

HDAS Transport Interchanges

Foreword – a broad statement of support highlighting the focus for the document, but also making reference to the wider Hillingdon Context – to be approved and signed by a senior representative within the council e.g. Leader of the Council, Director of Planning.

1 Introduction

Quick Reference Core Message (presented as a box of bullet points to summarise the chapter content)

- 1.1 Transport interchanges are fundamentally important in facilitating sustainable transport and access to urban areas. They are places where walking and cycling, car and taxi modes meet with public transport in the form of bus, tram or rail, providing the opportunity for integrated travel. Their importance as centres for new development and regeneration is intrinsic to the thinking behind both national and London planning policy.
- 1.2 Interchanges and development areas around them are about creating places that increase public transport use and capture the land value associated with the investment made by taxpayers into these facilities. They must also create places that are well-used, and well-loved, places of enduring value. There is also need for multi-modal transport choice management, and not least for the creation and sustenance of good quality places to live and work in the borough.
- 1.3 Transport and development must respond together and create active walkable streets in towns and villages, building density around public transport activity, carefully integrating rail, bus and (possible future) tram facilities so that they become part of the place, and not just alien add-ons. There is also evidence that certain land-use and design factors can influence people's decision to walk. This provides other benefits such as improved public health, more independence for youth and the elderly, improved air quality and greater housing affordability. In Hillingdon, there are also opportunities to exploit both traditional transport interchanges and very local interchanges along public transport corridors at bus stops.
- 1.4 There is increasing market demand for housing and commercial land uses, and a need for higher building densities in the south east. Hillingdon has both vacant and low intensity land uses in large pockets, some near stations.
- 1.5 Multi-modal transport nodes need customised planning, often involving many stakeholders. Areas within key transport corridors also need a blend of uses to create activity and mobility that foster public transport use. Planning policies in these areas will encourage less parking and will seek to lessen the need for car ownership, thus reducing the destructive impact of surface parking on urban quality.
- 1.6 This document recognises the need for sustainable growth in Hillingdon around both public transport nodes and corridors, and sets out the transport development issues for Hillingdon, provides definition of, and design principles for, transport development areas. It also provides guidance on how to apply those design principles or codes to these areas, to both private and public realm.

- Sustainable growth must be based around good public transport links to reduce the need to use the car for local transport and commuting
- High quality transport nodes encourage walking to and use of, these facilities
- Development successes close to transport are efficient and equitable and provide a mix of choices in land use and mobility
- Transport Development Areas capture value for residents in lowering household expenditure, provide transport agencies greater income, and provide a greater revenue source for the borough, to the benefit of public services for all

Purpose of the Document

- 1.7 For use by LB Hillingdon in making development control decisions on planning applications in the identified transport corridors and at interchanges, and in deciding on the nature of public realm improvements in these areas.
- 1.8 For information to transport operators and public transport agencies on transport access and development synergy in the Borough of Hillingdon.
- 1.9 For information for the Greater London Authority, adjoining planning authorities and statutory planning consultees, and developers on how LB Hillingdon will interpret the Mayor's London Plan and Transport Strategy in the Western Wedge.

How to use the document

- 1.10 The document sets out nodes and corridors where development and public transport are to be integrally linked. Section 4 sets out the design principles to be applied for both development and public realm for these areas.

Status of the guidance

- 1.11 As a Supplementary Planning Document, the design principles will be material in considering planning applications. They will also guide expected provision of public realm infrastructure from both public authority investment programmes and from developer funded agreements.

2 Policy Context

Quick Reference Core Message (presented as a box of bullet points to summarise the chapter content)

- 2.1 Transport policy is set nationally, regionally and locally to encourage greater use of sustainable transport modes of cycling, bus tram and rail. Central to all these policy aspirations is the need to create a good walking environment providing good places, both for access and for quality of life.

