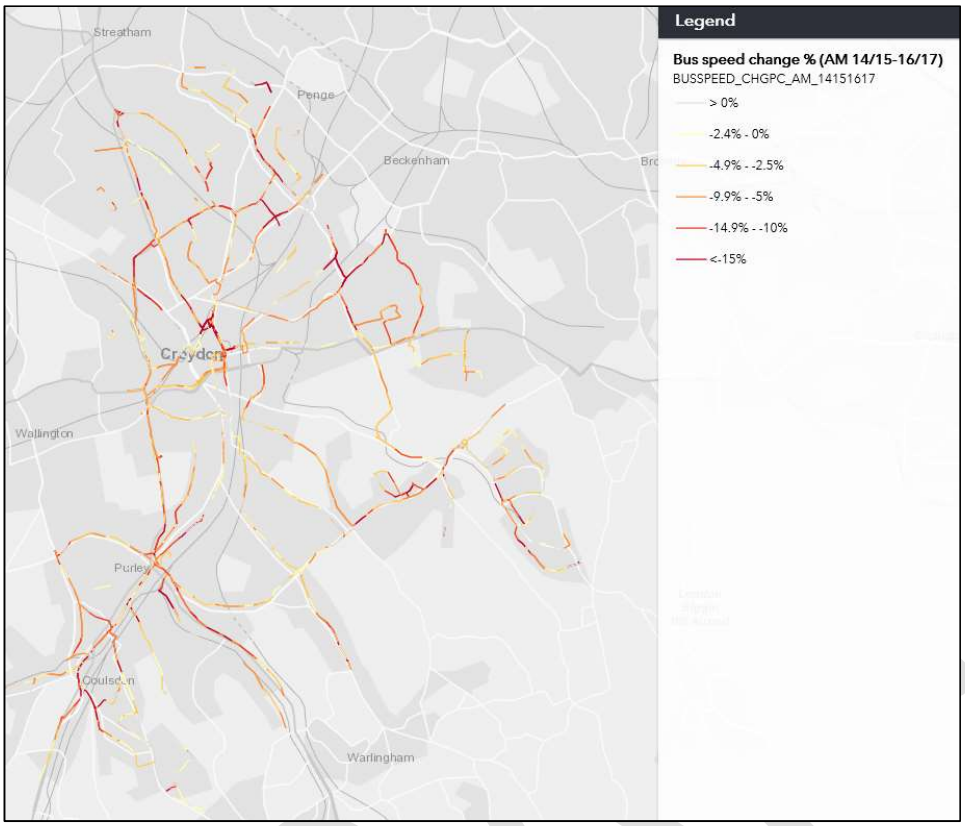
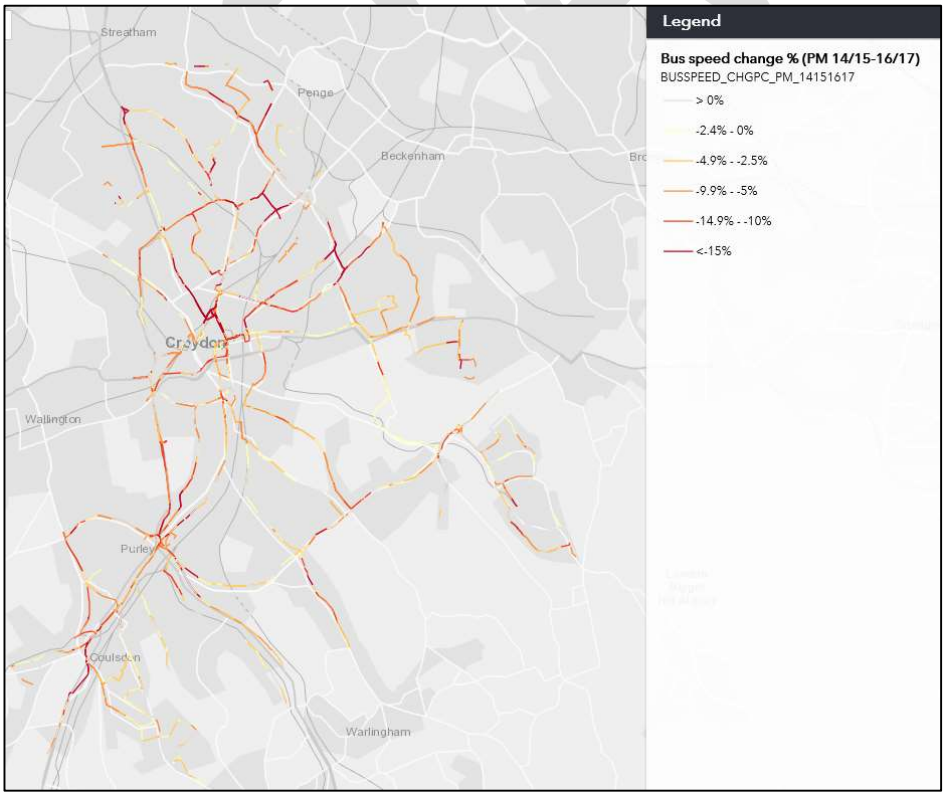


Figure X - Road Performance – Bus speed change % (PM 14/15-16/17)



Across the south London sub-region bus wait times have increased by 9% between 2013 and 2015.

With the growth in jobs and population particularly in the town centre Growth Zone the challenge is to support this growth in a sustainable way such as by encouraging people to use buses.

Bus Priority

Bus priority measures are significant proposals to improve public transport reliability and frequency within the Borough and reduce car travel. Strategies can be applied on a variety of scales – Borough wide, or on specific strategic routes.

.

Borough objectives:

11. Work with TfL to introduce additional bus priority measures on key road corridors to improve efficiency and reliability of bus services.

12. Lobby the TOCs and the DfT to improve performance of train services and reduce gaps in service frequencies

Short to medium term delivery objectives and proposals:

- Work with TfL to review bus services operating in the Growth Zone to improve efficiency and reduce bus congestion.
- Work with TfL to introduce additional bus priority measures on key road corridors to improve efficiency and reliability of bus services to accommodate growth in the borough.
- Continue to effectively lobby Network Rail, DfT and the train operating companies (TOCs) to improve rail services.

Long term goals

- By 2041 Croydon will have By 2041, mode share by public transport will be the most convenient way of getting between Central Croydon, our local centres and locations further afield.

Buses – TfL provides funding for bus improvements through the Strategic Bus priority programme however this only applies to main bus corridors. This funding programme will examine what can be done to improve bus services in the south of the borough, with specific focus upon improving accessibility to support the suburban intensification areas. As well as traditional bus services the work will also consider new concepts such as on demand minibuses and autonomous vehicles. TfL's funding is being more than matched by Growth Zone funding for Bus Priority and Bus Standing.

……..

