# croydon gateway a landmark development to regenerate central Croydon

### Your questions answered

IN DISCUSSIONS WITH STAKEHOLDERS AND THE PUBLIC, SOME QUESTIONS HAVE REPE EMERGED. THESE HAVE CHIEFLY CENTRED AROUND THREE PARTICULAR AREAS:

- Anti Social Behaviour Fears have been raised that adding more people to Croydon's town centre would exacerbate existing problems with crime and drinking.
- 2. The Business Case Concerns have been raised that the arena could become a drain on the public purse.
- 3. Traffic and Public Transport Incorrect assumptions about the impact of the development on traffic and public transport have also featured in discussions with local people.



Computerised Image of arena led development

Arrowcroft is committed to ongoing liaison with the communities around the Gateway site and the representative groups within Croydon which have an interest in the development. Arrowcroft has therefore compiled this document to address many of the points that have been raised.

The development will comprise a 12,500 seat arena, together with ancillary commercial and retail floorspace as well as mixed tenure residential units, comprising:

- A 12,500 seat arena;
- · 57,800 sqm of office floorspace;
- · 10,212 sqm of retail floorspace;
- · a 7,650 sqm foodstore;
- · 5,756 sqm of restaurant floorspace:
- 9, 548 sqm of leisure/sporting facilities;
- · 834 residential flats; and
- · Community health centre.

#### ANTI-SOCIAL BEHAVIOUR

Croydon's town centre has a particular problem with a drinking culture and high levels of crime. This is an inescapable fact and has to be tackled head on when thinking about how to use the Gateway site.

www.croydongateway.com

Arrowcroft



The Arrowcroft scheme addresses the problem of antisocial behaviour through mixed use development, allowing the local community to "reclaim" its public spaces. Mixed use brings activity and people, dispelling environments that encourage crime,

Croydon's core problem is that it is overly dominated by low grade offices and business premises. Once office hours are finished, and workers leave the centre, the town centre becomes a vacuum that is often filled by gangs and those seeking to indulge in binge drinking.

Since the late 1970's a movement called "new urbanism" has sought to change the way we view our city centres and has become the key to the design of sustainable town centres. New urbanism recognised that instead of centres being environments where people work from 9 to 5 and then leave, they can become areas which are used by the community as places to work, shop, eat out and spend their leisure time.

New urbanism has shown that this change can only be achieved by encouraging mixed development (i.e. cafes, shops, homes, offices, restaurants, leisure and cultural facilities) thus encouraging varied uses for land and space that keep areas vibrant throughout the day and evening.

The crucial aspect of this in terms of crime and antisocial behaviour is that the presence of more people, over a wide range of age groups, is recognised by the Home Office, The Association of Chief Police Officers, criminologists, academics and many charities and foundations as having a "self-policing" effect. It is this type of experience in US and UK cities which underpins the Council's desire to see the Gateway site become an area which is not just a 9 to 5 venue for more office workers, but quality, landscaped public space at the centre of a vibrant mixed use project and anchored by an important cultural offering, to create an appealing, safe, family oriented environment.

#### 2.0 THE BUSINESS CASE

The arena will be entirely financed by Arrowcroft and its partners. The arena will not be owned by the Council, nor will the Council be involved in its financing in any way. Consequently, the public should be assured that there is no possibility of any burden arising for Council Tax payers.

In terms of viability, the three crucial factors are firstly the location alongside East Croydon station; secondly, its adaptability; and thirdly, the quality of the venue.

The location, with its unparalleled transport infrastructure, gives it an extensive catchment area, while its connectivity makes it ideally situated to tap into the leisure spending potential of this area of the country.

Table 1 below indicates how easily accessible the arena is by rail for many parts of London and the South East. It also indicates the times taken to reach potential alternative arenas from the same start points. As can be seen below, the Croydon arena would have a huge advantage in terms of convenience of travel for many people.