Relevant National Policy

Planning Policy Guidance 3, Housing

- 2.2 PPG 3 encourages Local Authorities to create more sustainable patterns of development by building in ways which exploit and deliver accessibility by public transport to jobs, education and health facilities, shopping, leisure and local services.
- 2.3 PPG3 seeks to promote more sustainable residential environments by encouraging, amongst other things, development that is linked to public transport, mixed use development, and a greater emphasis on quality and designing places for people. PPG3 states that larger housing developments should be located around major nodes along good quality public transport corridors (both existing and those with firm proposals for improvement in local transport plans) and seek to ensure that all housing developments are accessible by a range of non-car modes.
- 2.4 In terms of parking standards, PPG3 states that local authorities should revise their parking standards to allow for significantly lower levels of off-street parking provision, particularly for developments in locations, such as town centres, where services are readily accessible by walking, cycling or public transport;

Planning Policy Guidance 6, Town Centres and Retail Developments

- 2.5 The Government's objectives with regard to town centres and retail development are to promote '*vitality and viability of town centres*', and endeavour to provide easy access to facilities by a range of transport modes.
- 2.6 PPG6 specifies that town and city centres should be the preferred location for large trip attracting and generating developments.
- 2.7 Town centres should remain the focus for developments that generate/attract large numbers of trips, as they act as public transport hubs. The location of new large trip generating developments in city centres with good access to public transport is suggested to increase linked trips thus reducing the need to travel and reliance upon the car.

Planning Policy Guidance 13, Transport

- 2.8 Sustainable development is the philosophy at the core of PPG13. This aims for a reduction in travel demand by encouraging development that reduces the need for travel, and maximises opportunities for the use of non-car modes such as public transport, walking and cycling. Mixed developments are seen as the key to delivering such aspirations.
- 2.9 Three objectives are specified within PPG13:
- The reduction in growth for the length and number of motorised trips;
 - The promotion of alternative methods of travel to lessen the effect of transport on the environment; and
 - The reduction of reliance on the private car.

- 2.10 The importance of developing 'key sites' is covered within the note. The policy (Paragraph 21) states that local authorities should seek to maximise use of the most accessible sites, such as those in town centres and others which are, or will be, close to major transport interchanges. PPG13 suggests that local authorities should proactively promote intensive development in these areas.

Making London a walkable city – The Walking Plan for London, Transport for London February 2004

- 2.11 The Walking Plan aims to ensure that London becomes one of the world's most walking friendly cities by 2015. Walkability is defined as "the extent to which walking is readily available to the consumer as a safe, connected, accessible and pleasant activity. Key indicators that make a city walkable are seen as the route being connected, convivial, conspicuous, comfortable and convenient.
- 2.12 The benefits of walking are numerous and include; greater use of public transport, a better environment, social inclusion, healthier lifestyles and an improved economy. The objectives of the Walking Plan are set out as:
- Improving co-ordination and inclusiveness in the Walking Plan development - to adopt a consistent approach across London
 - Promoting walking – by overcoming the barriers to walking
 - Improving street conditions – from large scale projects to local improvements and maintenance
 - Improving development proposals and interchanges – through ensuring that proposals maximise pedestrian access and convenience
 - Improving safety and security – by reducing vehicle speed better design of streets

Mayor's London Plan

- 2.13 In the London Plan, Hillingdon lies within the Western Wedge and there are specific policies which aim to promote economic growth and facilitate new homes and jobs in appropriate locations.
- 2.14 These include 'Areas for Intensification' where Boroughs should be promoting development opportunities through higher density redevelopment at key transport nodes and in town centres and seek to achieve higher levels of provision wherever possible, especially for housing. Hillingdon is expected to provide 8890 new homes by 2016.
- 2.15 Section 4 of the London Plan sets out the Mayor's design objectives for accommodating growth within current boundaries. The Plan recognises that to achieve this, there must be more intensive development in the right places. A guide to densities is set out in Table 4B.1 which sets a strategic framework for densities at different locations, although this is not static. It is a tool for increasing density in situations where transport proposals will change the public transport accessibility ranking. This has been reflected in the matrix set out within this design guidance.