Outcome 8: Active, efficient and sustainable travel will be the best option in new developments

Key challenges and opportunities

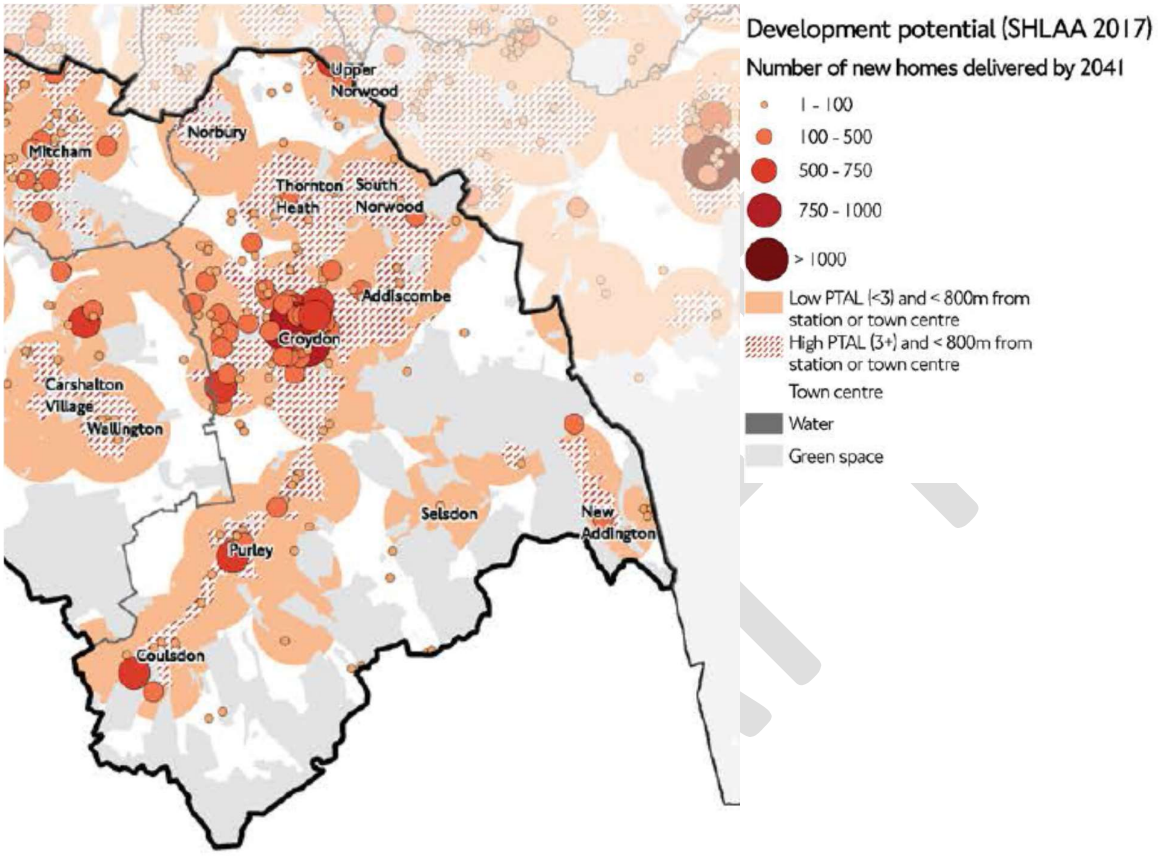
- Suburban densification and impacts on parking and transport network in lower PTAL areas
- Westfield development – 3,000 new car parking spaces
- Construction impacts on our streets and transport network in the Growth Zone

The Whitgift Centre redevelopment – Croydon Partnership – Westfield/Hammerson

Westfield and Hammerson created the Croydon Partnership to redevelop the Whitgift Centre into a new state-of-the-art retail and leisure centre in Croydon..

The Town Centre will benefit from improvements to the public transport infrastructure network which includes major bus, rail and taxi interchange funded through the Growth Zone framework.

- …….



The Council has adopted its Local Plan which includes policies to support sustainable development both within Croydon town centre and other local centres which will become the focus on growth in jobs and housing through higher density developments. However, growth,…….. The challenge will be to offer alternatives to the private car for people who will live in such places.

Based on our housing trajectory for the Local Plan ….. of homes would be within PTAL rating 1-3, as shown in Table ? below.

Table ? Housing trajectory [2016 -2036]

The Borough's population is expected to increase from 382,000 in 2016 to 465,000 by 2041, a 22% rise. This growth in population will need to be housed and the borough is required as part of the London Plan to deliver ?? over the period ??. This is an increase from the London Plan 2016 target of 1,435 per annum. The increase in population will place more pressure on the transport networks

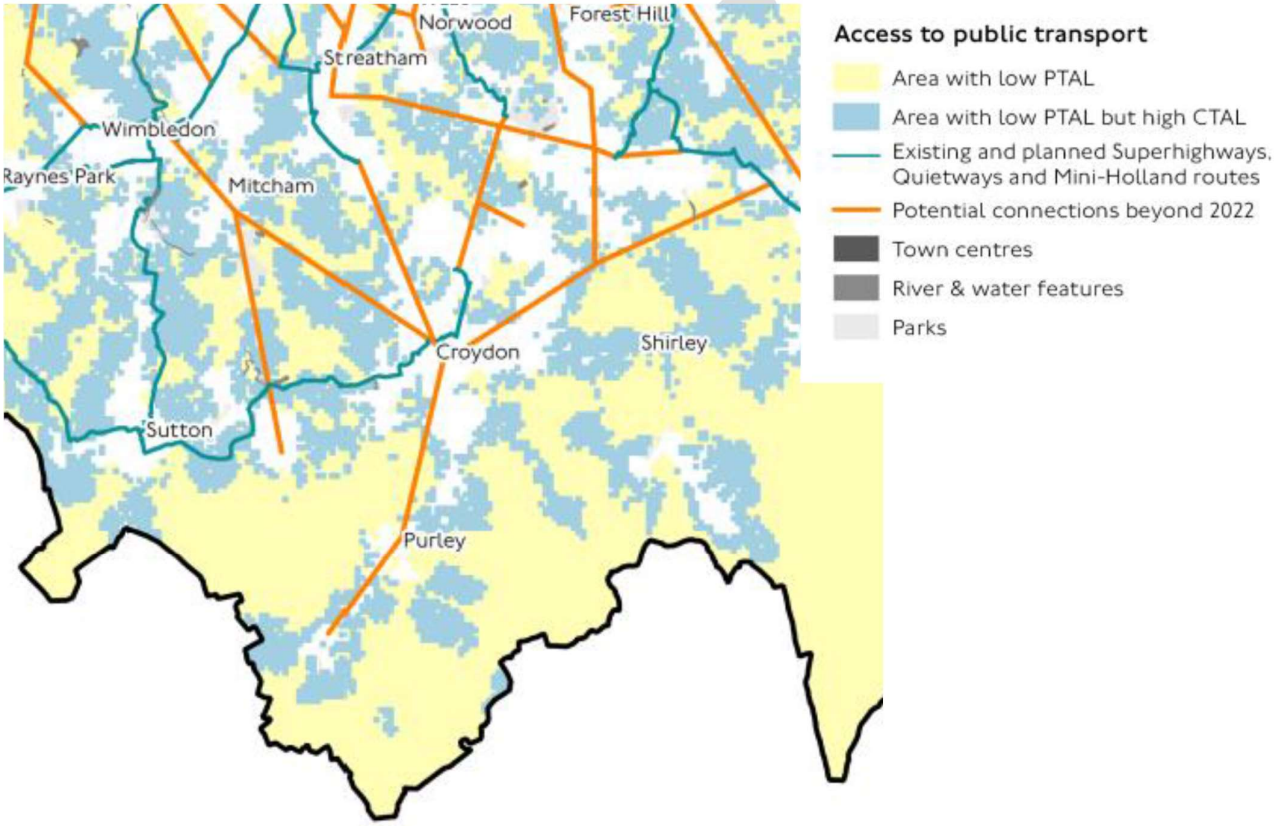


Figure X: Potential for a cycling network to improve access to public transport network.