	Wembley Arena (Times expressed in hours: minutes)	Greenwich/02 Arena (Times expressed in hours: minutes)	Croydon Gateway Arena (Times expressed in hours: minutes)
Clapham Junction	1:02 - 1:11	1:03 – 1:11	0:15
Wimbledon	1:10 - 1:14	1:09 - 1:17	0:32 - 0:34
Richmond	0:49 - 1:15	1:17 - 1:21	0:35 - 0:54
Brighton	1:23 - 1:36	1:17 - 1:33	0:35 - 0:54
Victoria	0:54 - 0:56	0:32 - 0:40	0:16 - 0:33
London Bridge	1:00 - 0:55	0:08 - 0:10	0:13 - 0:16

Table 1: Travel times to Croydon and alternative arenas

gateway

The adaptability of the arena is also key, allowing it to attract a wide mixture of events. London is the music capital of Europe, guaranteeing a steady stream of performers of all genres looking for venues to showcase their talent.

The arena's flexibility means it can also be adapted for other uses such as sports events; for example indoor tennis, equestrian events, basketball or ice hockey. It will also be an ideal venue for business events such as conferences, Annual General Meetings, corporate promotions or prestigious Awards Dinners, supporting Croydon's status as an important business centre.

During the day, the arena's concourse will be a place where people can meet and enjoy a coffee and will also act as a focus for smaller community and business events.

#### 3.0 TRAFFIC AND PUBLIC TRANSPORT

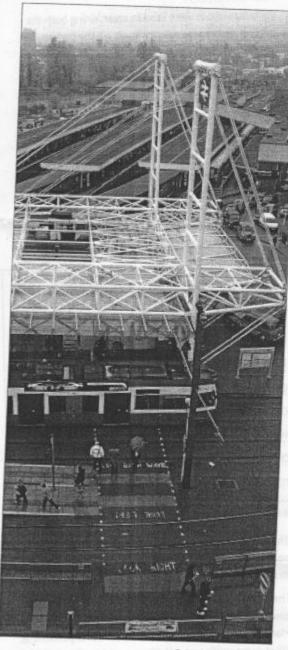
This section has been prepared by Arrowcroft's

Transport Engineers, Colin Buchanan, in response to
inquiries relating to the capacity of Croydon's transport
infrastructure and the proposed mixed use
development located adjacent to East Croydon train
station.

The planning authority resolved to grant detailed planning permission in February 2005. As part of this process a Transport Assessment (TA) was produced in December 2003 which assessed the impact that the development as a whole would have on both the highway network and surrounding public transport infrastructure. This includes the residential, office and leisure uses of the Gateway site as well as the arena.

Subsequently, several supporting documents have been produced, taking on board comments made by the relevant transport authorities, including Transport for London.

This summary note therefore seeks to explain the various methods used in assessing the transport impact of the development and describes both the methodology used and results of the analysis.



East Croydon Station

It concludes that the transport facilities have the capacity to comfortably cope with the traffic generated by the Gateway project.



#### METHODOLOGY

Various methods were used in ascertaining both the existing and future capacity levels on the highway network and public transport modes. All future trip generation from the development was based on the modal split developed for Croydon by Colin Buchanan based on London Area Transport Survey (LATS) information, which includes household surveys and information about people's travel movements for all areas of London and neighbouring districts.

Additional information was obtained from the Croydon Tramlink Impact Study (Oscar Faber, March 2002) which included information regarding the shift in travel patterns due to the introduction of the tram. The outcome of the studies is summarised in Table 2 below.

A	All Purposes	Work	Shopping	Leisure	Arena
Train	5.4%	10.2%	1.6%	4.2%	30.0%
Bus	14.6%	18.8%	34.8%	7.5%	10.0%
Tram	10.0%	10.0%	10.0%	10.0%	10.0%
Car Driver	30.1%	32.7%	15.3%	28.7%	15.0%
Car Passenger	12.8%	11.7%	12.1%	20.9%	20.0%
Walk	25.4%	13.3%	25,3%	27.7%	0.0%
Other/Combin	ed 1.7%	3.3%	0.9%	1.0%	15.0%
TOTAL	100%	100%	100%	100%	100%

Table 2: Public's travel patterns to Croydon centre

The above table shows the various modes by which people in Croydon currently travel for the majority of journey purposes within Croydon Town Centre.