- 2.16 The London Plan also seeks to ensure that on-site car parking at new developments is the minimum necessary and that there is no over-provision that could undermine the use of more sustainable non-car modes. The only exception is to ensure that developments are accessible for disabled people.

Mayor's Transport Strategy

- 2.17 Improving interchange forms a crucial part of the Mayor's Transport Strategy (GLA, 2001) and is recognised as fundamentally contributing to improved transport network integration.

- 2.18 Policy objectives relevant to interchange are to:

- promote London
- promote economic development and regeneration
- promote network efficiency
- promote town centres
- promote walking and cycling
- promote accessibility
- promote travel choice and quality

- 2.19 Refer to Hillingdon.

Hillingdon Unitary Development Plan Adopted September 1998

- 2.20 The Hillingdon UDP sets out transport policies within a chapter on Accessibility and Movement. This chapter seeks to reduce the need for travel, limiting parking and promoting greater use of public transport.

- 2.21 The UDP recognises the link between land use and providing uses in accessible locations, such as in town centres or local centres.

Hillingdon Borough Transport Strategy – Draft for Consultation 12th July – 11th October 2004

- 2.22 Hillingdon's Transport Strategy addresses issues by mode, whilst recognising that the car is the preferred mode of transport for many. The Strategy aims to address a number of issues including congestion, public transport capacity, parking, walking and cycling.

- 2.23 The Strategy indicates that Hillingdon has been successful in achieving substantial improvements at several of its local interchange locations and the proposals for improvements to Uxbridge station are progressing. Improvements in this regard are mainly related to the interchange only and whilst the local surrounds may be included, this is in terms of improving links and walkability rather than the provision of other mixed use developments near or adjacent to the site.

- 2.24 The Strategy considers the introduction and benefits of Transport Development Areas (TDA's), key locations close to transport interchanges which are suitable for intensification of development. There is however no specific spatial

transport framework within the UDP and Transport Strategy to facilitate development at interchanges that this statement seeks to achieve.

3 Hillingdon Overview

- The main mode of transport is the car and vehicle congestion is increasing.
- The Borough is mainly suburban with low public transport accessibility levels.
- There are large areas of zoned land uses.
- The main housing type is low density, ex London County Council housing.
- Public transport is provided mainly by the Piccadilly Line in the north of the Borough, by GNER services through Hayes, Harlington and West Drayton and tube at Heathrow.
- Key interchanges are identified at historic centres like Uxbridge and Hayes and at centres with stations.
- Main transport corridors are identified with priority bus routes running along heavily trafficked vehicular routes.
- Make a point about Floorspace Density.

- 3.1 The borough of Hillingdon has grown as a set of villages which form the heart of the boroughs district and local centres. Public transport linkages between the centres are often broken and not exploited to the maximum and orbital travel within the Borough is an identified problem.
- 3.2 Hillingdon borough, being on the edge of the metropolitan area, is currently very car-reliant for mobility. It has several strategic roads that take traffic from the wider area accessing employment areas and Heathrow or passing through the borough. The Borough is characterised by its low density inter war suburbs, including London County Council housing estates. It is recognised that in some locations these are in poor condition and within the suburbs there is limited mixed land uses which increases the need to travel for some.
- 3.3 There is little synergy between transport interchanges and land uses except in Uxbridge town centre where new development has helped in funding a walking environment conducive to linking tube, bus and other modes of travel. Public transport accessibility level (PTAL) never exceeds level 4 except in Uxbridge, and only reaches level 3 in Hayes and Harlington and immediately around Ruislip tube station. **Note - The current PTAL system is not sufficient to measure site accessibility outside central London [quote from ALG]**
- 3.4 Development in Hillingdon, particularly residential, is constrained by the Green Belt and other protective designations so all new development is likely to be within urban areas, on brownfield and infill sites. There are opportunities to provide housing at higher densities in the Borough at transport interchanges, helping to meet the housing allocation and making more efficient use of land.
- 3.5 In developing this guidance, a distinction has been made between transport interchanges, nodes, and transport interchanges on routes, corridors. This is necessary as the design principles, treatment and type of development differ substantially for each.