Figure X shows areas with low PTAL values (2 or less) but high CTAL values (3 or more). This analysis enables the identification of areas where access to the public transport network is currently low, but could be much improved if cycling was facilitated.

There are numerous overlaps between areas of low PTAL and high CTAL, which demonstrates the important role that a cycling network could play in increasing access to public transport for the local communities it would serve and to accommodate intensification and growth in these areas.

Borough objectives:

13. Croydon will ensure all new development incorporates the ten Healthy Streets principles into their design, and ensure they are integrated with the local walking and cycling networks as well as public transport.

Short to medium term delivery objectives and proposals:

- Deliver Ensure construction works and development related traffic does not impact on businesses operating in the town centre.
- Ensure all new development incorporates the ten Healthy Streets principles into their design, reduce the dominance of vehicles and connect to local walking and cycling networks as well as public transport.
- Use the planning system to direct higher density development to the most accessible places in the borough and secure funding to upgrade the public realm and transport infrastructure.

Long term goals

- By 2041, residents in new developments will be more active and walk and cycle more than the borough average.

Outcome 9: Transport investment will unlock the delivery of new homes and jobs'

Key challenges

- New transport infrastructure to accommodate growth along main movement corridors in the borough
- Scale of development occurring in the Growth Zone taking place over a relatively short period of time
- 23,500 new jobs in Growth Zone in the next decade
- 30,000 new homes in the next decade

Brighton Mainline Upgrade

The map above only provides a partial picture. A DfT commissioned study which considered the London to South Coast rail corridor estimated in 2016 demand on the corridor would double between 2015 and 2060. Even……. Figure ? below shows how the BML will be overcrowded by 2043.

Figure ? “Do nothing” scenario without Housing development on the left and with Housing development on the right [morning peak period, 2043]; Red line: demand is in excess of capacity including standing spaces; Amber: demand is greater than seating capacity with standing required.

Key issues which need to be addressed are the capacity at East Croydon station and the constraints of the flat junctions immediately to the north of East Croydon. Many passengers stand in peak periods. There is no possibility of running additional trains with the current track capacity. ……..

The provision of transport infrastructure can encourage growth in jobs and homes in the most sustainable locations. However, congestion on the rail network and trams serving Croydon’s town centre means such growth is constrained. It also highlights the need for “metroisation” of the local rail lines in south London to provide the capacity to serve the increasing population. This will only be realised with the much needed investment in Brighton Main Line as discussed above.

Borough objectives:

14. Work with key partners to increase public transport capacity in the borough to support the creation of new homes and jobs planned over the next two decades, including the extension of the tram to Crystal Palace and the upgrade of Brighton Mainline.

Short to medium term delivery objectives and proposals:

- Increase the public transport capacity in the borough to support the creation of new homes and jobs.
- Lobby TfL and the Mayor to develop proposals for tram extensions to Crystal Palace and Purley.
- Work with Network Rail to upgrade East Croydon station and create 2 additional platforms to reduce overcrowding and accommodate growth.
- Work with Network Rail to successfully deliver the Brighton Mainline Upgrade works in the borough.
- Work with TfL and the Mayor to ensure a successful Fiveways Junction Scheme is delivered on time.
- Design and deliver 3 ‘Movement Corridors’ serving the Growth Zone; Brighton Road, Mitcham Road and London Road, that consider holistic improvements for buses, cycling and walking.
- Work with Network Rail and TfL to ensure the successful redevelopment of West Croydon station to increase capacity, reduce overcrowding and provide adequate step-free access and interchange.

Long term goals

- By 2041, the Brighton Mainline Upgrade will have been successfully completed and there will be new tram and rapid bus connections linking our local centres with central Croydon.

Other Mayoral Strategies[31]

[Guide 2-3 pages plus maps and tables]

Draft London Plan 2018

The Draft London Plan (minor amendments 2018) sets out new housing and growth targets for Croydon and requires the Borough to deliver 14,500 new homes and 10,500 new jobs in the Growth Zone between 2019 and 2041.[32]

The 10 year net target set in the Draft London Plan for Housing Completions for Croydon between 2019 and 2029 is 29,490 with an annualised average target of 2,949 per year.

Mayor's Environment Strategy

Health Inequalities

Housing

Economic Development

Culture

[31] Requirement R12: Other Mayoral strategies are also relevant to LIPs, and boroughs should have regard to these as they are published.

[32] https://www.london.gov.uk/what-we-do/planning/london-plan/new-london-plan/download-draft-london-plan-0 Table2.1

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Health Impact Assessment for LIP3 Policies

Strategy document	Health & Wellbeing Strategy: Priorities for action				Public Health Outcome Indicators Framework												
Priorities & actions	Giving children a good start in life	Preventing illness and injury and helping people recover		Preventing premature death & long term health conditions	Improving the wider determinants of health						Health improvement			Health protection	Healthcare public health and preventing premature mortality			
Health Objectives	Reduce overweight & obesity in children	Reduce overweight & obesity in adults	Prevent illness and injury & promote recovery in over 65s	Cardiovascular diseases, diabetes & cancer	Reduce sickness absence rate	Killed & serious injured casualties on roads	% of popn affected by noise	Utilisation of outdoor space for exercise /health	Social isolation	Employment for those with long term health conditions	Proportion of physically active and inactive adults	Injuries due to falls in people aged 65 and over	Self-reported well-being	Fraction of mortality attributable to particulate air pollution	Mortality rate from causes considered preventable	Under 75 mortality rate from all cardiovascular diseases (including heart disease and stroke)	Under 75 mortality rate from cancer	TOTAL SCORE – OUT OF 90
LIP3 Local Objectives:																		
1. reduce reliance on the car for local in-borough car journeys by creating streets and a transport network that prioritises walking, cycling and public transport.	5	5	4	5	4	5	5	4	4	3	5	4	4	5	4	4	4	**74**
2. create healthy streets and neighbourhoods that encourage walking and cycling, and where traffic volumes and speeds are lower	5	5	4	5	4	5	5	5	5	3	5	4	5	5	4	4	5	**78**
3. improve accessibility for pedestrians and cyclists through increased priority at key junctions and reduced severance caused by major roads, railway lines and parks	5	5	3	4	3	5	4	5	5	3	5	4	5	5	4	4	4	**73**
4. implement and deliver the network of cycle routes outlined in the Croydon Cycle Strategy	5	5	4	5	5	5	5	5	5	5	5	4	5	5	4	5	5	**82**
5. support and deliver the principles of the Vision Zero Action Plan and work towards ensuring we have the safest roads in London with no killed or serious injuries on our roads by 2041.	4	4	3	4	3	5	2	3	3	2	4	3	3	4	5	2	2	**56**
6. reduce the volume of traffic on our roads and associated congestion through better management of our roads and kerbside space, and by offering pleasant, practical and safe alternatives to private cars and vans.	3	3	3	4	2	5	5	4	3	2	5	3	3	5	3	3	3	**59**
7. tackle road based air pollution by reducing traffic volumes, supporting the shift to zero emission vehicles and introducing new green infrastructure.	3	3	2	4	4	4	5	5	4	3	3	3	3	5	3	4	4	**62**
8. Work with the Mayor, TfL, Network Rail, bus operators and TOCs to improve public transport links, reduce overcrowding on the public transport network and ensure Croydon is the best connected Metropolitan Town Centre in Outer London	2	2	2	2	2	4	3	3	3	4	3	2	2	4	2	2	2	**44**
9. Work with the Mayor, TfL, Network Rail, bus operators and TOCs to ensure the entire public transport network is accessible, safe and step free.	3	3	4	3	3	3	3	3	4	4	4	4	3	4	2	2	2	**54**
10. Work with TfL to introduce additional bus priority measures on key road corridors to improve efficiency and reliability of bus services	2	2	3	3	2	3	2	2	3	3	3	2	2	3	2	2	2	**41**
11. Lobby the TOCs and the DfT to improve performance of train services and reduce gaps in service frequencies.	2	2	2	2	2	3	3	3	3	3	2	2	2	3	2	2	2	**40**
12. Ensure all new development incorporates the ten Healthy Streets principles into their design, and ensure they are integrated with the local walking and cycling networks as well as public transport.	4	4	2	3	2	4	3	3	2	2	4	3	3	4	3	3	3	**52**
13. Work with key partners to increase public transport capacity in the borough to support the creation of new homes and jobs planned over the next two decades, including the extension of the tram to Crystal Palace and Brighton Mainline Upgrade.	2	2	2	2	2	3	3	2	2	2	2	2	2	3	2	2	2	**37**