The arena trips have been added to the table, and are based on projections outlined within the Event Management Plan (which is based on travel patterns at other comparable venues). The percentage break-down represents a daily average and assumes that people would return home by the same mode in which they initially travelled.

It is expected that some people within the locality will choose to walk to events at the arena. However, in order to make the analysis as robust as possible, we have sought to look at figures for a "worst case scenario" and so pedestrian visitors have been excluded.

It should be considered that already many large groups of people travel into the town centre on Friday and Saturday evenings to enjoy themselves. Arrowcroft expect that about 15% of visitors to the arena already spend leisure time in Croydon town centre at these times and therefore their trips already take place on the transport network. However, despite many of the "Arena" journeys already taking place we have chosen to look at all arrivals as "new" trips to Croydon to make the transport assessment as robust as possible.

#### PEAK PERIODS

The Event Management Plan for the arena indicates that events will start at 19:00 on a weekday and 14:00 on Saturdays. There is however likely to be flexibility in the opening times with events also commencing at 19:30 and 20:00. Experience at similar venues has shown that attendees will arrive in a staggered manner as shown in Table 3 below and so spread out the impact of attendance on the public transport and highway networks.

Period	% of arrivals
16:00 - 17:00	20
17:00 - 18:00	32
18:00 - 19:00	48

Table 3: Arrival patterns to arena based on a 19:00 start

A key reason for people arriving well before the start of an event is the high quality of restaurants and food outlets that will be available at the arena. All tastes will be catered for, ranging from fine dining, comparable with a Mayfair restaurant, to top quality fast food. Watching a show or event will only be part of the experience for many customers who will arrive early to combine it with eating out.

## gateway



Bus Lanes in Croydon

After an event the arena will also see a staggered departure as the range of outlets will encourage people to stay and socialise, avoiding a rush of people going home.

In preparing the Transport Assessment however, we have sought to examine the impact of the arena in a "worst case" scenario. We have focused on those times when space/capacity on the transport network is at its lowest, these are known as "peak periods". The peak periods on the transport network are 08:00 – 09:00 in the AM period and 17:00 – 18:00 in the PM period, at other times in the day capacity on the network will be greater.

As Table 3 shows the majority of attendees to the arena will be traveling outside of the peak periods. Nonetheless, we have focused on the peak periods across all the modes of transport in order to make our assessment as robust as possible and to demonstrate that the arena arrivals will not have a detrimental impact on the system.



Trams outside East Croydon Station

#### HIGHWAY NETWORK

The initial TA used traffic flows which were extracted from Croydon Council's "Saturn" computer model. This is an approved model which predicted the morning and evening peak hour traffic flows within Central Croydon. These traffic flows were used to create a TRANSYT (TRAffic Network Study Tool) model which accurately models the various highway junctions within a predetermined network area. This network is bounded by:

- · Barclay Road roundabout to the south;
- · St James' gyratory to the north;
- · Wellesley Road to the west; and
- · The railway line to the east.

To project the impact of the development, the relevant vehicular trips generated by it have been distributed onto the existing highway network using the existing traffic turning proportions as a guide, to indicate which routes vehicles would use to enter/exit the development. The model was run using the anticipated future traffic flows to ensure that no junctions would be overcapacity as a direct consequence of the development. These models have been rigorously scrutinised by Transport for London (TfL).

The results of these models indicated that the development would not have a detrimental impact on the highway network.



#### CAR PARKING

A car parking survey was undertaken for all the multistorey car parks within Central Croydon. The surveys counted vehicles entering/exiting the car parks throughout the day on both an average weekday and Saturday, and from this the number of available parking spaces was obtained.