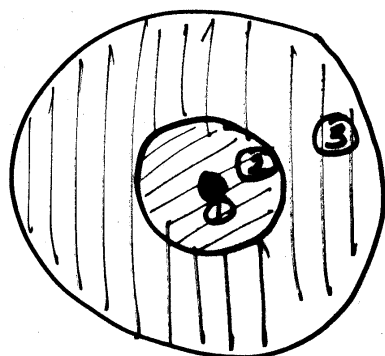
Transport Interchanges

3.6 The Council recognises the need to acknowledge categories of interchange type. These are based on level and capacity of services, network linkage, and catchment area.

- Category A: Stations at Hayes and Harlington, Heathrow, Uxbridge and West Drayton.
- Category B: Stations at Northwood, Hillingdon, Ruislip and West Ruislip.
- Category C: All other stations.

[N.B. Northwood is outside the Western Wedge]

Development at Interchanges



1. high density development
high quality interchange
low parking
2. medium density development
medium parking
3. walkable streets

3.7 Illustrated above are the priorities at the transport interchange, and in those areas radiating out. At the transport interchange, high quality and high density development should be achieved with low levels of parking, and in surrounding areas medium density and medium parking levels are more appropriate. Within all areas there should be walkable streets.

3.8 Uxbridge, Hayes and Harlington, Heathrow and Ruislip are all interchanges of strategic or sub-regional importance in respect of bus to rail interchanges. Hayes and Harlington station has a regional transport catchment though train services are not as frequent as would be ideal for such a category.

3.9 Most interchanges within the borough of Hillingdon serve district wide and local catchment, mainly providing bus and London Underground services. They act as routes to work and services and have spin off benefits to providing people with the opportunity to use local or town centre facilities, shops and businesses. At interchanges, they often provide a place to wait between trips on different transport modes such as train to bus.

Priority Public Transport Corridors

3.10 Walking to bus stops feature extensively along existing bus networks within the borough. These play an important role in influencing modal shift. It is also

important that key routes on the bus network within the borough are identified and promoted. Many local residents walk to local bus stops where they get a bus to their destination. The following key routes and interchanges have been identified:

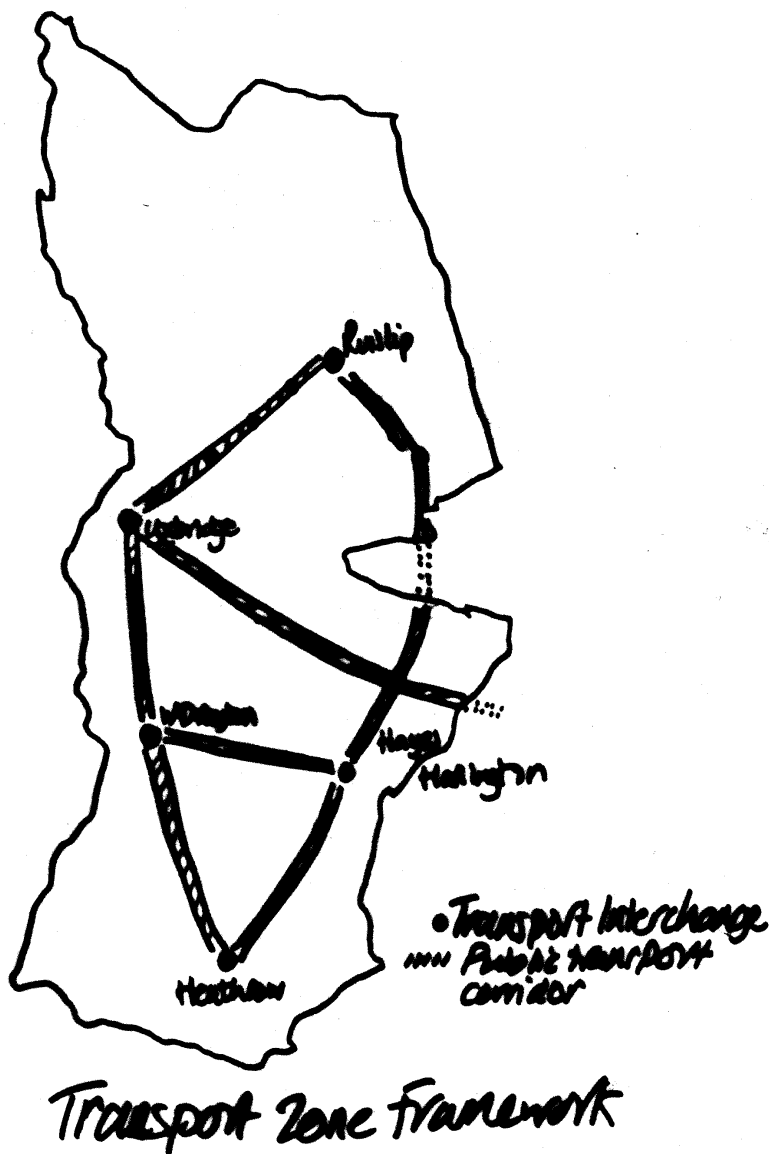
- Uxbridge Road (Bus 207)
- Station Road/ Coldharbour Lane
- Cowley Road / Uxbridge Road
- Long Lane and Harlington Road
- Ickenham Road to West Ruislip
- Yeading Lane / Coldharbour Lane / Uxbridge Road

Insert illustration showing the density levels on public transport corridors.

3.11 These transport corridors link village and town centres and form a movement hub for the borough as they form important links between key centres and interchanges and they link employment districts to interchanges and stops. Most rightly mirror the highest traffic roads, and seek to provide a robust alternative choice to car travel along these routes.

A Transport Zone Framework

- 3.12 There are opportunities to make improved linkages between some of the satellite villages around Uxbridge which would improve connectivity and orbital travel and build on key bus routes and intensify what is presently low density suburban housing. This encourages income and enough catchment for successful operation of public transport services. Illustrated below is the main nodes and transport corridors in Hillingdon.



- 3.13 The corridors link the interchanges forming a concentrated transport zone, encouraging development in these areas, keeping development pressure away from green belts and edges and keeps car use and ownership down.

4 Design Principles

- 4.1 The design concept for interchanges in Hillingdon is to encourage appropriate development at transport interchanges and transport links as set out in the matrix below. The design principles are intended to support a transport zone of nodes and links. These are formed of transport interchanges (public transport access 'hotspots'), and featured public transport priority corridors.
- 4.2 This section sets out design principles for development in the transport zones and principles for public realm that will benefit the walking environment at these interchange facilities. These concentrate on development issues that affect the pedestrian catchment of an interchange or corridor, and influencing the selection of mode of travel.

