



Public realm

CHAPTER CONTENTS

- Existing public realm
- Six principles for the public realm
- Public realm strategy and its character
- Funded and unfunded public realm
- Play space requirements

CHAPTER OBJECTIVES

- Plan for a joined up public realm network across the whole of the COA.
- Plan for improvements to the quality of existing streets and spaces as per the public realm network.
- Secure new streets and public spaces as per the public realm network.
- Plan for the provision of quality play and informal recreation space across the Opportunity Area.
- Utilise new development to help deliver this public realm network.
- Utilise public funding to help deliver this public realm network.

EXISTING PUBLIC REALM

5.1 The quality of public realm influences a person's perception of an area and determines how much time people want to spend in a place.

5.2 Parts of the COA's public realm is of poor quality. This is evident in the number of barriers to existing pedestrian and cycle movement, people's generally poor perception of the area, and the fact that 22% of streets in the COA have dead building frontage (Space Syntax 2009).

5.3 Poor quality public realm is most evident around New Town and East Croydon, the Retail Core and parts of Mid Croydon and Fairfield. The public realm in these areas is characterised by poor wayfinding, poorly defined street patterns, poor permeability, varied and confusing materials, with excessive levels of car parking and servicing space.

5.4 By contrast, the Northern and Southern area do have a better quality public realm. These areas underwent less large scale redevelopment and the streets in these areas are better defined, and safer with better quality streets and public spaces.

5.5 A cornerstone of the OAPF is the preparation, and more importantly the delivery, of an improved public realm across the whole of the COA. The wholesale improvement of the public realm will allow people to more easily enjoy their time in the COA, ultimately helping to change their perception of the place. Achieving a quality public realm is key to attracting people and businesses and is paramount to the area's future success.

- **5.6** Positive aspects to be enhanced:
- There are strong existing north/south routes
 e.g. along Wellesley Road, Roman Way, Cherry
 Orchard Road, North End and High Street / South
 End (albeit their character and quality vary)
- The Old Town, the Southern and Northern areas have an existing pattern of well-defined streets and spaces of a human scale
- North End is a successful pedestrianised street/ public space
- The existing modernist building stock offers significant redevelopment and conversion potential that will bring help bring about an improved public realm
- There is close access to three large public parks, Wandle Park, Park Hill, and Duppas Hill
- **5.7** Negative aspects to be addressed:
- There is a limited number of east/west routes across the COA, meaning there is little permeability
- The severance caused by Wellesley Road, the Flyover, and the East and West Croydon railway lines create major barriers to movement
- The streets and spaces around New Town and East Croydon, Mid Croydon and Fairfield are poorly defined and unpleasant places.
- Access to existing public spaces in the COA is of poor quality
- There is large variation in street surface materials and furniture
- There is a lot of street clutter that impedes movement
- The COA is deficient in open space as per London Plan standards.



Figure 5.1 North End public realm



Figure 5.2 Wellesley Road public realm



Poor arrival experience at train stations
 High streets lack consistency and cohesion
 Large urban blocks with unclear street patterns that are difficult to navigate

Pe

Fragmented and poorly connected public parks and squares Pedestrian movement severely restricted by Wellesley Road, Croydon Flyover and Roman Way

Figure 5.3 Analysis of the existing public realm across the COA

SIX KEY PRINCIPLES TO IMPROVE THE PUBLIC REALM NETWORK

5.8 The following principles are a corner stone of delivering an improved public realm across the COA over the next 20 years. Improving these six aspects will bring a significant change to the quality of public realm. These principles complement Croydon Council's town centre masterplans and the Connected Croydon Programme. The following are indicative diagrams and it is recognised that there are a variety of design arrangements that could also deliver on these principles. The exact details would be decided on a case-by-case basis.



Figure 5.4 Indicative layout - Permeable blocks

I. CREATING A PERMEABLE CORE BY BREAKING DOWN LARGE URBAN BLOCKS

5.9 Overcoming barriers to walking and cycling in the core of the COA is critical to the future success of the area. Breaking up the larger urban blocks and introducing publicly accessible streets and public spaces through the central commercial and retail areas will improve movement between destinations and will also unlock new opportunity sites.



Figure 5.5 Indicative layout - Improved arrival spaces

2. IMPROVING THE ARRIVAL SPACES AT EAST AND WEST CROYDON STATIONS

5.10 Improve the key entry points at East and West Croydon stations. This will help create a positive first impression and will provide high quality welcoming spaces. It is also important to improve connections from the stations to nearby bus, tram and taxi interchanges to enable ease of onward journeys.





3. IMPROVING THE HIGH STREETS

5.11 The main high streets include London Road, North End, High Street, South End, Church Street, Surrey Street and George Street (and also includes a series of smaller streets that run off these). High streets are places of community and social engagement. They provide opportunities for convenience shopping, small scale retail and commercial uses, community, eating/drinking and leisure activities. This principle seeks to repair, upgrade, de-clutter and activate these streets. Improving their quality and reducing vacancy rates will make these spaces more attractive places in their own right and will support the retail and commercial core.



Figure 5.7 Indicative layout - Creating a network of high quality routes and public spaces

4. CREATING A NETWORK OF HIGH QUALITY ROUTES AND PUBLIC SPACES

5.12 New and improved high quality public spaces will be critical to attracting new businesses and residents. New streets and spaces will be needed to accommodate an additional 17,000 new residents. These spaces must be of a sufficient size, accessible, well designed and be able to cater for the needs of all residents, young and old.

5.13 This will also include the "de-culverting" of the River Wandle as part of the Wandle Park redesign. These spaces will be connected by a network of high quality streets.



Figure 5.8 Indicative layout - New East-West connection

5. CREATING AN EAST-WEST ROUTE FROM EAST CROYDON TO OLD TOWN THROUGH THE RETAIL CORE

5.14 A new 24-hour publicly accessible east/ west connection from East Croydon to Old Town will help break down the current impenetrable shopping malls. This will allow improved movement options for pedestrians and cyclists across the whole of the day and will bring new life into the retail and commercial core.



Figure 5.9 Indicative layout - Improving Wellesley Road

6. IMPROVING WELLESLEY ROAD

5.15 Wellesley Road currently performs an important transport function. The future aspiration for Wellesley Road is to change the character of this road. This will require an approach that reduces the severance it causes so that Wellesley Road can help knit the COA together. The Mayor and Croydon Council have a long term ambition to help transform this road into a quality urban space.

5.16 It is accepted that the future of Wellesley Road will not be delivered as one single project but rather as a series of interventions that will be delivered in line with the following key principles. These principles could be delivered in a variety of different ways and this detail will need be worked up collaboratively through detailed development proposals and planning applications.

5.17 The following principles for improving Wellesley Road have been agreed between TfL, GLA and Croydon Council. These principles should be used to guide future development and investment in and along Wellesley Road. It is recognised that, as and when, new development comes forward there will be a need to have site specific dicussions to determine the best way to achieve (contribute to) these principles as part of a new development.

- **Principle:** Change the character of Wellesley Road. Incorporate a mix of activities, spaces, and facilities to help animate and better define it. Ensure that it can become a focal point at the heart of the COA. Provide a coherent and vibrant public space. It can be used to drive regeneration and show-case Croydon's enterprising future.
- **Principle:** Reduce car dominance in accordance with the Public Car Parking Strategy and enhance its role as a highly accessible bus and tram public transport corridor.
- **Principle:** Provide a more pedestrian and cycle friendly environment by ensuring new development and works, to Wellesley Road deliver improved east / west connections and an enhanced north / south environment.
- **Principle:** Use Wellesley Road to help deliver a comprehensive and sustainable approach to infrastructure provision in the COA, including; energy, water, transport movement, drainage, services and broad-band.



- 4. New and improved amenity spaces and streets
- 5. New East West connection through the retail core
- 6. Wellesley Road and Park Lane improvements

Figure 5.10 Indicative public realm network

PUBLIC REALM NETWORK AND ITS CHARACTER

5.18 Fig 5.14 shows the indicative public realm network. This proposed network includes a mix of new and improved streets and spaces.

5.19 This section provides design guidance on the type, scale and character of these streets and spaces. This information should be used as a starting point to help guide applicants, the public and planning authorities when it comes to securing the delivery of these works.

NEW AND IMPROVED STREETS

New streets

5.20 New streets should be designed as a mix of pedestrian and cycle streets, but it is recognised that some new streets may not be able to accommodate cycling. These new streets are necessary to create a joined up public realm network to allow easy movement across the whole of the COA.

5.21 Where new streets are identified alongside or within application sites, applicants will be expected to assist with the delivery of these new streets and further information on delivery is set out on page 53.

Improved and transformed streets

5.22 In addition to the provision of new streets, some other streets will require improvements to their physical quality e.g. Wellesley Road, the various High Streets, Lansdowne Road, George Street and Edridge Road. Applications for sites along these streets will be expected to help physically improve them and may also be required to help co-fund work to them. The exact detail would be decided on a case-by-case basis.

NEW AND IMPROVED PUBLIC SPACES

Public parks

5.23 The COA contains two large parks at Wandle Park and Park Hill. Duppas Hill is located just outside the COA boundary. As the residential population of the COA increases the role and importance of these public parks will become more important. Where applicants are unable to deliver a public space as part of their scheme, they may be required to contribute to improvements to these large public parks.

Smaller public spaces

5.24 Smaller spaces include formal gardens, squares and pocket parks. These smaller spaces provide a vital amenity function. The network of new and improved spaces is shown on Fig 5.14. These spaces would be delivered either directly by new schemes, or cumulatively by a number of new schemes. The details would be decided on a case-by-case basis



Figure 5.11 Squares (eg. Exchange Square)



Figure 5.12 Pocket parks (eg. Poplar Walk)



Figure 5.13 Gardens (eg. Queens Gardens)

CHERISHED SPACES

5.25 In addition to the more formal public parks and smaller public spaces, there are also a series of other spaces. Currently across the COA there are a number of spaces that are underused and left over. These spaces detract from people's perception of the COA. However, with a limited level of intervention they could offer interesting visual and pausing spaces. New development will be expected to help improve these spaces where appropriate.



Figure 5.14 Indicative public realm network

FUNDED AND UNFUNDED PUBLIC REALM PROJECTS

5.26 Fig 5.15 shows the complete programme of improved streets and public spaces. This network is consistent with the Council's adopted masterplans and the Connected Croydon Programme.

5.27 The delivery of this network is central to the future success of the public realm in the COA. To date, some elements of the public realm network have received funding and it is important that over the life of the OAPF the remaining aspects are also delivered.

5.28 Delivery of the public realm network will require close working between; public authorities, service providers and developers. Each sector will have an important role to play and will be expected to make contributions to the overall achievement of a high quality public realm. This is a live delivery programme with funding and delivery of projects constantly changing. This is not a comprehensive list of unfunded projects and other projects may come forward in the future that will help deliver an improved public realm network within the COA.

FUNDED PUBLIC REALM PROJECTS

5.29 The Mayor, TfL and Croydon Council are very aware of the need to help kick start public realm interventions. Creating a critical mass of improvements is crucial to attracting private sector interest. This process is now underway and public authority funding to the amount of £49million has already been secured. Funded public realm projects are being delivered via the Council's Connected Croydon Programme and include; new pedestrian crossings on Wellesley Road, a new footbridge over the East Croydon train line, station improvements and high street works. This public sector funding has been provided via the Mayor's Recovery Fund, TfL LIPs funding, TfL Sustrans, Growth Area Funding, Heritage Lottery, Network Rail and Croydon Council's Capital Budget. Funding has also been secured via the section 106 process on individual planning applications.

UNFUNDED PUBLIC REALM PROJECTS

5.30 There are also a series of unfunded projects that are essential. These are shown in Fig 5.15 (green are streets and yellow are public spaces). It is expected that these new streets and public spaces would be delivered through a mix of; additional public sector funding; directly as part of new developments; indirectly as s106 and Community Infrastructure Levy (CIL) contributions from new developments.

Directly as part of new developments:

5.31 Applicants must contribute to the enhancement of the COA's public realm by directly delivering projects (or parts of projects). Depending on the size and location of the application this process of delivery could involve either the full and/ or the partial delivery of a project. All applicants will need to demonstrate how their scheme contributes to the delivery of the public realm network and principles as set out in this OAPF.

Indirectly as part of new development:

5.32 Where new developments are unable to directly deliver new, or improved, public realm projects (agreeing this will need to be robustly justified through the application process), it may be acceptable for applicants to provide a financial contribution to Croydon Council via CIL or s106.

Future public funding:

5.33 In addition to the private sector delivery, both Croydon Council and the Mayor will continue to seek out other public funding to help deliver public realm projects. In the future there may be potential to secure additional match funding to deliver other aspects of the public realm network, and work on this will be on-going.



Figure 5.15 Funded and unfunded public realm projects

Figure 5.16 Chart of funded projects (as of January 2013)

	Project number	Project name	Secured funding		Proje numb
We	st Croydo	n		Eas	t Croy
1	WC03	Bus station upgrade (unfunded)		19	EC12a
2	WC01	Interchange spine	CA C	20	ECOS
3	WC05	Poplar Walk	£4.0M	21	EC03
4	WC02	West Croydon Circus		22	EC14
5	WC12	London Road		22	
Hig	h Streets			22	0021
6	HS02	South End		24	CO2a
7	HS04	George Street west		25	CO1b
8	HS03	Church Street	£9.3m		
9	HS01	North End		Leg	ible Lo
10	HS05	South Croydon			
Wellesley Road				Wa	ndle Pa
11	WR01a	Flyover crossing		26	WP01
12	WR01b	Park Lane crossing		Wa	ndle R
13	WR01c	George Street crossing		27	
14	WR01d	Lansdowne Road crossing	<i>£</i> 6.18m	Mic 28	l Croyo
15	WR03b	Lansdowne Road		Ext	ernally
16	WR01f	Station road crossing		29	
17	WR01e	Bedford Park Road		30	
Fai	r Field			31	
18		Fair Field	£150.000	51	
				32	

	Project number	Project name Secured funding			
Eas	t Croydon	ı			
19	EC12a	Dingwall Road			
20	EC08	Billinton Hill	(10 /m		
21	EC03	East Croydon square	£10.4m		
22	EC14	George Street East			
Cor	nect				
23	CO02b	Connect 2: Barclay Road			
24	CO2a	Connect 2: Old Town	£3.4m		
25	CO1b	Connect 2: Roman Way			
Leg	ible Lond	on			
		Legible London	£600,000		
Wa	ndle Park				
26	6 WP01 Wandle Park £3.8m				
Wa	ndle Road	Car Park			
27	Wandle Car Park Feasability funding in place				
Mic	l Croydon				
28		Mid Croydon	£617,000		
Ext	ernally fu	nded via new develom	pents		
29		Saffron Square			
30		West Croydon entrance			
31		East Croydon footbridge			
32		East Croydon concourse			
33		Ruskin Square			

No	Project Name	Project description
35	College Green (FF02)	New and improved links to be guided by the Fair Field Halls masterplan
36	Mid Croydon	New and improved links and amenity spaces to be guided by the Mid Croydon masterplan
37	Altyre Road	Improved street
38	Cherry Orchard Road	Improved street
39	Dingwall Road	Improved street
41	Block George St. to Lansdowne Road	New link connecting George St. to Lansdowne Road
44	Sydenham Road	Improved street
45	Block Sydenham Road to Bedford Rd	Improved street
47	Bedford Road	Improved street
48	Woburn to Newgate	Improved street
50	Derby Road	Improved street
51	Claredon Road	Improved street
53	Whitgift block	New and improved routes through Whitgift
56	Centrale	New and improved routes through Centrale
57	Frith Road	Improved street
58	Drummond Road	Improved street
59	Surrey Street	Improved street
60	Overton's Yard	Improved street
61	Roman Way	Improved street including new and enhanced pedestrian crossings
62	A236 roundabout	Improved street
63	Edridge Road	Improved street

Figure 5.17 Chart of unfunded projects (as of January 2013)

No	Project Name	Project description
40	Block George St. to Lansdowne Road	New amenity space
42	Block Lansdowne Rd to Sydenham Rd	New amenity space
43	Block Lansdowne Rd to Sydenham Rd	New amenity space between Lansdowne Road and Sydenham Road
46	Block Sydenham Road to Bedford Rd	New amenity space
49	Around the base of the lylo building	New amenity space
52	St. Michael's Square	New amenity space
54	Whitgift block	New amenity spaces in Whitgift
55	Wellesley Road	New amenity space and improved street

PLAY SPACE REQUIREMENTS

5.34 To create a place where families are willing to live, it is important that places are designed to accommodate children.