Since the new development only provides 568 public spaces, which roughly replaces the existing 660 spaces located within the Dingwall Road multi-storey car park, it was always known that during times when the arena operates at full capacity, some vehicles would need to park within the surrounding car parks, this is referred to as "overspill" parking.

The amount of available spaces in Croydon during the peak hours for both the weekday (17:00-18:00) and weekend (12:00-13:00 Saturday) is given in Table 4 below.

The analysis indicates that there are 2242 parking spaces available for use during the PM peak hour (17:00-18:00) and 1939 spaces during a Saturday peak hour (12:00-13:00). This is in addition to the 568 spaces available for public use at the Gateway site itself. Parking availability increases further, after the peak hour.

The public's propensity to travel by car must also be viewed in the context of TfL's policy to promote the use of sustainable modes of travel, including reallocating road space for public transport use, walking and cycling, and to reduce the level of parking provision within new developments. It is therefore unlikely that car use, and hence the 'overspill' demand outlined above, will be exceeded. However, there is significantly more spare capacity within the car parks than would ever be generated by the arena.

Car Park	Distance to arena (m)	Total Spaces	Spare Spaces PM peak (17.00 – 18.00)	Spare Spaces Saturday (12.00 – 13.00)
Allders	380	584	36	2
Whitgift	570	1054	484	87
Fairfields Halls	320	1360	619	781
Wandle Road	880	920	431	546
Surrey Street	850	700	463	355
Popular Walk	630	16	9 1019 191	8
Popular Walk NCP	600	61	31	25
Ann's Place	660	70	34	17
West Croydon	770	57	29	25
Factory Lane	1150	90	45	38
Spicers Yard	1330	130	61	55
TOTAL	The same of the same of	5042	2242	1939

Table 4: Car Parking Capacity and Distance from arena in metres



#### VIVIS

The Vehicle Management System (VMS) allows drivers in Croydon on approaching a car park to be alerted as to whether it is full or has spaces. Arrowcroft will contribute to the development of a more advanced VMS system which not only updates drivers on whether a car park is full but also directs them to the nearest car park which still has spaces. This system will allow drivers to avoid unnecessary congestion caused by searching for spaces and improve the flow of traffic.

The car park at the Gateway development will also be linked to the VMS system.

#### RESIDENTS PARKING

The topic of attendees to the arena parking in residential roads rather than nearby car parks is one which needs to be tackled. While studies show that there is more than sufficient space for attendees to park in Croydon car parks, everyday experience tells us that people will seek to park for free if they can.

The proposed solution is for an extension to the Controlled Parking Zones to cover those streets which could be used by visitors. This will allow residents to enjoy parking on their streets without interference from visitors. The extended Controlled Parking Zones would be well signed, to discourage visitors from entering.

#### COACHES

Coaches are expected to bring people to the arena and a specific Coach Management Strategy has been devised for them.

Coaches will drop off their passengers in a demarcated area adjacent to the pedestrian entrance to the arena. Once all passengers have disembarked the coaches will follow a prescribed route to Sydenham Road where they will park until after the finish of the event.

To make sure that the required section of Sydenham Road is clear a temporary traffic order could be enforced to set the area aside exclusively for coach parking. Once the event is finished the temporary traffic will cease and Sydenham Road will go back to its former use.

In order to minimise disruption drivers will be provided with a map clearly showing the access arrangements to the arena including the route they should take and the coach parking location.

#### TAXI

Taxis are also an important part of the transport on offer to people going to the Gateway site and we have included plans to accommodate taxi use at the development.

A taxi rank will be established on Dingwall Road (above the Lansdowne Road junction) made up of 4 taxi bays. This will be in addition to the existing taxi rank next to East Croydon station.

Just prior to an event the taxi rank area will be used by coaches as a drop-off point (before they depart for their designated waiting area at Sydenham Road). Therefore, during these times it is expected that taxis will be dropping people off at convenient locations on the surrounding highways or at the existing taxi rank to the east of the East Croydon Station.