Development

- 4.3 It is clear from national and strategic guidance that development at transport interchanges is beneficial, particularly in reducing the reliance on the car, building at higher densities to meet housing allocations and making more efficient use of land. The TDA¹ concept promotes well designed, higher density, mixed-use areas situated around good public transport access points in urban areas. The development of proposals for the TDA involves a range of stakeholders which if on board from the outset facilitates land assembly, funding and defining a delivery mechanism.
- 4.4 There is certainly scope within Hillingdon to develop this concept, particularly because of the reliance on the car and the present low density development around some nodes. This Statement provides a checklist for facilitating this process, see the matrix at Para 4.34.
- 4.5 Within the Borough, there is also a need to relate transport and land use accessibility to residential areas, on priority routes, as well as major attractors in the town centre. This is on a small scale around bus stops and local interchanges.
- 4.6 Along public transport corridors are low density suburbs which are not attractive to transport operators as they do not provide the people to use the service. To encourage the provision of public transport in the Borough, there needs to be adequate catchment to service it. This is one of the prime mechanisms for encouraging transport operators to implement and enhance services on routes, and in providing a catchment, the economic viability of a route is more assured. The Urban Design Compendium² states that a bus route will be viable if there are enough people within a 400m radius of each stop. A density of around 80 persons per hectare provides a catchment of 2000 people per stop and that densities below this may not be attractive to bus operators.

1.1 _____

¹ The Royal Institution of Chartered Surveyors published research in 2001 into the feasibility of setting up Transport Development Areas (TDAs), in conjunction with the Department of the Environment, Transport and the Regions.

² Urban Design Compendium, Llewelyn-Davies, August 2000

- 4.7 Set out below are the principles for development at transport interchange nodes and corridors. These include: density, parking standards, car parking and charging, connections and mixed uses. The information is summarised in a matrix which also refers to the node or route to which the criteria relates.

Density

- 4.8 In national, regional and local guidance, it is recognised that development at transport nodes and links should be intensified, although the density level changes from location: town centre to neighbourhood centre, and distance from the interchange: within a 400m radius and within a 400-800m radius.
- 4.9 The residential and employment density ranges that should be used in Hillingdon are set out below and are taken primarily from the London Place. The high density range will apply to Uxbridge only as this is the main centre in the Borough. It is appropriate to use the medium density ranges for other Category A stations due to their suburban location.

4.10 PUT IN FLOORSPACE DENSITIES – (REFER TO GLA REPORT)

	Houses (dph) Detached/linked	Houses (dph) Terraced houses and flats	Flats (dph) Mostly flats
High Density	n/a	55-175	165-275
Medium Density	n/a	50-120	80-120
Low Density	35-65	50-80	n/a
Parking Provision	2-1.5 spaces	1.5-1 space	<1 space

Parking standards (new development)

- 4.11 Within areas around transport interchanges, parking standards should be lower and there should not be provision for additional parking in these locations. This is supported by national and local policy which recognises that close proximity to alternative modes allows for more transport choice and lessens reliability on the car as the sole means of completing a journey.
- 4.12 The table above sets out the appropriate parking standards from the London Plan for development by house type. This reflects that at major nodes, flats are the most appropriate development; therefore the lowest parking provision should be used.

Car parks and charging

- 4.13 At car parks located close to public interchanges, there should be a charge made for car parking, proportionate to the level of interchange, i.e. highest charge for parking close to a Category A station. As a general rule new car parking should not be provided within 800m of the interchange as this may encourage people to drive to the destination rather than use other means.
- 4.14 Although limited, where additional car parking is justified, facilities should be secure, well-lit and clearly sign-posted.

Connections

- 4.15 Providing good connections for public transport uses, pedestrians and cyclists has the benefit of creating a place that is easy to move around. Easy, direct access to public transport facilities is vital to encourage greater use. This can be done by providing routes that follow desire lines to encourage walking and cycling.

Mixed uses

- 4.16 To make places more liveable, there needs to be a range of uses. Variety of uses provides many benefits such as varied building types, attraction of varied people at varied times for varied reasons. There are also benefits in reducing the need to travel.

Public realm

- 4.17 Public realm design principles concentrate on the walking environment, how people get to the interchange, how they transfer from one mode to the other, and what they do when they wait. Transport for London (TfL) recognises that improving interchanges is key to promoting the use of public transport. Guidance is contained within the TfL document Intermodal Transport, Interchange for London, Best Practice Guidelines, January 2001 (Issue 1) to which this guidance refers.
- 4.18 The public realm design principles relate to different catchment areas beyond each category of station reflecting the priorities that pedestrians and cyclists have in reaching the interchange.