5.35 The following assesses the number of children that would live in the 7,300 new homes, based on an assumption of 20% three bed housing and 10% affordable housing. The assessment is in line with the London Plan SPG on 'Providing for child and young people play and informal recreation',

5.36 It is assumed that this level and make-up of housing could house approxiamtely 1,730 children under the age of 16, within the following age bands;

- 675 under the age of five
- 640 between 5 and 11 years
- 416 between 12 and 16 years

5.37 London Plan SPG recommends 10 sq.m of play space per child, which equates to 17,000 sq.m. This space should be delivered through new residential schemes. However, achieving this level of play space would be difficult to achieve in all schemes. As such there is scope for older child play space to be pooled and provided off-site in existing and new spaces.

5.38 For new applications, the play needs for children under the age of five should be provided on-site. This can be provided as communal space, balconies, terraces and roof space. Where the play needs of older children cannot be meet on-site, this can be provided in off-site public spaces.

5.39 Off-site play can be provided as;

- Financial contributions to the Council
- Direct off-site provision of play space

5.40 Contributions to the Council will be used to incorporate play facilities within the public realm network. This includes designing play facilities into new and improved streets and spaces to encourage informal child play.

5.41 Contributions would also be used to provide better access and improvements to Wandle Park, Park Hill and Duppas Hill.

DIRECT DELIVERY OF OFF-SITE PLAY SPACE

5.42 As part of the planning application process where applicants propose to directly deliver off-site play space, the quantity and design of that space should follow the guidance in the London SPG. The space should (as much as possible) be provided within the same character area as the proposed development. The location should be guided by the list below and Fig 5.18.

5.43 Off-site in New Town & East Croydon:

Should be provided as part of planned public spaces in the urban blocks between George Street, Lansdowne Road and Sydenham Road. There is also scope at Ruskin Square and Cherry Orchard Road. It could also be integrated into the redesign of Wellesley Road and other quiet streets.

5.44 Off-site play in West Croydon:

Should be provided as part of a new public space adjacent to St. Michael's Church, the new public space at West Croydon Circus, or in quiet streets.

5.45 Off-site play in the Retail Core:

Should be provided within close proximity to the development. There is scope to provide off-site play as part of new public spaces within the retail core, within the redesigned Wellesley Road, and integrated into North End and the Poplar Walk public space.

5.46 Off-site play in Mid Croydon and Fairfield

Should be provided as part of Queens Gardens, Fairfield Halls, and the new Town Hall square.

5.47 Off-site play in Southern and Old Town:

Provided as part of improvements to the Minster public space, Exchange Square and also as part of public realm work at South End and Surrey Street.

5.48 Off-site play in the Northern area:

Should be provided as part of a new space around the base of lylo building, integrated into Saffron Square, and into the existing street network.



Figure 5.18 Quantum of play space required across the six character areas



Building height and form

CHAPTER CONTENTS

- Existing building heights and form
- Guiding building heights
- Three building height areas
- Residential building form
- Impacts on environmental conditions
- Impacts of new buildings on views

CHAPTER OBJECTIVES

- Establishing the existing context of building form and height in the COA
- Identifying three existing clusters of tall buildings
- Identifying sensitive locations in and around the COA which must influence the design of new buildings
- Identifying three building heights for the COA and setting guidance for heights in these areas
- Providing guidance on appropriate building form and typologies
- Ensuring the visual assessment of buildings against impacts on views and townscapes
- Ensuring new buildings carefully mitigate against the impacts of air quality, noise and micro-climate

EXISTING BUILDING HEIGHTS AND FORM

6.1 Today the COA has a mixed built environment. The evolution of the COA's physical make up and different architectural and planning styles are explained in greater detail in chapter 3.

6.2 The COA's existing built environment has been shaped over the last 700 years and it contains evidence of different development cycles and the related building styles of those times.

6.3 This process of growth and change has given rise to a varied and unique physical environment. Buildings of different scales, styles and quality sit alongside each other.

6.4 Future development should be designed with an understanding of the COA's existing character. Given the variety in the area's existing physical make up, the COA should be able to accommodate all manner of future building styles, forms and heights so long as the design achieves a high quality and is context led.

6.5 Tall buildings and large buildings will continue to have an important role to play in the development of the COA and such buildings may be considered appropriate where they can be justified on the basis of design, location and context.

6.6 Today, there are approximately 48 tall buildings in the COA. Most of these buildings are broad–shouldered, modernist in style and commercial in use. There are also some contemporary, more slender, residential towers.

6.7 The largest cluster of tall buildings runs along Wellesley Road. It includes parts of New Town and East Croydon as well as parts of the Retail core character areas. This cluster of buildings is comprised of, and surrounded by, commercial and retail uses.

6.8 A second cluster is located around the Croydon flyover. It includes buildings to the south of the flyover along High Street (e.g. Leon House) and



Figure 6.1 Existing tall building clusters in the COA

buildings to the north of the flyover (e.g. Taberner House and Bernard Weatherill House). This cluster is mostly surrounded by low rise residential, high street and civic buildings.

6.9 A third smaller cluster is adjacent East Croydon station. It includes the COA's most recognisable tall building, the NLA tower (No.1 Croydon). It is mainly comprised of buildings between 6 and 9-storeys. However, planning permission has recently been granted for a 55-storey residential tower (2011).

6.10 In addition to the above clusters, there are other sporadic tall buildings dotted across the COA (e.g. Ryland House). These are tall buildings that are generally considered to be in inappropriate locations and which detract from the physical and visual cohesion of the area.

6.11 An objective of this OAPF is to ensure that the design and location of future buildings is carefully considered. Design approaches should be context led,

based on an understanding of where the building is located and what the character of the surrounding area is. These are important consideration at both the pre-application and the planning application stages.

6.12 Cities and skylines continually evolve. In the right place, tall buildings can make positive contributions to city life. However, by virtue of their size and prominence, such buildings can also harm local qualities. The COA skyline is not static and it will continue to evolve over the 20 year life of this plan.

6.13 The purpose of this chapter is to ensure that new tall buildings are located and designed so that they contribute to the COA's skyline and overall built environment. Tall buildings should not be allowed to have unduly negative impacts on their surroundings. The OAPF will not stem the development of new tall and/or large buildings, but rather ensure they are located in the most appropriate locations. This approach should ensure the development of a coherent place.



Figure 6.2 Centre Tower alongside the Burton's building on North End

GUIDING BUILDING HEIGHTS

6.14 The COA contains a mixture of sensitive, and not so sensitive, areas and buildings. Applicants will need to carefully consider the impact of the existing built environment. This section identifies the main sensitive locations in and around the COA as shown on Fig 6.3.

6.15 Impacts on heritage assets, changes in topography and changes to the shading of surrounding areas must inform the design approach of new developments. As part of preparing the OAPF, broad consideration has been given to assessing the impact of new buildings on these issues as set out below and as shown in Fig 6.3.

HERITAGE ASSETS

6.16 The COA and its environs has a rich mixture of heritage assets. The COA itself contains 35 listed (statutorily and locally) buildings and scheduled monuments and 5 conservation areas.

6.17 Future protection and enhancement of these assets is important. New development should respect, enhance and help to unlock the potential of these assets. New development should seek to stitch these heritage assets into the fabric of the COA, ensuring they can be integral parts of the town. New development will be expected to follow the policy requirements of the London Plan, the Council's Core Strategy (local plan) and the guidance provided by English Heritage and CABE.

TOPOGRAPHY

6.18 Another significant influence on the COA's built environment, is the area's natural topography. There are steep level changes across the COA and ground level falls by 30 metres from Park Hill (east) to Old Town (west). This level change is most evident along London Road, North End and High Street.

6.19 Applicants and design teams should be aware of this significant change in level and explore ways for new developments to utilise this feature. This could help further enhance the unique character of the COA. It should be noted that steep level changes can generate particularly sensitive locations. For example, new buildings located around these steep changes can be far more visually prominent in their surroundings.

6.20 Across the whole of the COA, all new buildings should be designed in light of these changes in topography and applicants will need to show how they respond to this.

SHADING

6.21 The COA and its environs includes a mix of mid-rise and low-rise housing, as well as public and private amenity spaces. New buildings have the potential to create new shading of these spaces.

6.22 It is important to ensure that any adverse effects from loss of sunlight and daylight to residential occupiers in and around the COA is minimised. In determining applications, regard will be had to the 'BRE publication Site Layout Planning for Daylight and Sunlight (2011)'.

6.23 It is recognised that in heavily built-up areas such as the COA, new development will inevitably result in some level of overshadowing and overlooking of neighbouring properties and amenity spaces. It should be noted that the existing pattern of development in the central part of the COA is not conducive to the application of normal planning guidelines for sunlight and daylight. As such, as part of new development proposals, there will need to be a flexible approach to the protection of natural light for existing properties.

6.24 It is important to ensure that the use of existing open areas such as private back gardens, parks and public open spaces is not prejudiced by an inappropriate loss of sunlight from new developments. Where possible, the above should receive at least two hours sunlight on 21 March at their centre or over the majority of their area.

6.25 For major developments, a thorough analysis of existing sunlight and daylight conditions should be undertaken early in the pre-planning application process. A full sunlight and daylight assessment should also be provided.



Figure 6.3 Sensitive locations in the COA

THREE BUILDING HEIGHT AREAS

6.26 The impact of new development on sensitive locations, combined with a clear contextual design approach should be the starting point for all new building design. A broad understanding of these local issues has enabled the Mayor and Croydon Council to identify three broad building height areas across the COA.

6.27 As set out in Croydon Council's Core Strategy (local plan), a tall building is a building that is 6-storeys (25 metres) or which is significantly taller then its surrounding buildings.

6.28 The OAPF proposes a plan-led approach to guide the location of new tall buildings. Due to multiple and complex land ownership arrangements, the OAPF does not identify specific sites for future tall buildings, as this would be too difficult to predict.

6.29 The OAPF identifies three areas; the Central area, the Edge area, and the Outer area. The general principle being that, as one moves out from the Central, to the Edge and Outer areas; the potential negative impact of new buildings on sensitive locations and local character will increase. The following section provides additional guidance on what broad approach should be followed in each of the three height areas.

CENTRAL AREA

6.30 The central area is considered the most appropriate location for future tall buildings. It houses the largest number of existing tall and large buildings. The area contains the least amount of sensitive heritage assets, amenity spaces and there is very little existing residential in or near the area.

6.31 The central area has the best access to public transport and the most capacity to accommodate future development.

6.32 This is the rationale for encouraging the location of future tall buildings in the central area. However, this is not to say that every site in the central area could accommodate a tall building. Each tall building proposal will still need to be considered on its own merits, including; a detailed assessment of building form, treatment, urban design and height along with an assessment of the impacts on views, heritage assets, shading and environmental impacts.

EDGE AREA

6.33 In the Edge area, there will be less opportunity for new tall buildings. It is considered that new tall buildings in the Edge area are likely to have a greater impact on sensitive locations. The Edge area contains (or is closer to) more heritage assets, amenity spaces and existing residential areas then the Central area.

6.34 Where it can be demonstrated that there will be limited negative impact on sensitive locations and that the form, height, design and treatment of a building are high quality then a tall building may be acceptable. In general, there will be fewer tall buildings in the Edge area then in the Central area. This area is likely to contain more medium height and infill buildings that will sit more comfortably alongside the existing character.

6.35 Of particular interest is the existing cluster of tall buildings to the south of the flyover, along South End and Edridge Road. The majority of the buildings in this cluster are commercial and tend to have high vacancy rates. There is opportunity to convert and/or redevelop some of these existing buildings. Through redevelopment, new tall buildings may be acceptable but only where they improve the character of the area beyond the existing situation, and improve the relationship between the new building and the existing buildings (both tall and small).

OUTER AREA

6.36 Beyond the Central and Edge areas, there is a well established area of low rise buildings, amenity spaces, conservation areas and a large level of existing suburban residential. The predominant building height in the Outer area is primarily between 2 and 5-storeys. Given the number and type of sensitive locations, along with existing character, it is unlikely that future tall buildings would be acceptable in the Outer area.

6.37 An exact height or range of heights has not been set for the Outer area. A blanket approach would not be appropriate as there are numerous physical and site specific differences that will require careful consideration on a case-by-case basis to determine an appropriate height at the planning application stage.

6.38 The outer area does contain some randomly located tall buildings that are considered to be out of context with their surroundings. Demolition and redevelopment of these tall buildings beyond a midrise height would not be considered appropriate.



Central area

New tall buildings will be most appropriate in this central area. New tall buildings in this area would have the least impact on sensitive locations.

Edge area

Building heights in this area will vary. There will be scope for some new tall buildings where justified. There will be more mid-rise and smaller scale infill buildings.

Outer area

In general, tall buildings are unlikely to be acceptable in the outer area. Site specific circumstances and site history will have an important role to play in determining exact heights of future buildings in this area.

RESIDENTIAL BUILDING FORM

6.39 Achieving a high quality built environment requires a combination of well considered elements beyond just the issue of building heights. It is important that careful thought be given to a range of other design elements. This section provides guidance on the form and design of future residential buildings.

6.40 This section includes information on different residential typologies that would be appropriate for the COA. These typologies are indicative, however, it should be noted that they are supported by both the Mayor and Croydon Council.

6.41 This guidance should be read in addition to the policies set out in the London Plan and all relevant SPG's, the Mayors Housing Design Guide, Croydon Council's Core Strategy (local plan) and the tall building guidance provided by English Heritage and CABE.

TALL BUILDING TYPOLOGIES

6.42 New tall buildings must achieve the highest quality design and architecture. This is relevant to all parts of the building, including; its lower levels, the tower section and the top of the building.

6.43 It is important that the lower levels of all buildings (not just tall buildings) relate well to their surroundings. Lower levels should provide better definition of the public realm, they should be designed to create a legible and human-scale environment that improves, or mends, the local built environment.

6.44 It is important that tall buildings (or that part of a tall building that is significantly taller then its surroundings) is designed as a slender and elegant tower. Applicants will be expected to demonstrate and explain how their tall building successfully achieves a slender form, and how it contributes positively to the street-scape and skyline.

6.45 As a guide, a tall element (or that part that is significantly taller then its surroundings) would generally achieve a slender form when the proportions of the tower achieve a slenderness ratio of 1:3 (or greater) i.e. for every metre in width should be 3+ metres tall (measured on the broad side).

6.46 This slenderness ratio is presented as a guide for applicants and planning authorities. It provides a starting point for consideration when designing and assessing the slenderness of a tall building in the COA. It may be acceptable for new tall buildings to achieve a different slenderness ratio and this would be considered on a case-by-case basis.

6.47 Fig 6.5 shows the design approach for tall buildings as set out in the West Croydon masterplan. It demonstrates how tall buildings can achieve a low level (shoulder height) that relates well to its surroundings at street level and at the same time achieves a slender tower above this. In the West Croydon masterplan, this is referred to as the 'plinth and tower' approach. This concept is also relevant to other locations in the COA. For example, on the eastern side of Wellesley Road, the predominate building height is between 10 and 12-storeys. New schemes could utilise a similar plinth or shoulder height with the inclusion of a slender tower above.

6.48 It is also important that the tops of tall buildings should be carefully designed and considered against their impact on the Croydon skyline and panoramas.