Health Impact Assessment for LIP3 Proposals

Strategy document	**Health & Wellbeing Strategy: Priorities for action**				**Public Health Outcome Indicators Framework**													
Priorities & actions	**Giving children a good start in life**	**Preventing illness and injury and helping people recover**		**Preventing premature death & long term health conditions**	**Improving the wider determinants of health**						**Health improvement**			**Health protection**	**Healthcare public health and preventing premature mortality**			
Health Objectives	Reduce overweight & obesity in children	Reduce overweight & obesity in adults	Prevent illness and injury & promote recovery in over 65s	Cardiovascular diseases, diabetes & cancer	Reduce sickness absence rate	Killed & serious injured casualties on roads	% of popn affected by noise	Utilisation of outdoor space for exercise /health	Social isolation	Employment for those with long term health conditions	Proportion of physically active and inactive adults	Injuries due to falls in people aged 65 and over	Self-reported well-being	Fraction of mortality attributable to particulate air pollution	Mortality rate from causes considered preventable	Under 75 mortality rate from all cardiovascular diseases (including heart disease and stroke)	Under 75 mortality rate from cancer	**TOTAL SCORE – OUT OF 90**
LIP3 Local proposals																		
Healthy School Neighbourhoods	5	5	4	5	3	5	3	3	3	3	5	4	4	5	5	5	5	**72**
Dockless & e-bike hire schemes	3	5	5	5	3	2	2	4	4	4	4	2	2	4	4	4	4	**61**
Vision Zero - 20 mph on main roads	5	5	3	4	3	5	4	2	4	2	4	2	2	4	4	3	3	**59**
Car clubs	2	2	2	2	1	2	3	1	2	1	2	1	1	4	2	2	2	**32**
Cycling strategy delivery	5	5	3	4	4	5	4	5	3	3	5	4	4	5	4	4	4	**71**
Liveable Neighbourhoods	5	5	4	5	4	5	5	4	4	3	5	4	5	5	4	5	4	**76**
Bus accessibility	2	2	2	2	2	3	3	2	3	4	2	2	2	3	2	2	2	**40**
Electric vehicle charging points	1	1	1	3	1	1	5	1	1	1	1	1	1	5	1	3	2	**30**
Pedestrian improvements	5	5	4	5	4	5	4	5	5	3	5	5	5	3	4	5	4	**76**
Traffic reduction strategy	5	4	3	5	2	5	5	3	3	1	4	2	3	5	3	4	3	**60**
Freight & logistics	2	2	2	4	2	5	4	2	2	2	3	2	2	5	3	3	3	**48**

Stage 1: Initial Equality Analysis

The council has an important role in creating a fair society through the services we provide, the people we employ and the money we spend. Equality is integral to everything the council does. We are committed to making Croydon a stronger, fairer borough where no community or individual is held back.

The Initial Equality Analysis helps to determine if the proposed change will have no impact, a positive or negative impact on groups that share a protected characteristic and ascertain if you will need to undertake a full equality analysis.

An Equality analysis enables us to target our services, and our budgets, more effectively as well as understand how they affect all our communities. It also helps us comply with the Equalities Act 2010.

Please note that an equality analysis must be completed as early as possible during the planning stages to ensure information gained from the process in incorporated in any decisions made. If you are not at the beginning stage of your decision making process, you must inform your Director and the Equalities Manager that you have not yet completed an equality analysis.

In practice, the term **'proposed change'** broadly covers the following:

- Policies, strategies and plans;
- Projects and programmes;
- Commissioning (including re-commissioning and de-commissioning);
- Service Review;
- Budgets;
- Staff restructures (including outsourcing);
- Business transformation programmes;
- Organisational change programmes;
- Processes (for example thresholds, eligibility, entitlements, and access criteria.

Directorate:	Place, Planning & Strategic Transport
Title of project or proposed change:	Third Local Implementation Plan (LIP3)
Officer responsible for assessment:	Ben Kennedy
Date assessment completed:	01 September 2019

1.1 Information about the proposed change

1.1.1	**Brief outline of proposed change** *(see above for examples of proposed changes)* *Please provide a brief outline of the proposed change, why it is being considered. Please also state if it is an existing, new/proposed or revised change*
	The LIP3 document includes a three year programme of investment for the borough in which we must set out the schemes that we intend to deliver in order to meet the Mayor of London's transport outcomes. The MTS seeks to deliver the integration of land use and transport, and the provision of a robust and resilient public transport network, with an ambitious aim to reduce Londoners' dependency on cars in favour of increased walking, cycling and public transport use. It sets out three priority themes for delivery: • Healthy Streets and healthy people • A good public transport experience • New homes and jobs The key overarching framework for the new MTS is the 'Healthy Streets Approach'. This policy puts people and their health at the centre of our decision making, helping everyone to use cars less and to walk, cycle and use public transport more. Borough councils are required to set out their proposals for implementing the MTS in their area. This is through the Local Implementation Plan (LIP). It is a legal requirement under the GLA Act 1999 section 145 for boroughs to prepare a LIP "as soon as reasonably practicable" after the Mayor has published his transport strategy. Borough councils are required to include a Delivery Plan in their LIP3 that outlines the projects and programme areas that will contribute to the delivery of the Mayor's Transport Strategy. Croydon's draft LIP3 is proposing to retain many of the previous LIP2 work areas whilst reflecting the new MTS outcomes and policy frameworks specifically the *Healthy Streets* principles, *Vision Zero* ambition and a borough traffic reduction strategy. The following programme areas and projects being proposed in Croydon's draft LIP3 are detailed below:

	• *Healthy Schools Neighbourhoods* – this will be a holistic approach to tackling the school run and encouraging walking and cycling to and from school whilst also helping all in the neighbourhood make local journeys on foot and by bike. **(New)** • *Dockless and electric bike share schemes* – this will involve the successful introduction of a dockless and hub based bike share scheme that will include electric bikes (e-bikes). **(New)** • *Cycling Strategy* – the proposals and infrastructure schemes previously agreed through the Croydon Cycling Strategy will continue to be progressed and funded as part of the LIP3 alongside Growth Zone funding. **(Existing)** • *Walking and Pedestrian Improvements* – this programme area will include continued provision of safe and secure pedestrians crossing facilities, with dedicated pedestrian phases and pedestrian countdown where appropriate. **(Existing)** • *Buses* – TfL provides funding for bus improvements through the Strategic Bus priority programme however this only applies to main bus corridors. This funding programme will examine what can be done to improve bus services in the south of the borough, with specific focus upon improving accessibility to support the suburban intensification areas. As well as traditional bus services the work will also consider new concepts such as on demand minibuses and autonomous vehicles. **(New & existing)** • *Behaviour change* – this work stream includes a variety of activities such as cycle training, led rides, cycling events, promotional events, education and behaviour change projects to encourage more walking and cycling. **(Existing)** • *School Travel Plans* – This is a continuation of the school travel planning programme for schools that are outside of the Healthy Schools Neighbourhoods areas. **(Existing)** • *Vision Zero* – this will be an evidence led approach to road danger reduction and safer streets in accordance with the Vision Zero Action Plan. The Mayor's aim is for no one to be killed in or by a London bus by 2030, and for all deaths and serious injuries from road collisions to be eliminated from London's streets by 2041. It will focus upon improving safety in our district centres with the highest collision rates which have been identified as South Norwood, Crystal Palace and Thornton Heath. These schemes will include the introduction of 20mph limits on the main roads in these centres including speed management and safety measures such as junction treatments and pedestrian crossing improvements. **(New)** • *Car Clubs* – this programme area will continue the expansion of Car Clubs in the borough including electric vehicle charging provision and the introduction of flexible Car Clubs in the north of the borough. This will reduce the need for individual car ownership by increasing access to shared car club vehicles. **(Existing)** • *Electric Mobility* – this will support the Council's ambition to install 400 electric vehicle charging points across the borough by 2022 and enable the shift to zero tailpipe emission vehicles resulting in improved air quality. **(Existing)** • *Traffic reduction strategies* – this programme area will investigate and deliver new strategies for reducing traffic volumes and congestion in the borough as required by the MTS. It will include reviews of parking management in the borough, with a

	focus upon reducing the number of staff driving for work through the implementation of a Council Staff Travel Management Plan. The work stream will also consider the demand management tools recommended in the MTS and understand whether they are appropriate mechanisms for both reducing traffic congestion and funding new transport infrastructure such as tram extensions. **(New)** • *Construction Logistics & Freight Management* – this work will consider options for better managing construction traffic through the establishment of a Construction Consolidation Centre. It will also continue the work to monitor and enforce construction and logistics plans for development sites. It further piece of work will involve assessing the feasibility of micro-consolidation, micro-distribution centres and cargo bike delivery schemes in the borough in order to reduce freight movements and deliveries. **(New)**

1.2 Who could be affected by the change and how?

Scoring your adverse impact

You will need to score impact on service users, community groups and/or staff and record this in your Action Plan.

Deciding whether the impact could be positive or negative

You must gather evidence to help you decide how each of the protected groups could be affected. This evidence must be of two types:
• about people (quantitative) – for example, statistics, borough and ward profiles on the Croydon Observatory (http://www.croydonobservatory.org/), national research
• from people (qualitative) – for example, consultation results, complaints, surveys, information from relevant voluntary or community organisations

You will find it useful to discuss sources of information with the equalities manager. They may be able point you towards relevant information from another equality analysis or concerns about equality matters from inspections or audits.

However, you can make reasonable assumptions where impact is likely to be minimal. For example, changes to the school admissions policy are likely to have minimal impact on older people. Negative impacts can often be identified by the concerns that stakeholders raise about whether a change will work or not.

Ranking the potential impact

You have to act to eliminate any potential negative impact that, if it was to be realised, would breach the law (perhaps by abandoning your proposed change). However, you may not be able to take action to minimise all your potential negative impacts or maximise all your potential positive ones. You must be realistic and proportionate about how many actions you can resource.

When you act to reduce the negative impact or maximise the positive impact, you must be sure that this does not create a negative impact on another group. If this is unavoidable, it can only be justified if it is done to eliminate discrimination.

1.2.1 PROBABILITY - What is the likelihood of the service, policy or function having an impact on service users, community groups and/or staff?

Use table below to assign the proposed change a category code for each protected group.

Please refer to Equality Analysis Impact Matrix at the end of this document.

	IMPACT ON PROTECTED GROUP(S)								
Category Code	**Race**	**Age**	**Gender**	**Disability**	**Religion or Belief**	**Sexual Orientation**	**Gender Reassignment**	**Pregnancy Or Maternity**	**Marriage or Civil Partnership**
1 Rare									
2 Unlikely									
3 Possible									
4 Likely									
5 Almost Certain									

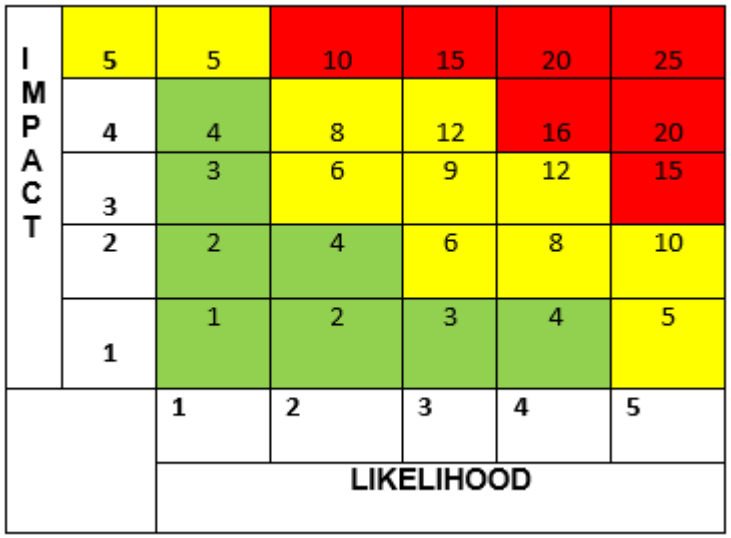
1.2.2. SEVERITY OF IMPACT - Identify the highest possible impact on the service, policy or function.