Illustrate extent of public realm principles by category
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- Category 'A' – Principles apply to 800m around the interchange. People want to reach the interchange safely and be comfortable when arriving. In addition, their expectations of the facilities offered at the interchange will be greater; it is more of an experience.
- Category 'B' - Principles apply to 400m around the interchange. People want to reach the interchange safely and be comfortable when arriving.

- Category 'C' - Principles apply to the interchange whether it is a station, bus station or stop. People want to reach the interchange safely.
- 4.19 When designing the public realm it is easy to provide too much signage, street furniture and a range of other items. It is important though that these spaces do not become obscured by clutter. This will be counter-productive and create a confusing place of poor quality which is neither navigable nor easy to understand. A co-ordinated approach towards the interchange as a whole, whether in a node or corridor, provides a well-structured and coherent environment.

Facilities for waiting

- 4.20 At interchanges there needs to be facilities that allow people to wait in comfort for their connections and provide services they may wish to use. This includes shelter, seats, clocks, telephones, toilets, cash machine etc. Creating active places also increases feelings of security within the interchange.
- 4.21 The TfL Guidelines recognise that the provision of other facilities such as shops, places to buy food and drink, and cash machines allows people to make productive use of the time whilst waiting for their next service. This type of service can also be useful for people living and working in the surrounding area. Guaranteed footfall from the interchange may make this an attractive proposition for potential vendors.

Facilities for Buses

- 4.22 Within the TfL Best Practice Guidelines, it is recognised that provision for buses at interchanges should incorporate several key attributes. Services provided should be safe, comfortable and convenient. This includes walkways and waiting areas, directional signing and information for other services and modes. Bus stops at interchanges should allow for full accessibility for all.
- 4.23 At some bus interchanges in London, it is not unusual to have a full range of facilities such as a shop kiosk, APC (Automated Public Convenience) and Real Time Information. The provision of RTI is important in providing up to date information to waiting passengers.

Facilities for cyclists

- 4.24 At interchanges, facilities need to be provided for cyclists to lock and store their bikes if users are changing modes. Facilities should be secure, protected from weather and well lit. Sheffield stands will usually be most appropriate, or if there is a Borough wide style this should be adopted for consistency and continuity. In some locations there may be scope for enhanced facilities such as cycle lockers, although this is only likely to be in Category A stations.
- 4.25 To establish the correct level of provision, an assessment of demand should be undertaken first, particularly with local cycle groups and users of the interchange.

Facilities for taxi and kiss and ride

- 4.26 Ranks for taxis should be provided that are convenient for passengers. They should be well lit and accessible for all.
- 4.27 At transport nodes, parking for the disabled should be accommodated in locations that are close to the entrance of the station. It may also be appropriate to provide a set down point for kiss and ride, although priority should be given to essential car users. This could also serve as a waiting place for people being picked up from the interchange.

Signage, information and wayfinding

- 4.28 Routes should be clearly signposted to enable passengers to quickly identify where they are going. The use of signs can be creative and use techniques such as arrows on the floor, tiling, or mirror the architectural features of the station.
- 4.29 Real time information and information points are also beneficial to passengers.
- 4.30 Signing should take account of sensory impaired people and ensure that easily recognisable symbols are used for tourists and visitors who may not necessarily speak English.

Security and conspicuousness

- 4.31 Improving safety at interchanges inspires confidence and people may be more likely to use them. This can be done by improving lighting and providing CCTV. In the long term, establishing active frontages which overlook the interchange provide opportunities for natural surveillance.

Ancillary activities (public art etc)

- 4.32 To make interchanges more interesting places, it may be appropriate to introduce some form of public art, providing an extra layer of quality. This can provides a landmark feature within a development which contributes to giving a place character and identity.

Design Guide Principles

- 4.33 Set out below are the principles to be employed at transport interchanges which should be read with reference to the text above.