Figure 6.5 Plinth and tower arrangement

6.49 Tall buildings will provide a large number of future residential units in the COA. As set out in Fig 6.4, future tall buildings will be focussed around the central area with scope to provide some new tall buildings in other areas. The height and design approach for tall buildings would be decided on a case-by-case basis and would be governed by a robust heights assessment.

6.50 It is anticipated that tall buildings would provide less family housing then other schemes. However, there will still be scope to provide larger units close to the ground and upper floors where easy access could be provided to amenity space.

6.51 New tall buildings will have to provide new amenity space, either as private and/or communal amenity space within the scheme (internal and/or external). Public provision will also be required and this should be provided in line with the public realm requirements in chapter 5.

Please note that the illustrations set out in Figs 6.6 to 6.10 have been prepared by MaCreanor Lavington Architects as part of their Croydon Town Centre Housing Capacity Study 2010.

HISTORIC AND INFILL TYPOLOGIES

6.52 Historic infill sites typically make up the gaps within the traditional blocks around the Southern and Old Town area and the Northern area. This typology should achieve a design that sits comfortably alongside existing heritage assets and built form. They would generally be on smaller sites and would often be hemmed in by existing 2 to 4 storey buildings.

6.53 The majority of infill and historic buildings should be developed as terraced houses, maisonettes and/or small blocks of flats. Historic and infill schemes will be expected to provide higher levels of family housing.

6.54 These schemes should respond positively to their surrounding context and where required, seek to preserve and enhance heritage assets. Active and retail frontages at ground floor level should be maintained where feasible. It is accepted that on certain sites it may be difficult to provide new communal and public amenity spaces but every effort should be made to provide private space.



Figure 6.6 Indicative tall building illustration

Slender residential towers - standards				
Density	Up to 405 units/ha			
Height	Decided on case by case			
Form of residential element	A mixture of flat sizes with up to 8 units per core			
Amenity	Balconies, communal internal space, roof space, new spaces at street level			



Figure 6.7 Indicative historic infill illustration

Historic and Infill - standards				
Density	65 to 100 units/ha			
Height	2 to 5 storeys			
Form of residential element	Houses and flats			
Amenity	Balconies, private and/or communal gardens			

MID RISE TYPOLOGIES

6.55 Mid rise schemes could make up a large number of future residential developments across the COA. Depending on their surrounding context, their potential impact on sensitive locations, and the quality of their design, mid rise developments could emerge on a wide variety of sites and even alongside existing lower rise housing and apartment blocks.

6.56 Mid rise schemes would be made up of a mixture of terraced housing, maisonettes and flats. The design and layout of these schemes will need to be site and context led. To this effect, they may include a mix of both small and tall elements.

6.57 These schemes will be expected to help provide better definition to the public realm. Depending on the size of the scheme, there should be opportunity to provide larger communal amenity spaces and potentially make contributions to public amenity. Requirements for public realm improvements should be made in line with the guidance set out in chapter 5.

6.58 The level of family housing should be in line the requirements set out in chapter 4. However, mid rise schemes would typically be able to accommodate medium levels of family housing.

ADJACENT INFRASTRUCTURE TYPOLOGIES

6.59 The COA contains large pieces of physical infrastructure such as East and West Croydon train lines, Roman Way, the Flyover and Wellesley Road. There are a number of potential development sites located around these. These sites tend to have a range of contexts and site specific influences. In many instances, they can be more difficult (and hence more expensive) to develop and so a number of these have remained both undeveloped and underdeveloped.

6.60 New schemes proposed alongside existing infrastructure will need to adopt a design approach that is context and site led. Given the broad spread of locations and possible site specific circumstances, it is more difficult to provide general design guidance.

6.61 It is important that future designs mitigate the impacts of the surrounding infrastructure, achieve a high quality design, secure public realm improvements and improve the relationship with surrounding sensitive locations.

6.62 Depending on the size of the scheme, there should be opportunity to provide larger communal amenity spaces and potentially make contributions to public amenity, with provision being made in line with the guidance in chapter 5 of the OAPF.





Mid rise - standards				
Density	110 - 175 units/ha			
Height	Up to circa 12 storeys			
Form of residential element	Stacked maisonettes and blocks of flats			
Amenity	Balconies, courtyards, communal roof			

Figure 6.9 Indicative adjacent infrastructure

Adjacent infrastructure - standards				
110 - 175 units/ha				
Up to circa 12 storeys				
Maisonettes, flats minimise impact from infrastructure				
Balconies, courtyards, communal roof				

RESIDENTIAL ABOVE RETAIL

6.63 Significantly increasing the quantum of residential in the Retail core will require attracting new residential into areas such as the Retail Core which traditionally have had lower levels of housing.

6.64 Future residential in these areas could be delivered in a variety of ways including; conversion of other buildings in the area, integrated into retail developments and as stand alone residential blocks.

6.65 It is expected that a variety of layouts could be delivered with a broad range of styles and sizes. The approach for each residential block would need to be based on the surrounding context and site specific circumstances. For example, in the retail core the approach to residential close to listed buildings and/ or conservation areas would need to be different to the approach closer to Wellesley Road. In this regard new residential could vary significantly in height, form and treatment. The provision of new amenity space could be provided as a mixture of public, communal and private spaces.



Residential above shopping - standards				
Density	175 - 370 units/ha			
Height	A mix of mid-rise buildings and taller towers			
Form of residential	Stacked maisonettes, flats			
Amenity	Balconies, communal roof space, communal space			

IMPACTS ON ENVIRONMENTAL CONDITIONS

6.66 The design of new buildings in the COA will also need to take account of the impact of environmental conditions.

FLOODING IMPACTS

6.67 The most prominent flooding impacts are closer to the river Wandle and Bourne and their tributaries as set out in Croydon Council's Surface Water Management Plan. Flooding issues are most prominent around Wandle Park, Old Town and along South End. In addition, areas around New Town, parts of the Retail Core and the Civic & Cultural areas are prone to surface water drainage issues. These areas have very low levels of existing green space and or other permeable surfaces to help manage run off and drainage.

6.68 There are outline proposals to de-culvert parts of the river Wandle which will help to reduce flooding impacts. Similar de-culverting proposals for the Norbury Brook and the Caterham Bourne, as advocated by the Core Strategy would also reduce the likelihood of unforeseen flooding across the borough.

6.69 The design of new buildings will need to demonstrate how they satisfactorily address direct impacts of flood risk. In addition, development in the COA will also be expected to help reduce impacts on drainage by including measures to achieve sustainable urban drainage, planting and greening of the COA.

AIR QUALITY, NOISE AND WIND

6.70 Air quality and noise implications are most prominent along Roman Way, the Croydon Flyover, Wellesley Road and along the railway lines running through East and West Croydon stations. New developments will have to show how these impacts, particularly in these areas, are addressed.

6.71 Also, new buildings, in particular tall buildings, will need to demonstrate how they successfully mitigate impacts from micro-climate conditions on new and existing amenity spaces. In particular, new tall buildings in the COA will need to show how their designs do not have a negative impact on wind (downdrafts and wind tunnelling), sun (heat traps and overshadowing), and pollution (air quality).

IMPACTS OF NEW BUILDING ON VIEWS

6.72 Existing tall buildings in the COA have given rise to a distinctive 'mini-Manhattan' skyline that helps highlight the area's importance as a Metropolitan Town Centre in London and the southeast.

6.73 From a distance, these panoramas are framed by significant greenery which help accentuate this contrast. These panoramas will continue to evolve over the life of the plan and applicants will be expected to demonstrate how they make positive contributions to it.

6.74 It is important that new tall buildings continue to enhance and evolve this skyline. New development will be assessed against their impact on this skyline. The Council's Core Strategy (local plan) and saved UDP policies identify a set of panorama views and landmarks from where new schemes must be assessed from.

6.75 The OAPF also identifies four COA townscapes;

- Roman Way, Croydon Flyover and Wellesley Road
- The East Croydon train line
- The High Streets
- Existing parks of Wandle Park, Duppas Hill and Park Hill

6.76 These townscapes help to show the physical characteristics of the COA's built environment. They allow people to get a 'sense of place' and location.

6.77 These townscapes are related to people's experience of the built environment as one travels through it. Travelling along these identified routes, streets and railway lines gives people generous views of the COA.

6.78 New development must show how it integrates and improves on the local character of the COA. These townscapes are the locations from where applicants will be expected to demonstrate this from.

6.79 The exact assessment location along these different townscapes will be determined at the planning stage in conjunction with the Council.

6.80 In addition to these identified views, new buildings will also be visible at street level.

6.81 In this regard, the design and arrangement of new buildings will have an immediate effect on surrounding streets and spaces. Buildings should be used to create an interesting townscape that people enjoy moving through.

6.82 By contrast, new tall buildings can equally result in an overbearing environment which reduces the feeling of openness and limits views to the sky.

6.83 In this regard it is important that new buildings do not create, or contribute, to this overbearing wall of development, and this is applicable for all areas of the COA. Fig 6.11 shows how the arrangement of three tall buildings on a site could result in an overbearing wall of development. Fig 6.11 also shows an alternative preferable building arrangement that does not result in an overbearing environment.



Figure 6.11 Overbearing development



COA boundaryTownscapes along the High StreetsTownscapes fromTownscapes along Wellesley Road, Croydon Flyover and Roman Wayexisting parksTownscapes along East Croydon train line

Figure 6.12 Location of COA Townscapes





Transport

CHAPTER CONTENTS

- Introduction
- Strategic transport study
- Transport assessment by mode
- Public transport modes
- Rail and tram
- Bus
- Highway Network
- Walking and Cycling
- Parking
- Freight, servicing and construction
- Travel demand management
- Taxis and private hire
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CHAPTER OBJECTIVES

- Ensure improvements in accessibility, connectivity, sustainability and ease of movement to, from and within the COA
- Facilitate the timely provision of transport facilities and infrastructure in order to support proposed developments
- Seek opportunities to mitigate adverse effects on the existing transport network.

INTRODUCTION

7.1 Growth is predicted and is being planned for across the whole of London, as set out in the London Plan. Whilst the level of growth anticipated in south London is lower than other London sub regions, it will impact on traffic and movement in the COA. The Transport study for the OAPF has been developed to help understand the impacts of growth in the COA and its environs and to help manage the effects of this growth on the transport network.

7.2 Efforts need to be made to mitigate the impact of growth on the transport network. This includes reducing the need to travel by co-locating homes and jobs, improving the walking and cycling environment, and improving access to, and the capacity of, public transport. This will be achieved through a mixture of hard infrastructure improvements, sustainable transport measures and softer behavioural initiatives.

7.3 In planning for Croydon's predicted level of growth, the Council and the Mayor have opted to focus a large proportion of the borough's housing and economic growth within the COA. The principle of consolidating growth within the COA should help reduce the need to travel and the length of journeys. By placing homes side-by-side with new and existing workplaces, shops and other services, the OAPF aims to create a walk-able and cycle-able town centre.



Figure 7.1 Croydon is well connected

7.4 This transport chapter examines the potential effects of this approach on traffic and public transport in and around the COA. This chapter has been developed in the context of the London Plan, the Mayor's Transport Strategy, Croydon Local Implementation Plans, the South London Sub-Regional Transport Plan, the South London Sub-Regional Transport Plan – 2012 Update, and Croydon Council's emerging LDF and Core Strategy.

7.5 The transport chapter is also informed by a Transport study undertaken by Transport for London in collaboration with Croydon Council and the GLA. This study assessed the impact of building 7,300 new homes and creating 8,000 new jobs (as set out in chapter 4) on the transport network. This assessment was carried out alongside wider London growth predictions. The transport study forms part of the OAPF evidence base.

7.6 The findings of the Transport study conclude that the level of growth can be accommodated, subject to the delivery of the various mitigation measures set out in this chapter.

7.7 The transport chapter proposes interventions for each transport mode, and these are differentiated between 'short-term' (less than 3 years), 'medium-term' (from 3 to 10 years) and 'long-term' (more than 10 years).



Figure 7.2 Existing Public Transport Accessibility Levels (PTAL)

7.8 These interventions are based on detailed transport modelling and masterplan work to ensure alignment with the goals of the OAPF, the Mayor's Transport Strategy and the South London Sub-Regional Transport Plan. Funding for some of these interventions is already in place. A strategy for sequencing the delivery of infrastructure improvements and securing new funding will need to be developed in order to manage the delivery of infrastructure in a timely manner. This process will be led by the Council and the GLA family.

EXISTING CONTEXT

7.9 The COA is one of the most accessible locations in Outer London, with the highest Public Transport Accessibility Level (PTAL) of 6b (out of a range of 0 to 6b). It is served by two National Rail stations, an extensive bus network and Tramlink. These are major strengths that will enable the COA to accommodate new homes and re-growth in employment.

7.10 TfL has undertaken periodic monitoring of road traffic in Outer London, which shows that overall traffic flows increased in the early 2000's but more recently since 2007 traffic flows have declined. However, it should be noted that there will be isolated increases in some places.

7.11 During this period of declining road traffic, travel to the COA by bus and tram continued to rise, along with train travel from East Croydon Station. During this time, the COA's economy and employment base declined and the COA has become less of a destination. The increases in bus, tram and train journeys into the COA are evidence of the COA's growing role as a transport interchange.

7.12 TfL's Travel in London report has identified an overall reduction in road traffic across outer London in recent years. Despite this, public transport trips on bus and tram have increased steadily, due largely to Croydon's role as an interchange destination. The OAPF therefore predicts a continued rise in public transport demand due to a combination of growth in homes and jobs and due to the high quality of interchange facilities in the COA.

7.13 Growth of the COA's retail, commercial and housing sectors will help strengthen the COA's role as an attractive destination. Providing new housing in the COA adjacent to new jobs and services should reduce the need to travel.

	Base year 2007		Future year (2031) without development		Future year (2031) with preferred growth				
	То	From	Within	То	From	Within	То	From	Within
a.m.,peak,(total,trips)									
Car	32%	44%	28%	30%	41%	17%	29%	35%	17%
Public Transport	46%	43%	17%	47%	45%	17%	47%	49%	15%
Walk & Cycle	22%	13%	55%	23%	14%	66%	24%	16%	68%
Total	100%	100%	100%	100%	100%	100%	100%	100%	100%
p.m. peak (total trips)									
Car	56%	39%	40%	53%	37%	35%	47%	36%	30%
Public Transport	32%	42%	16%	35%	43%	15%	39%	43%	14%
Walk & Cycle	12%	19%	44%	12%	20%	50%	14%	21%	56%
Total	100%	100%	100%	100%	100%	100%	100%	100%	100%

Figure 7.3 Numbers travelling into COA

STRATEGIC TRANSPORT STUDY

7.14 The purpose of the Strategic Transport study, as agreed by TfL, Croydon Council and the GLA is to:

- Identify transport challenges
- Identify opportunities arising from development
- Outline a package of interventions required to support the preferred development scenario
- Set out the next steps required to further develop interventions.

7.15 The full Transport Study is available as a separate document through the GLA website at www. london.gov.uk.

7.16 Figure 7.3 shows the planned growth across the COA. The Transport study assesses the differences between:

- The base year situation
- The future year without development (2031)
- The future year with the preferred growth scenario (2031)

7.17 The transport study identified that there will be impacts on both the road network and public transport, and it then indicates those areas that will be impacted and that will require some level of intervention or policy measures.

7.18 The modelling shows that the general pattern of congestion and delay remains much as it is today but becomes more intense. This means that measures will need to be put in place to ensure effective access

and continued movement.

7.19 The high level approach to addressing this includes: the co-location of jobs, homes and services to reduce the demand for travel; improving the walking and cycling environment; and enhancing accessibility to public transport.