Use this table as a general guide

Probability	Potential Impact on Protected Group(s)	The Potential for Complaint/ Litigation	Potential Impact on Organisation
1	No impact or adverse outcome	Unlikely to cause complaint/litigation	No risk at all to organisation
2	Short term impact	• Complaint possible • Litigation	Minimal risk to organisation
3	Semi-Permanent Impact	• Litigation possible not certain • High potential for complaint	• Need careful PR • Reportable to EHRC • External Investigation
4	Permanent Impact	• Litigation certain expected to be settled for <£1M	• Service closure • Threat to Divisional/Directorate objectives/priorities • Local Publicity
5	Permanent and Severe Impact	Litigation certain expected to be settled for >£1M	• National adverse publicity • Threat to Trust objectives/priorities

1.2.3 Equality Impact Score

Use the table in 1.2.2 and matrix below to calculate the equality impact score by using the formula: **Impact x Likelihood = Equality Impact Score**



IMPACT						
	5	5	10	15	20	25
	4	4	8	12	16	20
	3	3	6	9	12	15
	2	2	4	6	8	10
	1	1	2	3	4	5
		1	2	3	4	5
		LIKELIHOOD				

Risk index	Risk Magnitude
20-25	Maximum
15-19	High risk
10-14	Medium Risk
5-9	Low Risk
1-4	Minimum Risk

Example

If we are going to reduce parking provision in a particular location, officers will need to assess the equality impact as follows;

1. Determine the severity of the impact. You can do this by using the table in 1.2.2 as a guide, for the purpose of this example as 3 Semi-Permanent Impact
2. Estimate the Likelihood of this impact. You can use the category codes in the table in 1.2.1 to, for the purpose of this example as 5 Almost Certain
3. Calculate the equality impact score using the formula above and record it in the space provided below, for the purpose of this example - **Impact** (3) x **Likelihood** (5**) = 15 Red**

Calculate and enter the Equality Impact Score in the space provided - Please refer to Equality Analysis Impact Matrix

A full Equality Analysis will be required if the proposed change has been graded as scoring 10 or above (orange or red in the above table) as this will help you detail how you are going to address any negative impact.

1.2.4	**Please state if the proposed change will adversely impact the Council's ability to meet one or more of the Public Sector Duties set out in the Equality Act 2010 below:** *Please tick the relevant box(es) and provide a brief explanation* Advancing equality of opportunity between people who belong to protected groups **NO** Eliminating unlawful discrimination, harassment and victimisation **NO** Fostering good relations between people who belong to protected characteristic groups **NO**

1.3 Decision on the Initial Equality Analysis

Officer responsible for assessment	Name: Ben Kennedy Position: Strategic Transport Manager Date: 01/09/2018 Should a full equality analysis be carried out? **No** The equality impact risk assessment matrix found at the end of this document assessed the impact of the individual proposals upon all of the protected groups and found that the impact would not be major in any circumstances and where it was minor or moderate then the impacts can be mitigated for as detailed in the table at the end of this document.
Departmental Strategy Lead	Name: Yvonne Okiyo Position: Strategy Manager Date: 24/09/2018 Should a full equality analysis be carried out? N *(Please delete as appropriate).* Please state why and outline the information that you used to make this decision. The equality analysis has not identified any significant any negative impact on protected groups compared to non-protected groups. The equality impact score was graded as low risk. We will need to ensure any mitigating actions to address potential negative impacts are delivered.
Director	Name: Heather Cheesbrough Position: Director of Planning & Strategic Transport Date 04/10/18

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LIP3 Equality Analysis Impact Risk Matrix

	IMPACT ON PROTECTED GROUP(S)										
Work area	**Race**	**Age**	**Gender**	**Disability**	**Religion or Belief**	**Sexual Orientation**	**Gender Reassign ment**	**Pregnancy Or Maternity**	**Marriage or Civil Partnership**	**Description of impact**	**Possible mitigation**
Healthy School Neighbourhoods	3	3	3	8	3	3	3	6	3	Proposals to reduce through traffic & parking congestion in vicinity of schools may result in access difficulties for disabled motorists	Exemptions for blue badge holders in pedestrian zones
Dockless & e-bike hire schemes	3	9	3	9	3	3	3	3	3	There have been issues of dockless bikes obstructing pavements and there are some safety concerns e-bikes particularly for blind and partially sighted persons.	Ensure a robust enforcement and management agreement is in place with any operators prior to commencement
Vision Zero - 20 mph on main roads	3	3	3	3	3	3	3	3	3	Unlikely to be negative impact from 20mph speed limits unless it is associated with traffic calming measures. Some vertical deflection measures can cause discomfort for older persons, those with back problems	Ensure any physical traffic calming measures are built in accordance with national standards and gradients are not excessive.
Car clubs incl. Flexible scheme	2	2	2	2	2	2	2	2	2	Unlikely to be negative impact from introduction of car clubs unless there is an impact on disabled parking spaces	Ensure car club operators and users are aware that vehicles cannot be parked within disabled parking bays
Cycling strategy delivery	3	3	3	9	3	3	3	3	3	The installation of kerb segregated cycle lanes particularly in proximity to bus stops can have implications for wheelchair users and blind/partially sighted persons. Likewise cycle/pedestrian shared spaces can also have implications for blind/partially sighted persons.	Any proposed schemes would be designed in accordance with the London Cycle Design Standards and there would be separate engagement and consultation with mobility groups prior to design & implementation.
Liveable Neighbourhood bid	1	1	1	4	1	1	1	1	1	The only possible negative impact might be the loss of subways under the Ring Road and replacement with surface level crossings. Blind/partially sighted persons may prefer subways because they are easier to navigate due to being away from vehicular traffic.	Any proposed surface level signalised crossing would be designed in accordance with required accessibility standards and there would be separate engagement and consultation with mobility groups prior to design & implementation.
Suburban bus accessibility	1	1	1	1	1	1	1	1	1	This proposal is likely to have only beneficial impacts for all groups and would complement both local bus services and more demand responsive services such as dial-a-ride.	Prior engagement and consultation with local residents and stakeholders prior to commencement of any service.
Electric vehicle charging points	2	2	2	9	2	2	2	2	2	The installation of EVCPs in footways with wires extending from vehicles to points or lamp columns could negatively impact on wheelchair users and blind/partially sighted persons by narrowing pavements and creating trip hazards.	Wherever possible EVCPs will not be placed in the footway and if it is necessary to do so then they will be placed at the kerbside in a position that does not interrupt the pedestrian desire line or obstruct the footway.
Pedestrian improvements	1	1	1	4	1	1	1	1	1	This programme area will have a beneficial impact through interventions to improve the accessibility of the footway through dropped kerbs and the installation of equipment on signals to assist people with sensory impairment.	None necessary.
Traffic reduction strategy	2	2	2	4	2	2	2	2	2	This programme detail is still to be determined however it will likely focus upon parking management and traffic management restrictions so there is potential impact on access for disabled drivers	Prior engagement and consultation with local community, stakeholders and mobility forum prior to development of any new strategy.
Freight & logistics	1	1	1	1	1	1	1	1	1	The proposal will only have a beneficial impact by reducing the number and volume of HGVs and deliveries on Croydon's streets.	None necessary

Risk matrix – Likelihood of impact vs severity of impact	Negligible (1)	Minor (2)	Moderate (3)	Major (4)	Extreme (5)
Almost certain (5)	5	10	15	20	25

Likely (4)	4	8	12	16	20
Possible (3)	3	6	9	12	15
Unlikely (2)	2	4	6	8	10
Rare/remote (1)	1	2	3	4	5