		Development Principles			Public Realm Principles			
	Description	Density Profile	Parking Standards	Land Use Mix	Train Facilities	Bus Facilities	Cycle Realm	Pedestrian Realm
Category A Uxbridge only for development principles	Node at a strategic town centre	High	Flats - <1 space per unit Terraced housing – 1 – 1.5 space per unit	<ul style="list-style-type: none"> •Residential •Retail •Commercial •Leisure 	<ul style="list-style-type: none"> •Cafes, cash machines •Toilets •Cycle Lock Up •Wayfinding •Information •RTI •Taxi, kiss and ride and disabled parking 	Super Bus Stop: <ul style="list-style-type: none"> • Shelter • Kiosk • APC • Phone • RTI 	<ul style="list-style-type: none"> • Segregated cycle lane • Well lit and overlooked cycle lanes • Direct routes 	<ul style="list-style-type: none"> • Wide crossings • Well lit streets • Overlooked • Public Art • Squares/ Plazas • Reflect local desire lines • Direct Routes • Seating en route
Category B Include West Drayton, Hayes and Harlington and Ruislip in development principles	Node at a local centre	Medium	Flats - <1 space per unit Terraced housing – 1 – 1.5 space per unit	<ul style="list-style-type: none"> •Residential •Retail •Commercial •Leisure 	<ul style="list-style-type: none"> •Cycle Stands •Wayfinding •Information •RTI •Taxi, kiss and ride and disabled parking 	<ul style="list-style-type: none"> • Shelter • Phone • RTI 	<ul style="list-style-type: none"> • Segregated and shared cycle lanes • Well lit and overlooked cycle lanes • Direct routes 	<ul style="list-style-type: none"> • Wide crossings • Well lit streets • Overlooked • Public Art • Reflect local desire lines • Direct Routes • Seating en route
Category C /Users/timpharoah/Documents/01 Old LD projects/06/12/2020	Node at a local interchange	Low	Flats - <1 space per unit Terraced housing – 1 – 1.5 space per unit Detached/linked housing – 1.5 – 2 spaces per unit	<ul style="list-style-type: none"> •Residential •Retail •Commercial 	<ul style="list-style-type: none"> •Cycle Stands •Wayfinding •Information •RTI •Taxi, kiss and ride and disabled parking 	<ul style="list-style-type: none"> • Shelter • Phone • RTI 	<ul style="list-style-type: none"> • Segregated and shared cycle lanes • Well lit and overlooked cycle lanes • Direct routes 	<ul style="list-style-type: none"> • Wide crossings • Well lit streets • Overlooked • Reflect local desire lines • Direct Routes • Seating en route

Process of application

Presents a methodology and guidance for the application of the design principles

- 4.34 The matrix set out helps to define the level of provision at each interchange location. It is intended as a guide and should be kept under review in case circumstances within the Borough change. It should be read in conjunction with guidance contained within national and regional policy and adapted suitably for individual cases.
- 4.35 Most interchanges may not be able to benefit from such a wide range of services due to resource issues but other means of securing funding are available, such as developer s106 contributions. This guidance will provide more certainty over what is expected for development at transport interchanges enabling effective negotiations with planning applicants.

5 Appendix

- Includes any additional reference material and useful contact details
- Intermodal Transport Interchange for London – Best Practice Guidelines, Transport for London et al, 2001.
- Improving Interchange in London, Transport for London, August 2002
- Areas of Intensification, Report to the Association of London Government on the Draft London Plan, MTRU, January 2003
- Land Value and Public Transport, RICS Policy Unit, October 2002
- PTAL map Hillingdon, TfL February 2000
- A City of Villages, SDS Technical Report 11 – Report by Urbed with TCPA for GLA and GOL, 2002
- Dittmar, H and Ohland, G. eds. 2004. *The New Transit Town: Best Practice in Transit-Oriented Development*. Washington D.C. Island Press