7.20 The Transport study identified a number of areas at a strategic level that require more detailed analysis and scheme development. The principal conclusions of the Transport study include:

- The need to provide additional capacity on existing public transport services particularly on key corridors into the COA
- Tramlink capacity enhancements through the COA would be required but measures will need to consider the wider impact on the highway network due to the road capacity required as well as cost.
- Analysis of walking and cycling potential undertaken for sub-regional work has identified that there is considerable potential, for more trips to be made by walking and cycling instead of by car and public transport in the COA.
- The highway network is approaching capacity both within the COA and at key junctions on the A23 and congestion is forecast to continue to occur in the future. Further localised modelling work and analysis will be required to refine the measures that are proposed.





TRANSPORT ASSESSMENT BY MODE

7.21 This section provides an assessment of the impacts of planned growth on the transport network by mode and highlights those parts of the COA and surrounding areas where the planned level of growth will need to be mitigated. This assessment is informed by the Strategic transport study.

7.22 By 2019, substantial public transport improvements will have been delivered. These improvements include:

- Six new trams enabling an additional service of four trams per hour on the proposed "Line 4" between Elmers End and Therapia Lane.
- Extension and expansion of the Tramlink network as identified in TfL's strategy.
- Enhanced frequency of Thameslink trains, a lengthening of trains to 12 cars, and expansion of the range of places served from Croydon;
- More Southern suburban trains and many trains lengthened to 10 cars.
- The Councils' Connected Croydon Programme will deliver a number of public realm walking and cycling improvement schemes.
- Capacity improvements to both East and West
 Croydon stations

7.23 By 2031, continuing increases in the level of demand for travel by train, tram and bus are expected to require additional capacity improvements beyond those that have already been committed. The following section provides further detail on the objectives and proposed interventions by transport mode.

PUBLIC TRANSPORT MODES

7.24 The main public transport challenges are to:

- Address high flows and crowding on Tramlink, particularly on the loop around the COA and the approaches to Croydon.
- Manage increases in bus passenger demand, particularly on the north/south corridor.
- Maintain journey time reliability.
- Provide additional capacity on existing public transport services, particularly on key corridors into the COA.
- Manage the pressure of additional services on stations, bus and tram stops, bus stands and on the road network.
- The prioritistation of road space that would be required in order to provide any further tram capacity through the town centre.






RAIL AND TRAM

CONTEXT

7.25 The COA is served by two national rail stations, London Overground and Tramlink.

7.26 East Croydon is London's busiest railway station for entries and exits outside central London termini. Over 54,000 people enter and leave this station each day, and including interchange passengers, 27 million people use East Croydon every year. The station provides direct links to Victoria, London Bridge, Gatwick and Luton airports as well as the St Pancras International rail terminal. Trains between East Croydon and Central London are congested in the peak periods, and the platform/ concourse at East Croydon station is also crowded, although the new station entrance and footbridge will alleviate this (due to open in 2013).

7.27 West Croydon station is less busy than East Croydon, but passenger numbers have risen as a result of the London Overground. The station offers direct links to the City, North London and easy connections to Canary Wharf. Currently, more people arrive at West Croydon during the day to go shopping than at East Croydon (Source: NRTS). However, delivery of public realm improvements through the Connected Croydon programme should also increase the numbers arriving at East Croydon during the day to go shopping in the Retail Core.

7.28 Tramlink serves East and West Croydon stations. There is high demand for Tramlink across the network and crowding occurs in both directions between Wimbledon and the COA in the morning, and on the eastern approach. In 2010, TfL and Croydon jointly funded six new trams to provide additional capacity and these became operational in 2012. Further enhancements could be necessary in the future.

7.29 The Government announced its High Level Output Specification in July 2012 about extra capacity to be provided between 2014-19. Significant extra capacity will be provided through East Croydon during this period. More detail will be published in Network Rail's Strategic Business Plan.

RESULTS OF THE TRANSPORT STUDY AND INTERVENTIONS

7.30 Despite the extra planned rail capacity, trains on the Brighton main line are forecast to be crowded by 2031 due to the increase in numbers of people commuting from beyond London, along with more people living and working within the COA.

7.31 Analysis undertaken for the transport study included an assessment of the requirements for the numbers of gates, ramp widths, ticketing facilities and concourse areas at East and West Croydon stations. The analysis assessed the passenger demand in 2007, in the future year without development (2031) and in the future year with the preferred growth scenario (2031). At both stations, the results indicated that the current facilities enhanced by investment already secured will be sufficient to accommodate future flows.

7.32 Rail crowding on the services through East Croydon is a challenge that will need to be addressed, but development within the COA is only one aspect of this issue. The South London Regional Transport Study recognises that further work is required to identify options to relieve crowding on this line, which may include the provision of additional capacity. Land for additional platforms has already been safeguarded at East Croydon.

7.33 Modelling undertaken for the Transport Study suggests that additional tram capacity is required over and above that currently being provided to ease crowding on the loop. However, the current Tramlink loop route has its limits and beyond a frequency of 25 trams per hour, tram movements would significantly affect bus journey times. This impact on buses needs to be taken into account in service planning.

7.34 As part of the Transport study, a notional second cross-centre tram route has been tested which indicates that such an intervention could enable higher frequencies of Tramlink services to be run (32 trams per hour through the COA instead of 24) in order to meet the additional demand generated by the new homes and jobs in the COA. While no costing has been undertaken, any tram infrastructure work would be a high-cost project and require a lengthy planning consent process. This will need to be the subject of further study of potential options and feasibility.

Proposed interventions	Owner	Short term/ Medium/ Long	Proposed interventions	Owner	Short term/ Medium/ Long
East Croydon Station 1) construction of the new	Network Rail/TfL	Short	London Overground train lengthening to five cars.	TfL	Medium to Long
bridge and entrances 2) improvement of the existing concourse and Tram interchange in order to provide sufficient station gate-line	ridge and entrances) improvement of the xisting concourse and Tram nterchange in order to provide ufficient station gate-line	Tramlink Upgrading of Tramlink stops in order to provide good quality and safe passenger waiting environments.	TfL	Short	
anticipated additional demand over the plan period			As part of Connected Croydon programme, investigate the feasibility of repositioning George Street tram stop to	TfL/ Croydon Council	Short
East Croydon Station Increase to 8 platforms to allow	Network Rail	Long	improve accessibility. Subject to a positive business	Crovdon	Short to
increased through-put of trains			case, provide additional	Council/	Medium
West Croydon Station Improvements to the station and tram stop including new entrance on Station Road	Network Rail/ Croydon Council	Short/ Medium	through the COA and double- tracking the Wandle fly-over. Consideration for safeguarding routes.		
access at the tram stop in order to improve interchange between public transport modes, accessibility and to			Dual tracking of Tramlink to Wimbledon with additional capacity	TfL	Medium
ease the pressure of increasing passenger numbers.					
West Croydon tram stop Widen the platform as part of Connected Croydon, in order to reduce congestion. Tram stop is currently integrated into the footway.	Croydon Council/ TfL	Short			
Implement first phase of Interchange Spine at West Croydon (see also Buses)	Croydon Council/ TfL	Short / Medium			
West Croydon Station Redevelopment to form part of an integrated public transport interchange and a much improved passenger environment.	TfL / Network Rail	Long			

BUS

CONTEXT

7.35 The COA is a hub for bus services with 29 routes (including three 24 hour services) providing links across south London and into Surrey, and three night bus routes connecting Croydon to central London. Many of the bus routes serve East and/or West Croydon stations.

7.36 Buses are well used for journeys to and from the COA, and boarding and alighting points are spread across the COA.

7.37 Bus capacity enhancements are likely to be required as development comes forward, particularly on corridors into and out of the COA which are not served by Tramlink or National Rail/London Overground. Major initiatives necessary to support bus frequency enhancements include:

- Provision of bus standing facilities at Wandle Road car park to help consolidate bus stands in Mid Croydon and cater for increases in bus frequencies;
- Bus stop upgrades;
- Improvements to West Croydon bus station to increase capacity and modernise the quality of the passenger waiting environment;

RESULTS OF THE TRANSPORT STUDY

7.38 The Transport study shows that based on future growth predictions, passenger numbers on routes to and from the COA will increase, particularly along Wellesley Road.

7.39 The Transport study identified that the numbers of bus passengers will continue to rise due to wider sub-regional growth and as a result of the growth aspirations for the COA. The need for bus capacity is greatest in the areas not directly served by London Tramlink. Additional bus capacity and infrastructure is therefore required to support the COA growth.

0 to 100



INTERVENTIONS

Proposed interventions	Owner	Short term/ Medium/ Long		Proposed interventions	Owner	Short term/ Medium/ Long
Manage bus service frequency and capacity through TfL's continuous programme of network review	TfL	Short to Long		Upgrade bus stops so that they comply with all criteria for accessible bus stops with repositioning where necessary to achieve compliance. Interchange improvements at West Croydon to increase capacity and the quality of the passenger environment, in accordance with the West Croydon Masterplan, to cater	Croydon Council in consult- ation with	Short to Medium
Increase bus capacity with enhanced frequencies along the following bus corridors i) London Road, ii) South Croydon/ Brighton Road and iii) from east of the COA.	TfL	Short to Long			TfL in consult- ation with Croydon Council	Short to Medium
Improve bus access, routing and journey time reliability through the implementation of targeted priority schemes to maintain good reliability and protect bus services and their passengers from the effects of traffic congestion and to achieve more efficient and reliable operations.	Croydon Council/ TfL	Medium		for increases in bus service levels and usage in the COA.		
Safeguard land at Wandle Road surface car park for bus stands and staff facilities in order to accommodate increased numbers of buses terminating in Mid-Croydon and to allow improvement of the public realm. Identified in Mid- Croydon Masterplan.	Croydon Council in consult- ation with TfL	Short to Medium				
Revise bus operations to transfer routes using on- highway stands in Mid- Croydon to Wandle Road with TfL's agreement.	TfL/Bus operators	Medium				

HIGHWAY NETWORK

7.40 The main highway network challenges are to:

- Support development while maintaining capacity and reliability for strategic transport movements;
- Manage further increases in highway congestion and the effects on journey times and reliability on the highway network.
- Manage additional traffic congestion that is likely to add to the difficulty of movement for pedestrians and cyclists.
- Manage town centre car parking provision

CONTEXT

7.41 Croydon is well connected to the highway network. The regionally important A232 "Red Route" runs east-west across South London and runs through the southern part of the COA. It is a strategic route and provides a link to the A23. It is also a key bus corridor.

7.42 The A23, although outside the COA, provides important links into the COA from London, the M25, Gatwick Airport and the south coast. The A23 is severely congested on both the weekday and weekend due to sections of the road being single carriageway and the large volume of traffic using

the road, including buses. The Fiveways junction and Lombard Roundabout are particularly congested junctions which will require improvement during the life of the plan.

7.43 In the COA, there are high traffic flows on key routes and at key junctions, such as Wellesley Road and the A232. Some stretches of road and junctions in the COA, such as Wellesley Road, the A232 and Park Lane Gyratory are currently approaching capacity at peak periods and further increases will impact on bus journey times and reliability. Croydon Tramlink also operates along key sections of the town centre highway network, including Wellesley Road, and its interaction with cars and buses will be a key consideration.

7.44 Growth in the COA is likely to have effects on the highway network not only within the COA but over a wider area. The Strategic transport study tested improvements to key junctions on the A23 and identified a number of junctions that are at or approaching capacity and therefore will require improvements. The Transport study recommends that further analysis and local modelling be undertaken to understand the impact of junction redesign in these key areas and this will be undertaken through further review. TfL and Croydon are currently undertaking a review of parts of the road network through the Roads Taskforce.







Figure 7.8 Car journeys to the COA (by distance) (weekday inter-peak from 10.00 to 16.00)

RESULTS OF TRANSPORT MODEL

7.45 The findings of the transport study include:

- High traffic demand on the highway network within the COA and the wider area including the A23 and A232 which are currently close to capacity during some periods of the day.
- High flows on the highway network in all time periods which can cause increased journey times for all road users
- Increased delay will occur at key junctions as demand on the network increases.
- Risk of further decline in journey time reliability.

7.46 The transport study suggests that even without the growth proposed in the OAPF, demand on the highway network within and in close proximity to the COA will increase.

7.47 Increases in demand over time will add to an already pressurised network leading to further increases in journey times. There are key areas and/

or junctions that will experience issues such as A212 Wellesley Road, A23 Purley Way, A236 (Roman Way) and the A232. Any new development within the COA will need to consider all modes of transport and seek to mitigate the impact of development on journey time reliability on trams and buses.

7.48 The transport study indicates that in the future year with preferred development growth (2031), the impacts on the highway are centred in the COA and dissipate as one moves further away, except for on some key corridors such as A23 Purley Way. The greatest increases in vehicle flows are on Wellesley Road and the A232 in peak periods. The main congestion hotspots are identified as:



Figure 7.9 Key busy junctions on the highway network (SoLHAM am peak 2031 reference case PCU hour junction delay (London Regional Highway Assignment Models)

- Fiveways Junction, A23/Croydon Road Junction and Ampere Way in the AM and PM Peak – Transport for London Road Network (TLRN)
- The Lombard Roundabout (A23) in the AM and PM peak – TLRN.
- The highway network around West Croydon Station (London Road and Station Road) – borough roads.
- Junction delays on the A212, particularly Wellesley Road/George Street (SRN & TLRN).
- Approaches to the Park Lane Gyratory.

7.49 The transport study included a corridor analysis of journey times on the A23 and A232 in the AM and PM peaks. This was compared to the journey times along these routes in 2009 and 2031 with and without the planned level of growth. Overall, this analysis indicates that journey times will increase in both directions on the A23 and A232 between now and 2031. This highlights that the network is becoming more congested and a higher level of delay will occur at a number of key junctions.

7.50 Increases in road traffic will have an impact on all roads in the COA, but particularly on Wellesley Road. As such, achieving the vision for Wellesley Road described in chapter 5 will require careful management and design of the road space and its capacity to carry traffic. TfL and Croydon Council will work jointly to agree a corridor study and conceptual design for Wellesley Road.

7.51 Highway interventions will be necessary to cater for growth in the COA and ensure that buses can operate efficiently. The study highlights the importance of implementing improvements to the A23 due to the increased demand forecast as a result of growth within the COA. It goes on to recommend that further demand management, localised modelling work and junction re-design should be considered and a package of options for the A23 and A232 developed.

INTERVENTIONS

Proposed interventions	Owner	Short term/ Medium/ Long
Coombe Road/Park Lane junction: change traffic signal phasing in order to improve through-put of traffic.	TfL	Short to Medium
Changes to traffic movement in Poplar Walk as set out in the West Croydon Masterplan, including potential proposals to change i) the western half of Poplar Walk to shared space, and ii) a new southbound turn into Poplar Walk from Wellesley Road. These changes are subject to agreement by TfL due to their impact on bus operations.	Croydon Council/ developers	Long
Package of highway improvements on the A232 (Addiscombe Road) to improve traffic flow.	Croydon Council/ TfL	Long
Carry out detailed assessments of measures to improve flow along and across the A23 Purley Way at various junctions, e.g. Fiveways and Lombard roundabout	TfL	Medium to Long
Introduce measures to manage the road network in and on the approaches to the COA including clear signing and Variable Message Signing of available car park spaces in order to help traffic flow more freely and to make Croydon a more welcoming place.	TfL/ Croydon	Medium to Long
Improve general traffic journey time reliability through targeted interventions on TLRN and borough roads	TfL/ Croydon	Medium to Long
Develop a package of sequenced improvements along Wellesley Road, including review by the Roads Task Force.	Croydon Council/ TfL	Medium



Figure 7.11 Aerial image showing the extent of the COA road network including Wellesley Road

WALKING AND CYCLING

7.52 The main walking and cycling challenges are to:

- Facilitate a modal shift in the 119,000 (see transport study) current trips by car and public transport originating in the Croydon Cluster¹ that could potentially be made by cycling.
- Reduce physical barriers to movement that cause severance and disrupt movement for pedestrians and cyclists.
- Improve local connectivity in the COA to encourage greater town centre access by walking and cycling as part of modal shift from short trips made by public transport and car.
- Improve the quality of key corridors and public realm including making them safe to use.