Liveable Neighbourhood Bid – Expression of Interest

Organisation name	London Borough of Croydon
Project Manager	tbc
Person completing the bid	Ben Kennedy
Project Title	Croydon Growth Zone – Western Accessibility Improvements (Opening Up Old Town)
Financial years	2019-2022
Any other LN bids being submitted?	No
Has the project been submitted to TfL as a bid before?	No
Strategic location	On the western periphery of the Croydon Growth Zone (Opportunity Area) – refer to map X – A236 Roman Way & Old Town
Objectives	The objectives to be achieved by this proposed scheme are to: • Reconnect residential neighbourhoods with the Old Town area of the Growth Zone, resolving the impact of the severance caused by the Croydon Ring Road. Constructed 50 years ago, the ring road is an urban motorway that encircles the west & south of the town centre. • Create attractive new gateways to the west and south of Croydon town centre, to help improve accessibility and permeability for pedestrians and cyclists. Improving mode choice will encourage active travel, making it easier and more comfortable to walk and cycle into the centre of Croydon, helping to discourage car use. • Reduce the traffic dominance in the area by reducing carriageway widths, realigning junctions, reallocating road space to sustainable modes, and by investigating options for further traffic restrictions in the Old Town area. • Stop traffic from the Ring Road cutting through residential areas to the west of the A236 by introducing filtered permeability. • Improve safety and reduce perceptions of road danger by lowering vehicle speeds, and by creating safe and pleasant crossings for pedestrians and dedicated cycle lanes for cyclists. • Improve personal security and reduce anti-social behaviour by removing and infilling pedestrian subways and replacing them with high quality surface level crossings, and improving lighting and CCTV coverage of underpasses connecting Old Town with areas to the west and south. • Visually soften the 1960s brutalist style concrete flyovers and road structures through the installation of public art work, innovative lighting strategies and green infrastructure. • Improve the attractiveness and perception of the Old Town area, and create new public spaces and artwork thereby encouraging more people to visit and spend time. • Increase the shift to electric and zero emission vehicles by creating an electric vehicle charging hub in Factory Lane and Jubilee Bridge car parks, with particular emphasis on use by delivery and freight vehicles (Royal Mail currently use it as a base). • Enable and support the adoption of sustainable freight and logistics in the town centre area, through the development of a micro-distribution centre

	and cargo bike delivery hub in former car parking spaces, under Factory Lane and Jubilee Bridge car parks. • Introduce green infrastructure, tree planting and SUDS to improve air quality, reduce both the visual and noise impacts of traffic, mitigate against climate change and flooding. • Improve pedestrian and cycle access to East Croydon and West Croydon stations from the west, and enable easier interchange with local buses and trams. • Make it healthier and safer to walk and cycle to schools in the area and support parents to shift away from driving their children to school, including the option of introducing a Pedestrian Zone during school opening and closing hours. • Improve leisure walking and cycling connections to and from the Growth Zone, by improving access to Wandle Park and the Wandle Trail over the tram tracks at Waddon New Road. • Work with the Public Health team to support the delivery of a School Super Zone in the Broad Green area (in the section 1 of the Liveable Neighbourhood) focused around the Harris Invictus Academy on London Road.
Strategic alignment to the Mayor's Transport Strategy	

Healthy streets and healthy people: • *London's streets will be healthy and more Londoners will travel actively.* • *London's streets will be safe and secure.* • *London's streets will be used more efficiently and have less traffic on them.* • *London's streets will be clean and green.*	• The project has the potential to result in significant mode shift from private cars to walking & cycling trips to the Growth Zone. • It will reduce traffic volumes through the introduction of filtered permeability and the low trafficked neighbourhoods. • It will result in reduced accidents and road casualties through slower speeds, safer roads, new pedestrian crossings and segregated cycle routes. • It will help to reduce the number of deliveries made by motorised vehicles through freight consolidation, and mode shift to cargo bikes, contributing to reduced congestion and improved air quality. • The provision of new green infrastructure and screening will help reduce particulates by trapping them and therefore reduce resuspension. Green improvements will also help mitigate the impacts of climate change by providing shade.
A good public transport experience: • *The public transport network will meet the needs of a growing London.* • *Public transport will be safe, affordable and accessible to all.* • *Journeys by public transport will be pleasant, fast and reliable.*	• By reducing vehicular traffic volumes and movement through Old Town, the project will improve bus and tram journey times and reliability. • The proposals will improve pedestrian and cycle access to major transport interchanges such as East Croydon & West Croydon stations, as well as improving accessibility to local buses and the tram network. • Bus stop accessibility improvements at Drummond Road are included.
New homes and jobs: • *Active, efficient and sustainable travel will be the best options in new developments.* • *Transport investment will unlock the delivery of new homes and jobs.*	• Before 2031 10,000 new homes and 25,000 new jobs are to be created in the Growth Zone, with a further 20,000 new homes being built in the rest of the borough. • The project outlined in this bid will help to mitigate the impacts of this development, minimising additional

		traffic congestion or public transport overcrowding by enabling higher rates of walking and cycling.
	Overall aim and traffic reduction target (80% sustainable mode share):	• In the 2017 TfL report 'Analysis of Cycling Potential' Croydon was identified as the borough with the highest number of daily potentially cyclable trips with 400,000 potential daily trips, however only 6,000 cycle trips are currently being made, the equivalent of 1%. • Similarly in the TfL Walking Plan 62% of London's potential walkable trips have been identified as being in outer London. As one of outer London's largest metropolitan town centres, Croydon has huge potential for additional walking and cycling trips if the street environment is improved to reduce the dominance of motor vehicles. • East Croydon rail station has 22 million entry and exits each year making it the 19th busiest rail station in the UK and attracting a huge number of trips. Rail demand is therefore expected to increase.
Detailed description of project proposals & measures to be included	Croydon Metropolitan Town Centre (Croydon Growth Zone) has been classified as one of London's key growth area. Much of the development and change is taking place on the eastern side of the town centre in proximity to East Croydon station, and as such much of the focus of Growth Zone funding will be on the eastern side of the town centre. The western side of the Growth Zone is constrained by two urban motorways that were built in the 1960s as a ring road around Croydon town centre. The ring road is formed of Roman Way and Old Town to the immediate west, and the Croydon Flyover to the south west of the town centre. These roads are up to 6 carriageway lanes wide in places. When they were built they severed the local residential communities from the town centre, particularly the 'Old Town' area, making it inhospitable and difficult to walk or cycle into the town. Current pedestrian crossing facilities are very poor or completely lacking in places, the only alternative being intimidating subways which witnessed a particularly horrific personal attack in 2017. The general environment for walking and cycling is extremely unpleasant, with noise and air quality issues alongside fast moving traffic. The latest traffic data for Roman Way/Old Town shows average daily flows of 43,000 vehicles with about 2% HGVs. The environment for cyclists is very unenticing with very low cycle flows [less than 0.5% of total vehicle flow] undoubtedly linked to the intimidating nature of the road. Road collision casualties are an issue on the ring road with clusters on Roman Way in the vicinity of the Minster, as well as on the approach to the junction with Factory Lane and on Mitcham Road. It is currently easier to drive between the local residential areas to the west and south west than it is to walk, cycle or catch the bus into the town centre, despite being less than 1 kilometre in distance. The ring road flyovers and underpasses not only act as a physical barrier to pedestrian movement, but they are also a psychological barrier resulting from the noise generated by the fast moving traffic, the fear of crossing the road, the dark and intimidating subways, and the harsh concrete structures.	