CONTEXT

7.53 Currently, the main transport corridors cause severance and act as barriers to pedestrian and cycle movement. In London, cycle use and a desire to cycle has increased hugely in recent years. However, the existing urban fabric currently restricts the ability to achieve a step change in the COA.

7.54 For example, cyclists are permitted to use the Croydon Flyover. However, due to the design of the trunk road this is not an inviting option and so cyclists avoid it. Alternative routes through the COA for cyclists are poorly signed. Safety issues (real and/ or perceived) as well as impacts from air pollution make cycling and walking less attractive options. It is extremely important that the future design of streets and spaces in the COA address this deficiency.

7.55 In recent years there have been some improvements to walking and cycling movement;

- Legible London, which is improved signage and way-finding across the COA.
- The Biking borough programme and East Croydon station cycle hub.
- Connect 2 which provides cycling and walking links to parks and green spaces including connections to Wandle Park, Lloyd Park and improved crossings for pedestrians and cyclists at Roman Way and Park Lane.
- Connections with the All London Green Grid
 (Areas 7 and 8), giving continuity across the COA.
- The Connected Croydon programme (chapter 5).

7.56 These measures will need to be supplemented with additional infrastructure improvements and marketing campaigns to maximise use of improved facilities. It is important that walking and cycling mode share is "designed in" to new developments through the planning process.





Potentially cyclable trips per grid of 0.25 sq. km.



Figure 7.12 Cycleable journeys

Figure 7.13 London Cycle Network (LCN)

¹ The Croydon Cluster covers approximately 22 sq. km. and has been identified as an area with a high number of potentially cyclable trips

RESULTS OF THE TRANSPORT STUDY

7.57 The transport study estimated that approximately 119,000 current trips by car and public transport starting in a 22km2 zone centred on the borough each day could be switched to cycle. These "potentially cycleable" trips are those which could reasonably be cycled all the way but are not cycled at present.

7.58 Walking and cycling measures need to be part of a holistic approach that takes account of all users of streets as well as the 'place' function of the streets. All interventions have to be considered as integrated packages reflecting the competing pressures for road space and the characteristics of each area. The public realm strategy in Chapter 5 also provides for new and improved walking and cycling connections.

7.59 Croydon is one of the twelve Outer London boroughs designated as a Biking Borough and, with extra support from TfL, is working to encourage greater numbers of people to cycle, having pledged to put cycling at the heart of its local transport delivery plans. Biking Boroughs schemes are aimed at improving permeability and accessibility. Extra cycle links are being created where previous links have been broken and where there are barriers. These new links can take the form of contra-flow cycle lanes, crossing points and signage, creating safer routes. Any changes must be subject to tram safety audits.

INTERVENTIONS

Proposed interventions	Owner	Short term/ Medium/ Long
Measures to reduce severance and enhance the walking experience such as at- grade pedestrian crossings along Wellesley Road and the Lansdowne Road link between East Croydon Station and Wellesley Road and ensure the delivery of the Council's Connected Croydon Programme	Croydon Council/ TfL	Short

Proposed interventions	Owner	Short term/ Medium/ Long
Implementation of Legible London way-finding across the COA to help promote walking trips.	Croydon Council/ TfL	Short
Implementation of cycle directional signing across the COA and on routes to the COA.	Croydon Council/ TfL/ developer	Short
Upgrade and expand cycle parking in premises in line with London Plan residential and office standards and ensure that new developments comply with London Plan standards.	Croydon Council / TFL	Short to Medium
Upgrade and expand cycle parking as part of urban realm improvements in order to ensure conveniently located parking.	TfL/ Croydon Council	Short
East Croydon Cycle Hub secure parking for approx. 280 cycles and associated facilities to encourage cycle to train and town centre commuting.	Network Rail/ Southern Railway/ TfL/ Croydon Council	Short to Medium
Biking Borough local schemes: Create extra links where cycle links have been broken in the past and where there are barriers, by creating safer direct routes, contra-flow cycle lanes and signage in order to create convenient and safe cycle routes to and through the COA.	Croydon Council	Short to Medium
Complete Connect 2 cycle route between Lloyd Park and Wandle Park and other links.	Croydon Council / TfL	Short
Explore the possibility of the Barclays cycle hire scheme (or similar cycle access models) to contribute to an increase in cycling.	TfL	Medium
Biking Borough local schemes: Sign and mark existing routes in order to create convenient and safe cycle routes to and through the COA, improving accessibility and permeability.	Croydon Council / TfL	Short

PARKING

PARKING STANDARDS FOR NEW DEVELOPMENTS

7.60 Parking provision for developments in the COA should comply with London Plan standards. In particular, all residential developments in areas of good public transport accessibility should aim for significantly less than 1 space per unit, and for retail and employment, the level of car parking should be towards the lower end of the ranges. Importantly car free development will be encouraged. Appropriate provision for servicing and emergency vehicle access will also be required.

BLUE-BADGE PARKING

7.61 It will be important to maintain an appropriate supply of blue-badge parking in the COA which meets the needs of mobility impaired users. Poplar Walk is the largest off-street free car park for blue badge holders and is often heavily over-subscribed but is due to be redeveloped. The availability of blue-badge parking will be reviewed against relevant policies and regulations.

COACH PARKING

7.62 Coaches play an important role in providing an additional sustainable transport option. Currently there is significant pressure on existing facilities and there is a need to provide additional capacity. The London Plan seeks to protect infrastructure used by coaches and ensure that development proposals which create a demand for coach parking provide for additional coach capacity. Given the nature of existing and future uses (particularly hotels and leisure) there is an expectation that coach parking will be provided either through site specific development proposals or through the safeguarding of land for layover space and parking. On this basis, existing coach parking capacity should be retained unless there is strong justification for its loss.

ACCESSING PUBLIC CAR PARKS

7.63 Currently, signage for public parking across the COA is sporadic and confusing. A variable message system was installed but has not been brought into operation. Clear signs that lead drivers to the nearest parking will help smooth traffic and create a better impression of Croydon. Direction signs for people walking after parking their car are equally important.

ELECTRIC VEHICLE CHARGING POINTS

7.64 The Council has made a commitment to lower carbon emissions and improve air quality. It is committed to providing electric vehicle charging

points at designated on-street parking bays or in council-owned car parks, and elsewhere by negotiation with private car park operators. The Council will also look for charging points in new developments in line with the London Plan.

INTERVENTIONS

Proposed interventions	Owner	Short term/ Medium/ Long
Adopt and implement a clear strategy for the provision of public car parking that will allow redevelopment of some existing car parking sites.	Croydon Council	Short to Medium
Ensure an over-supply of car parking does not occur by engaging with car park operators to identify which sites should be retained and/or released.	Croydon Council	Short
Introduce clear and practical signing based on a Variable Messaging System.	Croydon Council	Short
Replace Blue Badge parking that will be lost on the redevelopment of the Poplar Walk site and generally improve quantity, location and accessibility of Blue Badge spaces.	Croydon Council	Short
Create well signed, safe routes to and from car parks.	Croydon Council	Short to Medium
Introduce electric vehicle charging points in public car parks and on-street parking.	Croydon Council	Short to Medium
Encourage private car park operators and supermarkets to provide electric vehicle charging points.	Croydon Council/ Land Owners	Short to Medium
Ensure that new hotel and leisure uses include provision for coach parking.	Croydon Council/ developer	Short to Long
Include electric vehicle charging points as part of new developments.	Croydon Council/ developer	Short to Long

Figure 7.15 Parking interventions

FREIGHT, SERVICING AND CONSTRUCTION

7.65 The main freight, servicing and construction challenges are to:

- · Maintain timely deliveries and collections
- Minimise impact on air quality and noise
- Minimise impact on traffic congestion
- Ensure new development and planning applications follow good practice

CONTEXT

7.66 Deliveries to, and the servicing of, properties are essential to the functioning of businesses in the COA. Changes to the streets and public realm over time will need to ensure that they maintain adequate access and penetration of the core area for deliveries and servicing of properties. An audit will be carried out to identify any problems for making deliveries and addressing conflicts with other users of the streets using TfL's Freight Environment Review.

7.67 At the same time, freight can cause physical, visual and noise disruption especially with "out-of hours" deliveries but a Quiet Deliveries Demonstration Scheme can address this. The appropriate design and location of service yards of new developments can minimise disturbance. The impacts of inadequate existing servicing routes such as along North End will need to be reviewed through any planning application process.

7.68 Planning applications will need to include a Delivery & Servicing Plan (DSP) that should comply with TfL best practice guidance and will need to include information on:

- Construction and Logistics Planning
- Integration with the Council Travel Plan
- Sustainable Procurement pack
- Knowledge Sharing Plan

7.69 The Council is currently developing a framework Construction Logistic Plan (CLP) for the whole of the COA, with input from TfL. This framework would assist in the production of site-specific transport, delivery and construction plans. A co-ordinated approach could greatly reduce the impacts of construction works. This process must be integrated at the earliest design and planning stages so that it is in place before demolition. The CLP should include consideration of tram overheads and measures to avoid tram blocking. A DSP is intended

to provide a structure by which the owners and occupiers of premises can ensure that their delivery and servicing activities can be conducted in a safe and efficient way while minimising their effect on the local environment. It will be critical for new developments such as those proposed in Croydon to ensure that the design takes into account subsequent use and provides adequate access and loading/unloading facilities. Existing businesses will also be encouraged to develop plans. In addition to freight trips to the COA, the A23 and A232 both form important corridors for the movement of freight between other South London centres. Journey time reliability is of critical importance to some freight customers particularly as a result of "Just in Time" logistics chains, as this directly feeds into costs and resources.

INTERVENTIONS

Proposed interventions	Owner	Short term/ Medium/ Long
Ensure through the development management process that CLPs are in place before new developments commence on site and minimise air, noise pollution and traffic movements.	Croydon Council	Short
Ensure that new developments have Delivery and Servicing Plans in place before they come into operation and that they are adhered to in order to reduce traffic congestion, make more efficient use of roadspace and minimise disturbance	Croydon Council	Short
Support existing businesses in developing Delivery and Servicing Plans for individual premises or for areas in order to reduce traffic congestion, make more efficient use of roadspace and minimise disturbance	Croydon Council	Short to Medium
Improve conditions for servicing and delivery in the COA through good planning.	Croydon Council	Short to Medium
Investigate innovative methods of spreading the hours of deliveries	Croydon Council	Short

Figure 7.16 Freight interventions

TRAVEL DEMAND MANAGEMENT

7.70 The following are the travel demand objectives:

- Encourage and support sustainable transport behaviour.
- Ensure measures are included in all development schemes that minimise the need for vehicle movement.
- Engage with existing premises to promote sustainable travel.
- Secure financial contributions through planning applications towards travel demand measures.
- Ensure accordance with relevant best practice guidance

CONTEXT

7.71 Transport Assessments will be required for all new development. Croydon Council will determine when a TA is required in consultation with TfL for applications referred to the Mayor. This will enable measures to be planned into schemes that will help to mitigate the impact of traffic and movement that they will generate. TfL best practice guidance on preparing transport assessments is available from the TfL website.

7.72 This will help to ensure that travel to and from new development will be as sustainable as possible. It will also identify other possible impacts on public transport and highways and identify necessary mitigation measures.

7.73 Site-wide travel plan strategies are to be prepared for each development or group of sites, both commercial and residential, incorporating the strategies proposed in this OAPF as well as measures tailored to the individual sites. TfL best practice guidance on preparing travel plans is available from the TfL website.

7.74 Applicants will be encouraged to enter into pre-application discussions to better inform the scope and form of transport assessments and travel plans together with appropriate tools for assessment and agreed mitigation measures, and promotion of best practice.

7.75 Residential and workplace travel planning measures for new and existing occupiers will be encouraged. The provision of shower and changing

facilities should be considered as a minimum. However, occupiers for larger developments will be required to deliver more comprehensive measures such as cycle and travel vouchers and car club membership, together with education and awareness campaigns.

7.76 Provision should also be made for car club bays and their uptake actively encouraged, especially in residential schemes.

INTERVENTIONS

Proposed interventions	Owner	Short term/ Medium/ Long
New developments will be required to assess capacity and demand and develop measures to mitigate the effects of that movement.	Croydon Council/ developers	Short to Long
New developments will be required to develop travel plans to reduce the number of vehicle trips. The Council will monitor those plans.	Croydon Council / developers	Short to Long
Area-wide travel plans will be developed in conjunction with businesses and land owners where it is practical to do so in order to reduce impact.	Croydon Council	Medium
New developments are to make full provision for walking and cycling in line with London Plan standards.	Croydon Council/ developers	Short to Long
Secure cycle parking, lockers, and shower facilities in new and existing developments to support cycling and walking.	Croydon Council/ property owners	Short to long
Provide bays for Car Clubs within new developments or in car parks and free membership for residents and businesses.	Croydon Council	Short to Long

TAXIS AND PRIVATE HIRE

7.77 There are TfL-designated taxi ranks at East Croydon Station, High Street, London Road (West Croydon Station), Mayday Road, Park Street (night time only), Poplar Walk and South End (night time only). There is no rank on the western side of the COA.

7.78 To supplement existing taxi ranks, additional sites have been identified in the East and West Croydon masterplans. The details of these ranks will need to be discussed further with TfL. Access for taxis to roads around the area and to existing and new taxi ranks should be considered when highway alterations are made and new developments considered. It may be appropriate to allow taxis access to certain areas where buses currently have access. There are some roads within Croydon that taxis require access to in order to better serve the community and this should be considered along with any changes to the area.

7.79 In association with the new foot bridge at East Croydon station, taxi provision is being investigated as part of the Ruskin Square and Menta schemes. There may be scope for more taxi ranks to serve day time and night time activities. The location of these facilities would be subject to the agreement of the TfL Public Carriage Office in their role of regulating taxi operation in London. Extra rank space and taxis ranks to support demand arising from the higher levels of activity in the COA will also be required, along with facilities such as monitors at feeder ranks like Cherry Orchard Road, where sight lines are limited.

INTERVENTIONS

Proposed interventions	Owner	Short term/ Medium/ Long
Provide additional rank spaces in appropriate locations to meet demand for taxis, improve interchange, and provide an alternative to the private car.	Croydon Council / TfL	Short to Medium
Improve quality, safety and setting of ranks with TfL including provision of monitors to ensure a convenient and safe environment.	Croydon Council / TfL	Short to Medium
Seek provision of pick up and set down facilities as part of future developments as necessary.	Croydon Council / developers	Short to Medium

RECOMMENDATIONS

7.80 The following transport related recommendations have been made through preparation of the OAPF, including the strategic transport study:

- Further work should be undertaken on trip data in order to better understand mode share and highway trip lengths to, from, and within the COA
- Further work should be undertaken to investigate a potential package of options and the feasibility for implementing improvements on the A23 and A232.
- Croydon Council and TfL should work jointly to develop a package of measures and conceptual designs for Wellesley Road scheme to fully achieve the strategic objectives of the OAPF.
- Croydon Council and TfL to review junctions and traffic flows on the A23 Purley Way in order to develop designs and mitigation measures that can be secured through s106, CIL or other investment opportunities.
- A study should be carried out into potential options for increasing Tramlink capacity through the COA as well as the impacts any options have on surface modes, including a Tramlink strategy.
- Better management of Town Centre parking
 provision
- To review current and future bus services and facilities that need to be upgraded to support higher levels of passenger demand, and to identify improvements and funding sources, through preparation of a bus strategy.
- All transport schemes must be developed as an integrated package considering each mode of transport.
- Work in partnership with developers to instil best practice in preparation of transport assessments and travel plans, by entering into formal preapplications discussions, and to deliver the objectives and priorities identified in this OAPF and associated transport study.

Figure 7.18 Taxi interventions





Parking

CHAPTER CONTENTS

- Introduction
- Parking occupancy levels
- User perceptions
- Two indicative parking scenarios

CHAPTER OBJECTIVES

- Maximise the efficient use of COA public off-street car parks by providing a sufficient amount during peak demand periods;
- Encourage the redevelopment of surplus public car parks for alternative uses including residential;
- Ensure the amount, location and quality of future public off-street parking support the following land use hierarchy in order of priority:
 - Retail Office operational pool cars, van
 - Worker/commuter

INTRODUCTION

8.1 The OAPF encourages the use of public transport, cycling and walking as far as possible, and acknowledges the need to reduce traffic generation. However, it is understood that this is not a practicable option for all people nor in all circumstances. The overall aim of this chapter is to promote a parking arrangement in the COA that functions well and that retains and improves the COA's retail competitiveness.

8.2 Today there are approximately 7,150 public off-street publicly usable car spaces in the COA. Up to 3,000 of these spaces are unused at peak times (e.g. weekends in the run up to Christmas). This evidence was derived from technical surveys carried out by Croydon Council and TfL in 2011 and the results are included in this chapter and the OAPF Technical Appendix.

8.3 A net increase in public parking provision is not considered acceptable nor reasonable given the COA's excellent public transport accessibility and the Mayor's support for greener transport modes.

8.4 On this basis there is an opportunity to make better use of the existing underused car parking

spaces in the COA. The OAPF includes proposals to help achieve this. There is a need to promote a balance between the needs of new development and preventing excessive car parking provision that would undermine cycling, walking and public transport use.

8.5 Making better use of existing publicly usable car parks is not simple. Most of these car parks are in private ownership and so are outside the control of Croydon Council and the Mayor. As such improving the quality and location of car parking stock in the COA will need to be actively managed over the next 20 years.

8.6 Central to improving car parking stock is ensuring that existing car parks are well designed, good quality, are in the right location and have a pricing structure that is affordable.

8.7 An objective of the OAPF is not to allow an increase in the overall number of 7,150 publicly usable off-street COA car parking spaces. This statement is made in light of the overall level of anticipated future growth of 7,300 new homes, an expansion of the retail core and a growth of the commercial sector over the next 20 years.



Figure 8.1 Fairfield multi-storey car park

8.8 Today there are 3,000 underused spaces that are not attractive to users for a variety of reasons. This needs to be addressed. There is a need to increase the number of good quality and well located parking spaces. The existing spaces need to be more attractive to users.

8.9 The delivery and management of an improved parking arrangement will need to be an iterative process. This process will continue to evolve as growth and new investment comes forward.

8.10 Depending on the location of new development, different areas of the COA will see a corresponding increase in the demand for parking. This development should result in investment in existing publicly usable car parks. By contrast, in those areas where there is less development and less demand for car parking, there will be opportunity to reuse those areas of surplus car parks for other uses including housing. This approach would also help to deliver the wider regeneration agenda for the COA.

8.11 In response to the level of growth and regeneration planned for the COA, and in the interest of creating a more efficient parking plan, the OAPF sets out two parking scenarios that could play out over the next 20 years.

8.12 The two parking scenarios are presented as

- what could happen should there be a large scale redevelopment in the central area of the COA around the Retail core, Mid Croydon and Fairfield, New Town and East Croydon;
- or an alternative parking arrangement if there is no significant redevelopment.

8.13 The desired outcome is that future public off-street parking is provided in the right locations, is of an appropriate quality and has the right number of spaces to make best use of land.

8.14 Development of either scenario will need to be supported by an appropriate implementation strategy encompassing future investment, and joint working with and between parking operators and the Council. There is opportunity to progress this joint working following adoption of the OAPF.



Figure 8.2 Croydon College underground car park

PARKING OCCUPANCY LEVELS

8.15 Fig 8.3 shows that approximately 3,000 spaces (up to 38%) of the COA's total off-street public parking stock is not used during weekdays. Weekend usage is even lower with up to 46% vacancy on average across the entire COA. Across the six character areas, with the exception of the Retail core and West Croydon, there are lower occupancy levels during the weekend when compared to weekdays.

8.16 Some of the character areas experience dramatic variations e.g. in New Town and East Croydon, the average weekday occupancy rate is 55%, while at the weekend this falls significantly to 15%.

8.17 Car parks in the Retail Core experience the most consistent pattern of usage. There is at least 80% occupancy at all times and this increases at peak times (e.g. in the run up to Christmas).

8.18 In trying to improve the overall management of the COA's public parking, it will be important that whatever approach is adopted, it continues to protect the COA's retail competitiveness.

8.19 As such, occupancy levels at peak times are the most important factor given that it is during these times that retailers generate the bulk of their revenue. Peak times are considered the starting point for determining any truly surplus capacity across the COA public car parking stock. The average at-peak (or highest) occupancy levels for car parks for each of the six character areas are set out in Fig 8.3.

8.20 The occupancy levels are based on 4 week day and 2 weekend surveys, at the following times;

- 1 survey June 2010
- · 3 surveys July December 2011
- · 2 surveys March 2011

8.21 The results across the weekday surveys demonstrate a consistent level of occupancy for most car parks in each character area.

8.22 By contrast, the weekend surveys show significant variations in occupancy levels for many of the car parks. One contributing factor for this may have been that the first weekend survey was in December 2011 in the lead up to the pre-Christmas shopping period. Occupancy levels were much higher here than during the March 2012 surveys.

8.23 In conclusion, true 'peak-time' parking use in the COA is at weekends in the lead up to Christmas, while standard weekdays are busier than standard weekends.

8.24 To ensure these results are robust, additional parking surveys will need to be conducted on a regular basis to smooth any variations in results and to ascertain exactly what quantum of car parking is truly surplus.

8.25 The occupancy data collected to date is deemed sufficient to support the investigation of high level car parking scenarios for public consultation as outlined below.

8.26 Future more detailed parking surveys need to consider the following issues in more detail;

- parking demand segmented by journey purpose, length of stay and location;
- parking usage by car park and day
- seasonal effects; and
- on-street parking levels, durations, journey purposes and occupancies.

8.27 *It should be noted that 466 car parking spaces were permanently removed from the Fair Field and Mid Croydon area in September 2012 by the operators of the Fairfield Car Park, leaving a total current capacity of 962 spaces in the area. The proposed reduction of 625 spaces represents an actual reduction of 159 spaces from current provision.

Character areas	Total spaces	Average weekly occupancy	Average weekend occupancy
New Town & East Croydon	754	55%	15%
Retail Core	3092	75%	80%
Mid Croydon & Fairfield	962*	34%	22%
West Croydon	72	100%	100%
Southern & Old Town	2327	46%	35%
Northern Fringe	0	n/a	n/a
Total	7616		





Figure 8.4 Peak time car parking occupancy levels in character areas

USER PERCEPTIONS

8.28 To supplement the data collected on occupancy levels, the Council undertook a 'user perception survey' over 2 weeks (including a weekend) in December 2011. 323 survey responses were recorded at the following locations:

- Fairfield Barclay Road
- Fairfield Hazeldean Road footbridge
- Whitgift Poplar Walk
- Whitgift Level 2 pedestrian walkway into shopping centre
- Dingwall Road
- Waddon Marsh tram stop
- Surrey Street
- North End
- George Street

8.29 The results demonstrated that satisfaction with the COA's off street public car parks is relatively high: 17% give a satisfaction rating of 9 or 10 out of 10; and a further 57% give a rating of 7 or 8 out of 10.

8.30 Amongst those who are satisfied, the main reason is that they like the location of the car parks in the COA, while for those who are dissatisfied the main issue is cost.

8.31 Location is the most important factor in determining which car park people will use. 84% of people surveyed mention it as a key factor they take into consideration and 71% saying it is the 'most important factor'. 18% take safety considerations into account (with 6% considering this the main factor).

8.32 Most of those who have parked in the COA between November and December 2011 have done so up to 4 times (57%), while a further 29% have parked in Croydon between five and nine times in the last month. There are some very regular users: 8% of those who have parked in Croydon in the last month have done so on at least 20 occasions.

8.33 The vast majority agree that the car parks in the COA are 'generally safe' and 'easy to access', and more than half agree that the car parks are 'high quality'. There is less agreement on the cost of car parks and 43% disagree that car parks are reasonably priced. When asked what one thing Croydon Council could do to improve parking in the town, the largest single group said that the cost should be reduced (22%).

8.34 Not surprisingly, the bulk of people who park in the COA (76%) did so to go shopping with the need to access a work premises a distant second at 8%. Surprisingly, given the COA's excellent rail connections, only 3% of respondents said they parked in the town centre for the purposes of an onward journey into London, although this may also demonstrate the ease of interchange between bus and tram services and the train.

8.35 The full results of the 'user perception survey' are outlined in the Technical Appendix. Also included in the technical appendix is an assessment of the build quality of the COA's existing public car parks.

TWO POSSIBLE PARKING SCENARIOS

8.36 Future development in the COA will influence how much and where parking should be located. Today, it is uncertain how future development may occur and so it is not possible to set out a comprehensive parking plan that covers all possibilities.

8.37 Based on the parking occupancy levels, car park users perceptions along with the land use, transport and design objectives set out in other chapters of the OAPF, four principles are identified which should be followed in guiding the future design and location of public off street parking in the COA.

PRINCIPLE |

8.38 The amount, location and quality of future public off-street parking should support the following land use hierarchy in order of priority:

- Retail
- Office servicing
- Worker/commuter

8.39 Any new on-site private car parking should be negotiated on a case-by-case basis and will need to comply with the standards of the Mayor of London and Croydon Council.

PRINCIPLE 2

8.40 Future car parking access along the full length of Wellesley Road and Park Lane should be in keeping with the longer term vision for this road as set out in chapter 5 of the OAPF. In addition, car parking arrangements should aim to reduce vehicular traffic on Wellesley Road.

PRINCIPLE 3

8.41 Improve overall access to public off-street car parks throughout the COA by:

- Implementation of a Variable Messaging Signage (VMS) system which builds on the infrastructure already provided as a means of more effectively influencing driver decisions and therefore managing demands on the highway network as well as inside the car parks;
- Have a balanced provision of public off-street parking in areas where there is demand. However, this will need to be carefully managed and there will be a need to avoid an over concentration of public car parking in one particular location to the detriment of accessibility and the physical environment.

PRINCIPLE 4

8.42 Protect and enhance existing underground car parks where possible, regardless of whether they are public or private (where feasible). Underground parking takes parking off street level. Today, across the COA, there is a large quantum of surface level parking which detracts from the visual and physical quality of the public realm

FUTURE PARKING SCENARIOS

8.43 The following section applies these four principles to two different future parking scenarios. These scenarios are not parking options, they are presented as alternative outcomes to different levels of future development.

8.44 Scenario 1 relates to a incremental renewal of the COA. This may occur where there is not a significant redevelopment of the Retail Core or another part of the COA.

8.45 Scenario 2 shows a parking arrangement for the COA that is based on the wholesale redevelopment of the retail core. It proposes a COA wide parking arrangement that reflects where the highest level of parking demand would be.

8.46 The proposals in both scenarios are based on the above principles.

SCENARIO I

INTRODUCTION

8.47 Under this scenario, an assumption has been made that major one off investment in the COA is unlikely. Therefore funding to improve existing car parks, as well as redevelop surplus car parks is likely to happen incrementally over the next 20 years. This scenario can be best described as 'managed reduction' in off-street public parking.

8.48 Figs 8.3 and 8.4 show that up to 3,000 public off street car parking spaces are not used even during peak periods. This scenario proposes a reduction in the total stock of public off–street car parking by 3000 spaces.

8.49 There would be capacity to reconsider the use of 3000 existing spaces. These spaces could be redeveloped for other uses.

8.50 The overall aim is to optimise the best car parking spaces, to retain the well used spaces that are in the best locations and to improve the car parks that people currently use and are likely to continue to want to use in the future.

REDEVELOPMENT POTENTIAL

8.51 Under this approach, surplus car parks can be redeveloped for alternative uses, principally housing. The OAPF Capacity Model as set out in the Technical appendix shows that the redevelopment of 3000 existing surplus car parking spaces could yield between 700 and 1,000 new homes depending on location.

8.52 It should be noted that not all car parks are surplus to requirements, nor will all sites be suitable for redevelopment. For instance the Council-operated Wandle Rd car park has been earmarked as a suitable site for a bus standing facility and energy centre to support the Council's Decentralised Energy Scheme.

8.53 Please note that the figures included in Fig 8.5 and 8.6 are broad indicative figures.

Character areas	Existing off-stree	Total current spaces	Indicative future reduction	
New Town & East Croydon	Dingwall Road	Wellesley Grove	754	-500
Retail Core	Allders Home Office	Whitgift Shopping Centre Centrale Shopping Centre	3092	-900
Mid Croydon & Fair Field	Fairfield Halls		962	-159 (in addition to the 466 removed in Sept 12)
West Croydon	West Croydon Station	Poplar Walk (disabled only)	72	0
Southern Fringe	Surrey Street Wandle Road NCP Wandle Road LBC Spices Yard	Ann's Place Jubilee Bridge Factory Lane	2327	-1000
Northern Fringe	None		n/a	n/a



8.54 Any redevelopment proposals for public off-street parking locations in the COA should take account of the following points;

- **Quality**: car parks of the poorest quality both structurally and in terms of access and layout will generally be more appropriate for redevelopment. The lower the quality of a car park the more expensive it is likely to be to raise it to a good standard;
- Location: car parks located further away from key activity nodes such as East and West Croydon stations, the Town Hall / Library, Fairfield Halls, the Retail Core and the High Streets, are generally less well used and therefore more appropriate for redevelopment. This is not the case in all instances however as some car parks are needed for more localised purposes. Similarly, those car parks located adjacent to future public realm upgrades linking them to key activity nodes are likely to experience increased usage against those not close to the Connected Croydon programme (see Chapter 5)
- **Vacancy**: car parks experiencing the lowest usage levels with no clear strategy for investment and improvement are more likely to be accepted for release and redevelopment; and
- Site characteristic: regular shaped sites with good road access are likely to be more easily developed than car parks which exhibit a number of significant constraints. Constraints could include proximity to the Croydon Flyover, restricted or convoluted access and proximity to listed building and conservation areas. The development potential of specific car parks will need to be determined on a site by site basis.

8.55 Many of the above are interrelated. While they are not a definitive list for determining which specific car parks should be redeveloped under this scenario, they do help to narrow down the likely candidates for more detailed analysis.

STRENGTHS

8.56 The potential benefits of this scenario include;

- Maintaining the broad distribution of car parking across the COA whereby surplus car parks can be redeveloped as the opportunity arises;
- A number of existing car parks will benefit from improved public realm linking them to key activity nodes such as railway stations, the Town Hall and North End via the Connected Croydon programme;
- Reducing the amount of car parking in the Retail Core and in New Town and East Croydon will help to reduce traffic on Wellesley Rd, thereby helping to deliver the planned longer term improvements. This will enable better use of car parks located outside but within easy walking distance to the Retail Core;
- A broadly even distribution of car parks throughout the COA will enable vehicles to access a public car park quickly irrespective of which direction they come from. This will limit the amount of time vehicular traffic will spend on the local highways network looking for a car park. A VMS system will be required to direct vehicles to available car parks;
- Enables some of the more valuable sites in the COA particularly in the Retail Core and New Town & East Croydon to be redeveloped creating a significant source of new housing, retail and commercial floor space; and
- Enhancing a number of pedestrian routes throughout the COA from car parks to key activity nodes could help create additional footfall in secondary retail locations such as South End / High Street, Surrey St, St Georges Walk, George St and Wellesley Rd.

SCENARIO 2 SIGNIFICANT RETAIL EXPANSION

INTRODUCTION

8.57 Scenario 2 is predicated on a healthier local economy where new major investment is likely. This would enable significant new investment in improving the quality of public car parks.

8.58 While Scenario 1 broadly maintains the current geographic pattern of parking provision across the COA, albeit at reduced levels, this scenario is based on the back of major new retail investment. This scenario looks to;

- Increase the amount of higher quality car parking directly in and adjacent to new retail development in the Retail Core;
- Reduce the amount of lower quality surplus car parks in peripheral areas and redevelop them, primarily for housing; and
- Where possible, increase the amount of underground car parking including underground links between car parks.