	The aim of this project is to break down the physical and psychological barriers, and reduce the severance caused by the construction of this legacy 1960s road infrastructure. The introduction of new green infrastructure, innovative lighting and public art will help counter the grey concrete, traffic noise and air pollution, and transform the perception of the underpasses turning them into features which add value in the street scene. The existing pedestrian subways which hare also prone to littering, anti-social behaviour (including graffiti), are also at risk of surface water flooding. These will be infilled and new surface level crossings and landscaping will be introduced. The scheme will seek to reconnect the areas to the west and east of Roman Way, with the Old Town area by reducing severance through the creation of new crossings and gateway treatments. The plans involve reducing the traffic dominance of the ring road, by reducing carriageway widths and reallocating road space to pedestrians and cyclists. The overarching aim is to change the Roman Way/Old Town section of the ring road, from the feel of an urban motorway to a more welcoming street for all road users. The project includes a number of the schemes outlined in the Old Town Masterplan, including the plans to enhance the urban realm, particularly around the historic Croydon Minster, and to create a new public space at Reeves Corner. There are particular measures to encourage cycling, including a new cycle route along the western side of Roman Way into the Old Town and Croydon town centre. This will complement the Sustrans led Connect 2 project completed in 2012, and a Quietway route which runs between Thornton Heath and Sutton Town Centre, helping to develop the local route network. These improvements will complement the wider cycle route network plans, including improvements for Lower Coombe Street and Roman Way roundabout at the southern end of Roman Way. We will work with the local community particularly on the western side of Roman Way, to encourage usage of the planned cycle routes. We are also engaging with the Old Palace School, to develop their travel plan and investigate options for reducing school run traffic, potentially through the introduction of a pedestrian zone or school street. In the Broad Green area of the Liveable Neighbourhood proposal we are working with our colleagues in Public Health to develop proposals for Superzone around the Harris Invictus Academy to improve health opportunities for children attending the secondary school. Extensive engagement work with the local community was undertaken in developing the Old Town masterplan in 2012/13. No major concerns were identified through the consultation process, and there was general support for the Council's plans. Further consultation and engagement work is underway and will be developed further in advance of the November bid submission. The details of the Old Masterplan can be found on the Council's website: https://www.croydon.gov.uk/planningandregeneration/framework/localplan/masterplans/masterplan-improvements/oldtown-mplan <u>Potential measures:</u> Section 1 – Mitcham Road / Factory Lane / Albion Street 1. New pedestrian crossing provision along Mitcham Road between Derby Road and Sumner Road.

2. Options for filtered permeability and other low trafficked neighbourhood measures in the Albion Street, Gardeners Road and the wider residential area between Mitcham Road and London Road, that is subject to high levels of extraneous through traffic at peak times.
3. Realignment of the junction of Roman Way between Factory Lane and Derby Road, to improve pedestrian, cycle, traffic and potentially bus movement between Factory Road and Derby Road, improving access from Factory Lane Estate to West Croydon station and the Growth Zone.
4. Reducing carriageway lanes and speed limits on Roman Way to reduce road danger and improve the collision history at this site.
5. Introduction of green infrastructure adjacent to Roman Way and tree planting in central reservation.
6. Innovative lighting strategy for the underside of Roman Way at Factory Lane car park including pedestrian underpass.
7. Development of micro-distribution hub and electric vehicle charging hub in Factory Lane car park area.

Section 2 – Roman Way / Reeves Corner / Minster Gateway

8. Upgrade the footbridge over the tram tracks into Wandle Park with street lighting, new surfacing and cycle and buggy channels, to improve pedestrian and cycle access into the park from the Growth Zone.
9. Work with Old Palace School on their travel plan, and investigate options for reducing the impact of vehicles dropping off and picking up outside the school at opening and closing times. Options to include a Pedestrian Zone or School Street.
10. Enhancements to the public realm on Drummond Road including soft landscaping, improving the waiting facilities at the bus stop, Legible London signage and lighting upgrade. Improvements to the car park to allow bus stop enhancement and better cycle facilities.
11. Creation of a new super crossing across Roman Way between St Johns Road and Rectory Grove, and gateway to the Old Town at Minister Green where the subway will be filled in and the supporting wall removed (funded through Growth Zone scheme).
12. New public realm and green space created in and around the Croydon Minster (developed as part of the Old Town Masterplan and being funded by Growth Zone).
13. Realignment of road layout at Reeves Corner, enabling the creation of a new public space including landscaping and SUDs.
14. Artwork installations and innovative lighting strategy for the underpass and area under Roman Way, adjacent to Cairo New Road and Jubilee Bridge car park.
15. Investigation of the development of micro-distribution centre and cargo bike delivery hub in Jubilee Bridge car park.
16. Green wall and landscaping including new trees and SUDs adjacent to Roman Way flyover.
17. Permeability measures on the one way streets in Old Town masterplan area affecting Scarbrook Road, Charles Street, Old Palace Road [including traffic calming], Church Street, Church Road, Keeley Road and Tamworth Place.
18. Traffic speed reduction measures on Roman Way in the vicinity of Croydon Minster, and associated landscaping including provision of a green median strip, subject to traffic modelling. Reduction of the speed limit on this section from 40mph to 30mph.

Section 3 – Old Town Roundabout / Croydon Flyover

19. Provision of a dedicated segregated cycle route between Croydon Minster and the Roman Way/Lower Coombe Street roundabout.
20. Enhanced pedestrian crossing provision on Old Town (ring road) between Howley Road and the Old Town roundabout.

	21. Removal of the subways at Old Town Roundabout and replacement with surface level crossings (to be funded and delivered primarily through Growth zone funding). 22. Innovative lighting strategy for the underside of the Croydon Flyover at Old Town Roundabout, Wandle Road and the High Street. 23. Green walls and landscaping on Church Road, Scarbrook Road and Sheldon Street to help screen the impacts of noise and pollution from the Croydon Flyover. Behaviour change measures: 1. Support the development of a travel plan for Old Palace School. 2. Undertake personalised travel planning with the local community in the Old Town area. 3. Support cycle training for adults and children. 4. Provision of car club bays on Drummond Road and Scarbrook Road. 5. Electric vehicle charging points on Drummond Road, Frith Road and Jubilee Bridge car park. 6. Led walks and cycle rides.

OUR FUTURE

Liveable Neighbourhood Proposal

Croydon Growth Zone - Western Accessibility Improvements
Removing Ring Road Severance & Opening Up Old Town

Section 1 – Mitcham Road / Broad Green
Section 2 – Roman Way / Minster Gateway / Reeves Corner
Section 3 – Old Town Rdbt & Croydon Flyover

September 2018

Croydon Growth Zone – Western Accessibility Improvements

Growth Zone area

Super Zone school

1

Mitcham Road / Broad Green

- New pedestrian crossing provision
- Stopping extraneous through traffic in residential neighbourhoods
- Super Zone proposals

2

Roman Way / Reeves Cnr / Minster Gateway

- Establishing a micro-distribution & cargo bike delivery hub in Jubilee car park
- Access improvements to Wandle Park over the tram track
- New super cycle/ped crossing and gateway created at Minster Green
- New public realm & traffic management scheme at Reeves Corner

3

Old Town Roundabout / Croydon Flyover

- Improving personal security & safety
- New pedestrian & cycle crossing facilities
- Greening the Grey
- Lighting strategy for underneath the Flyover