8.59 As outlined in Fig 8.6, the overall amount of public off-street parking would remain broadly as it is now, with a total number of spaces at approximately 7,150 spaces. This is in contrast to the 3,000 reduction proposed under scenario 1.

8.60 Whilst scenario 2 promotes an overall retention of a broadly similar number of parking spaces to the current number of spaces, the main change would be the distribution. This scenario would result in approximately 1,000 new car park spaces being created in the Retail Core with a corresponding reduction in the peripheral locations. The increase in numbers in the Retail Core is in response to anticipated new investment in the Retail Core area and the resulting increase in retail floor space and demand.

REDEVELOPMENT POTENTIAL

8.61 An increased amount of car parking in the Retail Core may be achieved through a combination of increasing the capacity of existing car parks or building new ones.

8.62 Principles 1 and 2 of the parking strategy are concerned with reducing traffic flows on Wellesley Road and improving the design and use of the public realm. If there was significant investment in the Retail core along with an increase in car parking, this new car parking should ideally gain access/egress by other means e.g. via the underpass, or by other alternative arrangements that would help to mitigate traffic impacts on Wellesley Road. There are a variety of potential arrangements that would need to be considered at the detailed planning stage.

Character areas	Existing off-stree	Total current spaces	Indicative future reduction	
New Town & East Croydon	Dingwall Road	Wellesley Grove	754	-200
Retail Core	Allders Home Office	Whitgift Shopping Centre Centrale Shopping Centre	3092	+1000
Mid Croydon & Fair Field	Fairfield Halls		962	-159 (in addition to the 466 removed in Sept. 12)
West Croydon	West Croydon Station	Poplar Walk (disabled only)	72	0
Southern Fringe	Surrey Street Wandle Road NCP Wandle Road LBC Spices Yard	Ann's Place Jubilee Bridge Factory Lane	2327	-200
Northern Fringe	None		n/a	n/a

Figure 8.6 Retail led expansion - to public off-street car parks

8.63 Possible access points could be off Barclay Road to enter / exit the current Fairfield car park and then connecting into the wider retail core redevelopment. Closing the underpass on Wellesley Road could be considered as part of the long term aspirations for Wellesley Road and would enable it to be used exclusively as an underground link between Fairfield Halls underground car park and underground servicing in Mid Croydon and the Retail Core. Clearly, significant engineering works would be required to make this possible but the bulk of the infrastructure is already in place including existing underground car parks at Fairfield Halls and Park Place (currently private) and a servicing yard under the Whitgift Centre. Preliminary assessments indicate this option is possible but is likely to require significant capital investment. Sub-surface surveys and engineering assessments will need to be undertaken to determine the deliverability of such an option.

8.64 The preferred solution would be to place as much car parking as possible underground, and linked via an underground circulation system. The exact entry and exit points would be determined through detailed investigations.

8.65 Putting car parking underground would enable substantial improvements to be made to the COA's physical character through redeveloping above-ground car parks for alternative uses with active at-ground frontages and improved public realm between buildings. An internal circulation system linking the underground car parks will also reduce the amount of traffic that would otherwise use the public highways such as Wellesley Road to access car parks.

8.66 Where the creation of new underground car parks, or the linking of existing car parks, is deemed impracticable, access arrangements to above-ground car parks in the Retail Core may be acceptable.

8.67 Regardless of the specific access arrangements for parking in the Retail Core, new development and the resulting parking arrangements will need to demonstrate, through a robustly evidenced Transport Assessment, that the parking plan delivers both the car parking principles in this chapter and the Wellesley Road principles in Chapter 5.

STRENGTHS

8.68 The potential benefits of providing new car parking infrastructure on the back of investment in the Retail Core include –

- Providing better quality car parks directly accessible from the Retail Core's main shopping centres and North End;
- Potentially delivering underground car parks and circulation systems which not only reduce the impact of traffic on Wellesley Road but help improve the physical character within the Retail Core through establishment of new uses with active ground-floor frontages and higher quality public realm between buildings; and
- Freeing up any surplus car parking in the periphery for redevelopment, a large proportion of which could deliver new housing.





Delivering the OAPF

CHAPTER CONTENTS

- Delivery approach
- Residential phasing
- Retail and office phasing
- Infrastructure requirements and costs
- Potential funding sources
- Funding gaps
- Delivery agencies
- Future planning requirements

CHAPTER OBJECTIVES

- Outline the key future choices and dependencies for delivering the OAPF
- Establish broad phasing plans for delivering growth in homes and office and retail space
- Identify broad infrastructure requirements and costs needed to deliver the planned growth
- Outline potential funding sources and identify any funding gaps
- Outline additional future planning work needed to help deliver the OAPF

DELIVERY APPROACH

9.1 The Mayor and Croydon Council are both very aware of the critical role the COA plays in supporting the future growth of Croydon and London. Both authorities will continue to positively support and encourage development that helps deliver the objectives of this OAPF.

9.2 This support is already evident in;

- The strong and clear planning and design guidance that is now in place for the COA. This includes the London Plan, Core Strategy (local plan), the OAPF and the masterplans. This suite of planning documents was nominated for the London Planning Awards 2013. These documents provide a clear and agreed plan for the COA's future. They give developers and the local community clarity about the type of development required and what is acceptable;
- Also, £49m of public funding provided has been allocated by the Mayor and the Council to help deliver physical public realm improvements and economic growth across the COA, with the aim of making the COA a more attractive place.

9.3 Political and public sector support and involvement are key factors in delivering change. However, equally as important is attracting private sector investment. Central to this objective is making the COA a more attractive place for development. To this end, the OAPF acknowledges the importance of securing inward investment in achieving this.

9.4 It does need to be recognised that the OAPF is principally a planning and design guidance document. The OAPF cannot make development happen and it is not a delivery tool, but it can help to make development a more attractive option. Delivery requires a collaborative approach between all parties over the life of the plan.

9.5 A combination of factors are required to help provide a stable and secure market for investors and funders. In turn this stability will lead to investment, growth and change.

9.6 The following components of the OAPF should help attract investment;

- Allowing flexibility: in land use, planning and design requirements. Flexibility is necessary to allow new development to respond to future (unforeseen) changes in market conditions. Small changes in land values significantly affect the viability of development. Over the life of the OAPF, changing economic cycles will impact on the amount and type of development delivered in the COA.
- **Removing unnecessary barriers to growth:** to help simplify the development process and provide certainty to applicants. The OAPF and the masterplans provide clarity about what is required from applicants and what policies can be relaxed to facilitate development. This has been prepared within a realistic delivery and feasibility plan.
- Acknowledging interdependencies: The Council and the Mayor know that the future success of the COA is based on resolving interdependent issues. Certain issues in the COA cannot be resolved in isolation e.g. providing sufficient car parking to support retail competitiveness will have an impact on the ability to deliver a high quality pedestrian/cycle friendly environment on Wellesley Road. The OAPF proposes parking options and a public realm strategy to address this interdependent issue.
- **Supporting investment:** The Council and the Mayor will actively support, and encourage private investment in the COA, in line with the guidance in the OAPF and masterplans. Investment can be incremental or transformational.
- **Securing public funding:** On top of the public sector funding already secured, securing additional funding would continue to build on early physical and economic regeneration.

RESIDENTIAL PHASING

9.7 The delivery of new housing in the COA is vital to the areas future success. Across Croydon and London, the demand for new housing is higher than ever before. However, the supply of new housing is constrained by the ability to secure finance for construction and mortgages.

9.8 Within this context, there are a total of 4,300 homes in the COA that have a live planning permission. 2,000 of these homes are in the New Town and East Croydon area. It is unlikely that this number of homes would come forward over the next five years, as market conditions in the area are not strong enough to make this number of new homes viable.

9.9 Nonetheless, in recent years, new homes have been built in the COA e.g. Altitude 25, Exchange Square and Bauhaus. These residential schemes are mainly medium to high density buildings focused on young people, couples and foreign investors. This type of housing is viewed largely as a stepping stone. Today the housing make-up in the COA contains more affordable homes, serviced apartments, flats for investment and hotel bed spaces than homes for general sale. This trend does need to be addressed if a long term community is to be established in the COA.

9.10 The success of establishing a long term residential community in the COA is the delivery of a large number of new homes matched with a real mix of housing types, along with new retail and commercial space and a much improved public realm. In the future, there is a need to secure other types of housing that will support a more mixed and balanced community.

9.11 To achieve this, sales values will need to be strengthened. Two drivers of value are; public realm improvements and; the creation of a cycle of growth.

9.12 The former is programmed through both committed and planned projects, but the latter could be assisted by encouraging people to remain within the COA and to grow their household in the area. This can be supported by;

- Securing a mix of housing types
- Providing larger flexible homes close to ground level that could be designed in a variety of ways
- Providing more family accommodation in the edge and outer areas of the COA
- · Converting surplus office space to residential

9.13 Fig 9.1 is a 20-year house phasing plan for the COA, which reflects current economic cycles. Over the first five years of the OAPF plan period, it is likely that only Saffron Square would be built out along with some office conversions. In years 6 to 10, latent demand for housing would grow and hopefully economic circumstances would be more conducive and in turn lead to more housing.

9.14 It is anticipated that on average between only 300 and 400 new homes could come on the market every year and for there to be a level of demand for this much housing. This is likely to be lower in the first 5 years, picking up in years 6 to 15 as the character and nature of the COA changes and then falling slowly in the final 5 years as the amount and suitability of appropriate housing sites decreases.

Six Character Areas (starting year 2012 to 2032)	Years 0 to 5 Residential	Years 6 to 10 Residential	Years 11 to 20 Residential
New Town & East Croydon	819	900	1000
Southern Fringe & Old Town	100	150	168
Retail Core	0	400	700
Mid Croydon and Fairfield	100	600	557
West Croydon	0	445	300
Northern Fringe	0	400	661
Total	1019	2895	3386



RETAIL AND OFFICE PHASING

RETAIL

9.15 There is significant potential to regenerate and reinvigorate the Retail core area. It is likely that this could occur in the first ten years of the plan period.

9.16 There is strong political support for improving the quality of the offer in the Retail Core area and creating a retail-led mixed use destination. Improving the quality of the retail offer would include attracting a new full range quality department store and providing some larger retail units. It could also support some increase in retail floor space within the Retail Core. This would be consistent with the COA's status as a London Plan Metropolitan Centre and identifying the COA as one of the largest retail destinations in London outside of the West End, serving south London and the wider south-east of England. It would be most achievable through a comprehensive redevelopment and renewal approach.

9.17 A similar phasing analysis has not been carried out for retail development on the basis that any growth will be focused in the Retail Core.

OFFICE

9.18 The development of new office space in central Croydon has been very restrained in recent years. The first speculative office development underway in the COA in the last 20 years is a five storey office building on Dingwall Road by Abstract.

9.19 The demand for offices in outer London centres has been flat in comparison to spikes in demand in locations in central London. In spite of the COA's opportunities, the demand for office space in

the COA is low. This is primarily because existing stock in the area is of a poor quality that does not meet the demands of modern occupiers.

9.20 There has been a limited amount of new office space built in recent years but there is an excess of 200,000 sq.m. of permitted office space in the COA. If this quantum of office space was implemented, it would represent a substantial over-supply. There needs to be more conducive financial and economic conditions before commercial development becomes viable.

9.21 To achieve this, there is a need for a reduction in vacant and under used offices, particularly in the first 5 years of the plan.

9.22 Coinciding with an increase in good quality office space in the right location, it is also expected that much of the surplus office space outside of New Town and East Croydon would be converted to other uses, or redeveloped. Most conversions are likely to be for residential, however, it is hoped that the flexible approach outlined in the OAPF would also encourage conversion to other uses such as; education, community and cultural facilities. The reduction in surplus commercial space will help focus the office market in New Town and East Croydon where market fundamentals (i.e. rents and quality) are strongest. A stronger, more flexible commercial area will be focused around New Town and East Croydon.

Six Character Areas	Years 0 to 5 Net office figures	Years 6 to 10 Net office uplift	Years 11 to 20 Net office uplift
New Town & East Croydon	0	+190,000	+40,000
Southern Fringe & Old Town	-20,000	-30,000	0
Retail Core	-20,000	-30,000	0
Mid Croydon and Fairfield	-10,000	-15,000	0
West Croydon	-5,000	-5,000	0
Northern Fringe	0	0	0
Total	-55,000	+110,000	+40,000

Figure 9.2 Commercial floor space supply

INFRASTRUCTURE REQUIREMENTS AND COSTS

INFRASTRUCTURE DELIVERY PLAN

9.23 Building a new community of 17,000 people in the COA along with an expanded retail core and redefined commercial sector, on top of an existing population of 8,000 people will require public and private sector investment in social and physical infrastructure.

9.24 Croydon Council's Infrastructure Delivery Plan covers the whole of the borough and includes the COA. It identifies the necessary requirements to support growth across the Borough. The main requirements for the COA are set out in Fig 9.3, including a best estimate of costs. Where the costs are unknown the cost column has been left blank. Over the life of the OAPF, the Council and TfL will continue to work on costing, and delivering, this infrastructure. Depending on future detail and design, there may be scope for efficiency saving.

ELECTRICITY NETWORK DISTRIBUTION

9.25 There is a lack of resilience in the local supply network, which requires the provision of a third, strategic sub-station in the town centre, along with a link to two currently separate branch networks that are separated by the railway line through East Croydon. Croydon Council is in discussions with electricity providers. Without this provision, development of several key sites becomes problematic and electricity supply becomes a major constraint on further new homes, offices and shops. This supply problem needs resolution in the years 5-10 of the plan to remove it as a brake on growth and to provide significant savings in energy distribution.

LOCAL ENERGY INITIATIVES

9.26 The Council is currently exploring the delivery of a district energy system in the COA. A feasibility plan and business case has been prepared. This indicated that the first phase would require between £4m and £6m public subsidy. A further phase would depend upon the degree of commitment and progress of development on several of the larger development sites in the town centre. The Council has requested the GLA consider this work as part of a London-wide package of district energy schemes.

TRANSPORT INTERVENTIONS

9.27 Chapter 7 of the OAPF highlights a range of transport interventions.

FLOODING

9.28 Surface Water Management Plan (Drain London, 2012) includes a recommendation for a storage tank under Whitgift Fields, to the south of the COA. Such a scheme, estimated at up to £10m would alleviate any potential for flooding affecting the town centre. Subject to the findings of a feasibility appraisal this would most likely be undertaken in years 5 to 10.

PLACES FOR SOCIAL ASSEMBLY

9.29 Public assembly spaces (large and small) are limited in number. There is scope to deliver improved spaces, both internal and external. A growing residential community requires new assembly, amenity and cultural activity spaces. The land and buildings exist to accommodate them, but their form and funding needs directing.

SCHOOLS

9.30 There will be a Primary School requirement for 3 schools. £10.5m is the cost expressed in the Infrastructure Delivery Plan for a school. Adding 10% for a central site location results in a cost of £12m per school. Phasing of new schools would be in line with housing and population growth. The likely need is for two schools in years 6 to 10 and one school in the 11 to 20 year period of the plan. The need for a secondary school to the north of the town centre has been identified. It was costed by a Background Assessment to the Infrastructure Delivery Plan, June 2011 at £53.4m. This figure will need to be refined when a site is picked. It is likely that a new 6th form school will be built on the vacant hospital site on London Road.

PUBLIC REALM AND OPEN SPACE

9.31 Chapter 5 of the OAPF sets out the detailed requirements for the public realm network. The COA does have a deficiency in the provision of parks and gardens as identified in Figure 9.3 of the Infrastructure Delivery Plan. The London Road is the most distant from quality open space. The proposed public realm strategy and Connected Croydon programme should address many deficiencies in play facilities for younger children as set out in chapter 5.

UNIVERSITY FACILITIES

9.32 Provision for future university facilities beyond the existing at Croydon College would be welcomed and could be accommodated in existing buildings in close proximity to the College, particularly in Mid Croydon and Fairfield.

HEALTH FACILITIES

9.33 Planning the provision of future health facilities is organised on a sub-regional basis. This makes planning of specific local facilities difficult. The need for a community health facility on the Croydon General Hospital site has been specified, but beyond this there are other facility requirements that are being planned for the additional population anticipated.

EMERGENCY SERVICES

9.34 The existing fire station is fit for purpose. Police facilities are likely to comprise the retention and possible expansion of front-end services in the town centre, with more operational specialist and custodial facilities relocated to appropriate locations outside of the COA.

9.35 A new ambulance station to serve central and north Croydon is an existing requirement.

GAS SUPPLY AND WATER SUPPLY

9.36 There are no foreseeable problems of future supply of gas that are specific to Croydon.

9.37 In providing water supply and waste water management, the Council will need to work closely with the water authority (Thames Water) to ensure sufficient management and delivery.

Requirement	Lead delivery agencies	Cost (if known)	Dependency C = Critical E = Essential A = Aspiration
Enhancement to electricity supply – primary grid substation and extension of local network	UK Power & property owners		C
New secondary school to the north of the town centre	LBC	£53m	E
Three primary schools	LBC	£36m	E
Up to 2 hectares of play spaces and facilities	LBC GLA		А
Public realm (Connected Croydon)	LBC GLA	<i>£</i> 87m	C
Wellesley Road transformation	TfL LBC	£40.1m	E
East Croydon Station – Additional platform	Network Rail	<i>£</i> 20m	А
West Croydon Station – improved interchange	Network Rail	£15m	А
Tram system improvements	TfL LBC		А
Bus system improvements	TfL LBC		E
Cycling infrastructure	TfL LBC		E
Car park improvements & rationalisation	TfL LBC		E
Road network improvements	TfL LBC		E
District energy/local power network	LBC	£55m	А
Health facilities	NHS		E
University facilities	LBC Croydon College	£7.3m	E
Wet & dry leisure			А
Enhanced digital infrastructure	LBC	£1.9m	E
Enterprise centre(s)	LBC		E
Flooding defence	LBC	£10m	E

Figure 9.3 Infrastructure requirements (£)

POTENTIAL FUNDING SOURCES

9.38 Fig 9.3 shows that the indicative infrastructure costs exceed £300 million. This figure will grow once all costs are quantified including those relating to transport interventions. There are several sources of funding to help this requirement.

MAYORS REGENERATION FUND (MRF)

9.39 The Mayor has earmarked £23m of funding for COA projects to help regeneration projects.

- £18m to help fund public realm interventions
- £5m for business support initiatives

9.40 Preliminary analysis has been undertaken to understand the likely impact the £18m 'public realm funding' will have on property values. Empirical evidence ('Paved with Gold, the real value of good street design' CABE 2007 and TfL's 'Valuing the Urban Realm Toolkit) sets out that public realm interventions generate uplift in sales values of properties adjacent to the improvement works,

- Materials and fixtures 3% uplift
- De-cluttering 7% uplift
- Pedestrian priority 12% uplift

9.41 Based on this, the MRF funded public realm works may lead to increases in sales values for residential properties adjacent to the planned works.

9.42 Increased sales values for residential properties will make new residential schemes more viable. By increasing predicted sales values, it is likely to make it easier to secure financing and therefore will make the delivery of schemes more achievable.

9.43 Recognising the role that public realm improvements can have in uplifting sales values is an important factor that needs recognition and should influence decisions about future public sector spending.

COUNCIL'S CAPITAL PROGRAMME

9.44 Croydon Council has approved a 20 year capital investment strategy. The Council has agreed the following capital programme spend to 2016 :

- £9m Regeneration Fund
- £27m Fairfield Halls refurbishment
- £1.2m Trams Purchase
- £3.491m Wandle Park
- £33.35m Connected Croydon
- £6m East Croydon station bridge
- £4,585m District Energy Scheme

CROYDON COUNCIL URBAN REGENERATION VEHICLE [CCURV]

9.45 Croydon Council Urban Regeneration Vehicle (CCURV) will continue to play an important role in transforming the COA. It provides financial resources and skills from both private and public agencies. It is responsible for delivery of the Public Service Delivery Hub (2013) and the future redevelopment of Taberner House.

community infrastructure levy [cil] and section 106 funding $% \left[\left({{\left({{\rm{cil}}} \right)_{\rm{const}}} \right)_{\rm{const}} \right]$

9.46 Community Infrastructure Levy (CIL) allows funds to be raised from new development to be spent on infrastructure schemes, such as; schools, roads, social care; parks and health. Croydon Council has consulted on its draft CIL schedule and this has also now been examined by the Planning Inspector with the report expected in early 2013.

9.47 It is estimated that the Levy will provide in the region of £70m across the entire borough, £30m of which will be generated by future development within the COA to 2031.

9.48 The CIL schedule for the COA proposes the following charging schedule per sq.m. - \pounds 0 for residential (C3), \pounds 20 business uses (B1, B2, B8), \pounds 0 institutions (C2, D2) and \pounds 120 all other uses.

9.49 There is provision in the legislation for the Council to borrow against future anticipated receipts, so the future finance may vary. CIL is likely to be levied from April 2013. It is estimated that it will levy between £4m and £6m annually borough-wide. A 'Regulation 123' statement with a programme of intended expenditure of the receipts has yet to be prepared. Legislation includes for 'a meaningful proportion' of the levy to be applied locally, but clarification from Government upon this will determine the extent to which the levied receipts may be spent on infrastructure in the COA.

9.50 The Council is also revising its S106 policies, with the intention of making developer contributions clearer. S106 funding will also be available to help mitigate the impacts of new development within the COA, but as they are negotiated on a case by case basis the likely total contribution from S106 within the plan period to 2031 is much harder to quantify. S106 receipts are anticipated to reduce by 2013 to those required to fund works to mitigate the immediate impact of the scheme on the site and its surrounds.

FUNDING GAPS

9.51 Critical to the successful implementation of the OAPF is the availability of sufficient funding and political determination to secure the necessary physical and social infrastructure that will help grow and galvanise the local community.

9.52 As set out above, there is an aspiration to fund major infrastructure to the tune of £300m. The key funding sources identified in the last section would provide between £136m and £176m (depending on where CIL monies are spent). There are other funding pots available that may be able to contribute towards plugging this funding gap, including;

- Section 106 contributions from new development that will be provided on-top of CIL contributions.
- New Homes Bonus: is a cash bonus for each completed new home. Early implementation would attract additional funding estimated at £10m for the next five years.
- Business rate retention: tax incremental funding and similar incentives could be implemented in ways to attract investment, but all present complex issues and the Council is considering their suitability.
- Public sector funding: In the future additional funding sources could be made available to help deliver infrastructure.
- Service providers and the local authorities will have to continue to work together to provide the required electricity and water needs and discussions with these service providers, the Council and investors will continue

9.53 At a time when both public and private financing is severely restricted, new funding streams and options will have to be considered. These could take the form of further public borrowing against expected income, or some form of local levy. The Localism Act 2011 allows greater flexibility for the council and local community organisations to act together and with the private sector to create new ways of raising capital and income.

9.54 Other delivery mechanisms being pursued in other parts of Britain are Enterprise Zones, Revolving Land Fund, where capital is used to purchase, develop and realise assets, the proceeds from which are recycled into other sites or buildings; Tax Incremental Funding, effectively raising capital by borrowing against anticipated future local tax revenues and Community Land Trusts, or similar non profit making or shared investments. All of these have been investigated and are being kept under review by the GLA and Council, in case local circumstances and market conditions become favourable to their application. However, current market values are not strong enough to support such schemes without considerable public subsidies.

DELIVERY AGENCIES

9.55 Failure to deliver the projected growth set out in the OAPF will have an impact on the sustainable growth of Croydon and London. It is essential that collaborative working between all agencies and communities is followed to mitigate this.

9.56 The production of this framework involved joint working of GLA and LBC delivery partners, with continued working between:

- LBC / GLA / TfL
- Private sector
- HCA
- Croydon BID
- LEP Forum
- NHS
- Academies & school partnerships

9.57 The GLA, TfL and Croydon Council will continue to work together to help deliver the objectives of the OAPF. This is likely to include the establishment of a COA strategic forum or implementation group. The forum / group will include senior representatives from these authorities with the aim of continuing to drive the regeneration objectives for the COA.

FUTURE PLANNING REQUIREMENTS

9.58 The OAPF and supporting delivery mechanisms set a clear path to growth over the next 20 years. To ensure the growth agenda remains on track a number of supplementary work streams will need to be developed and updated over the short, medium and longer term as tabulated below.

Project	Responsibility	Timeframe
Develop a delivery strategy for public off street car parks	LBC, TfL, NCP, Q-Park & U-Park	Short (2 -5 yrs)
Development and delivery of high street public realm improvements	LBC, GLA, TfL, Croydon BID	Short (2 -5 yrs)
Adopt Mid Croydon Masterplan	Croydon Council	2012
Develop and Adopt Fairfield Masterplan	LBC, GLA, TfL, land owners, Croydon BID, Croydon College, Fairfield Halls, Law Courts	Short (2 -5 yrs)
Develop and Adopt Old Town Masterplan	LBC, GLA, TfL, land owners, Croydon BID	Short (2 -5 yrs)
Develop and Adopt detailed preferred 'End State' for Wellesley Rd	LBC, TfL, GLA, Tramlink	Short (2 -5 yrs)
Site Specific Allocations Development Plan Document	LBC, GLA	Short (2 -5 yrs)
Conduct localised modelling and implementation transport interventions on the A23 and A232, which could include: provision of additional turning lanes at the Fiveways Junction; provision of 2 lanes between Imperial Way and Fiveways on the A23; conversion to two way working on the Epsom Road and signalisation of the Lombard Roundabout	LBC and TfL	Medium (6-10 yrs)
The Strategic Transport Study identified that additional Tramlink capacity will be required through the COA to cater for demand created by growth. It is suggested that a feasibility study is undertaken on possible Tramlink capacity enhancements to understand the full range of potential further options, and identify the most appropriate solution. The feasibility study should also consider the impact that the additional Tramlink capacity will have on the performance of the highway network in the COA	LBC and TfL	Medium (6-10 yrs)
The future arrangement and layout of Wellesley Road	LBC, TfL, GLA, private sector development, land owners	Short to Long term depending on the type of development that come forward along Wellesley Road
Working constructively with applicants to progress and determine planning applications for new development in the COA	LBC, TfL, GLA, private sector development, land owners	On-going




Glossary

AFFORDABLE HOUSING

Housing designed to meet the needs of households whose incomes are not sufficient to allow them to access decent and appropriate housing in their borough. Affordable housing comprises social and intermediate housing. (London Plan)

AT-GROUND

Street level

BRE DAYLIGHT, SUNLIGHT AND OVERSHADOWING STANDARDS

The Building Research Establishment provides guidance on standards and tests, as indicators of daylight, sunlight and overshadowing. This guidance is usually referred to in the consideration of the impact of tall buildings on surrounding properties.

BROWNFIELD SITE

A brownfield site is land previously used for any purpose and no longer used.

BUILDING TYPOLOGY

A classification of building type, in terms of its structure, mass and height

BY DESIGN

'By Design - Urban design in the planning system: towards better practice' was a manual published in 2000 by the Commission for Architecture in the Built Environment.

CCURV

Croydon Council Urban Regeneration Vehicle is a Joint Venture between the Council and John Laing, based on a contractual agreement for the development of Council property assets.

CMC

Croydon Metropolitan Centre

COA

Croydon Opportunity Area

COMPARISON GOODS SHOPPING

Retail shops and goods where the shopper visits to compare quality and price. This is contrasted to those shops and goods that are situated to be used on a daily, or weekly basis by shoppers, particularly for fresh food and described as convenience shopping.

CONNECTED CROYDON

Connected Croydon is a programme of coordinated public realm projects and transport improvements that will transform Croydon Metropolitan Centre (CMC) into a more walkable and liveable place.

CULTURAL AND CREATIVE INDUSTRIES

Employment activities that describe themselves as cultural or creative, including notably architecture, archives and libraries, artistic crafts, audiovisual (such as film, television, video games and multimedia), cultural heritage, design, festivals, music, performing arts, publishing, radio and visual arts. (European Commission)

DPD

Development Plan Document

DECLUTTER

The removal of street furniture, signs, railings, advertisements or other objects.

DEVELOPMENT VIABILITY

A financial assessment of the economics of a development plan or proposal.

DISTRICT ENERGY

District energy, also referred to as the Council's decentralised energy scheme, refers to the creation of a local network of power supply.

GRADE A OFFICE BUILDING

Grading of the quality of office accommodation is based on a broad framework, initially promoted by the Urban Land Institute in the USA, but now adapted and applied to UK cities.

HISTORIC GRAIN - FINE GRAIN

The pattern of urban blocks, streets, plots and buildings referred to collectively as urban grain.

INTEGRATED IMPACT ASSESSMENT (IIA)

Most commonly Integrated Impact Assessments combine an Environmental Impact Assessment (EIA) and a Health Impact Assessment (HIA). An IIA has been undertaken as part of the production of the Opportunity Area Planning Framework.

LDF

Local Development Framework

LIP

Local Implementation Plan – A document setting out the implementation in the Borough of the Mayor of London's Transport Strategy.

MEANWHILE USES

'Meanwhile' or temporary uses are a creative way to activate space while they await more formal development. (LDA)

MODE SHARE

Mode, or modal share describes the proportion of movement of people using differing methods of transport, usually walking, cycling, bus, tram, underground, rail, taxi, motorcycle and car.

NET FLOORSPACE

The floor area of a building, excluding facilities, servicing, lifts and access that are shared or in common to its occupants.

PSDH

The Public Service Delivery Hub (PSDH) is to be named Bernard Wetherall House.

PUBLIC REALM

Those parts of the highway to which the public have shared access and on which the spectrum of public life is carried out. This can include, among others, high streets, rural village streets, market squares and shopping streets but would not include roads of obvious and limited purpose such as motorways and dual carriageways. (Parliamentary Advisory Committee on Transport)

RETAIL CORE

The main shopping centre adjoining both sides of North End.

sl06

Section 106 (S106) of the Town and Country Planning Act 1990 allows a local planning authority (LPA) to enter into a legally-binding agreement or planning obligation with a landowner in association with the granting of planning permission. The obligation is termed a Section 106 Agreement and is a way of delivering or addressing matters that are necessary to make a development acceptable in planning terms.

SEVERANCE

The separation, or rupture, of street level activity, creating detachment of people from each other.

SOCIAL INFRASTRUCTURE

The schools, health and related networks of facilities required to make a community function.

STRATEGIC ENVIRONMENTAL ASSESSMENT

A Strategic Environmental Assesment (SEA) is intended to increase the consideration of environmental issues during decision making related to strategic documents such as plans, programmes and strategies.

The SEA identifies the significant environmental effects that are likely to result from the implementation of the plan or alternative approaches to the plan.

The findings of the assessment are presented in an environmental report that is consulted upon, with the public, alongside a draft of the plan. Issues raised in the environmental report and in responses to the consultation must be considered by the plan-maker before the plan is formally adopted.

SUSTAINABILITY APPRAISAL

An appraisal of the social, environmental and economic effects of a plan from the outset. In doing so it will help ensure that decisions are made that contribute to achieving sustainable development. (IDEA)

SUSTAINABLE URBAN DRAINAGE

Sustainable urban drainage systems (SuDS) are a sequence of management practices, control structures and strategies designed to drain surface water, while minimising pollution and managing the impact on water quality of local water bodies. (CIRA)

SURFACE MODE

Transport mode other than underground.

UDP

Unitary Development Plan, also known as the Croydon Plan.

VMS SYSTEM

Variable Message System is a proprietary supplier of LED based signs, used to assist transport users.



GREATER LONDON AUTHORITY

THEFT