Bus stop outside East Croydon Station

#### BUS

Transport for London (London Buses) kindly provided us with data from their Keypoints and BREMS databases in order to undertake an analysis of bus loads in the Croydon area. These databases contain information relating to how full buses are along particular routes and we were therefore able to use this information to calculate the available spare capacity.

The number of predicted bus users to and from the development was calculated using the model split for the various land-uses proposed as shown in Table 2 earlier in the document.



Croydon is well served by bus services but for the purposes of this paper we have only included the spare capacity of those services which stop at East Croydon, both Eastbound and Westbound during the peak period of travel between 1700 and 1800 hours. In reality many attendees would use other stops in Croydon including West Croydon; this would increase the amount of spare capacity but to keep the table simple we have presented a "worse" scenario than might be the case.

Period	Arrival	Existing Spare Capacity
16:00 - 17:00	681	>5001
17:00 - 18:00 (Peak Period)	800	5001
18:00 - 19:00	1011	>5001

Table 5: Spare Capacity on Buses

#### TRAM

Data for the tram operation was obtained from Tramlink. This data included the number of people boarding and alighting at various stops along the tram route. This data, together with the known frequency enabled us to calculate the number of people within each carriage, and subsequently the amount of spare capacity.

It was estimated within the modal split for Croydon, that 10% of all trips within Croydon are made by tram. The tram system has considerable spare capacity which would service the development's needs.

Period	Arrival	Existing Spare Capacity
16:00 - 17:00	432	>5653
17:00 - 18:00 (Peak Period)	576	5653
18:00 - 19:00	787	>5653

Table 6: Spare Capacity on Trams

#### TRAIN

The original TA used two separate methods for analysing the train capacity. The first method used data obtained from the weekday Strategic Rail Authority terminal census. This data contains the average loading and spare capacity available for all trains passing East Croydon. The second method looked specifically at the ticket barrier usage to understand the station capacity.

Both approaches ignore the increased capacity that will be achieved by plans to stop the Gatwick Express at East Croydon.

The number of trips generated by the development was calculated using the predicted percentage rail users for each land-use as shown in Table 1. These trips were then offset against the available capacity as shown in table 7 below.

Period	Arrival	Existing Spare Capacity
16:00 - 17:00	837	>10, 179
17:00 - 18:00 (Peak Period)	1283	10, 179
18:00 - 19:00	1887	>10, 179

Table 7: Spare Capacity on Trains

The second half of the train analysis concentrated not on the train capacity but on the impact of these extra numbers on the station and concourse itself. The study showed that the station in its current shape would in time not be able to handle the projected growth in passenger numbers, disregarding the arena proposal. Arrowcroft has therefore devised a £24m scheme to improve East Croydon Station. This provides a new station concourse and will allow the station to properly serve Croydon and the additional numbers of rail users expected to come into and depart from East Croydon.

#### SUMMARY

This non-technical summary has been prepared to outline the various methods used to assess the amount of spare capacity on both the highway network and public transport infrastructure within Croydon. It should also be noted that the analysis has assessed the impact of a capacity event at the arena. The impact of non-capacity events will be significantly lower.

Notwithstanding the above, the analysis undertaken in support of the Croydon Gateway development indicates that the development will not cause any modes of transport within Croydon to operate over capacity even using worst case scenarios.

The above transport information is however a synopsis of the work that has gone into analysing traffic and public transport impact on Croydon.

If you would like further information on the Croydon Gateway project, please get in touch at info@croydongateway.co.uk .

### Transport for London





Your ref: apls0004189hunter

Our ref: SM001584/10GH, TFL055938

Mr Andrew Pelling MP House of Commons London SW1A 0AA

9 January 2007

Dear Andrew

Peter Hendy CBE Commissioner of Transport

Transport for London Windsor House 42-50 Victoria Street London SW1H 0TL

Phone 020 7222 5600 Fax 020 7126 4249 peterhendy@tfl.gov.uk www.tfl.gov.uk

#### Croydon Gateway Arena - Status of Review

Thank you for your letter dated 18 December 2006, requesting information on TfL's current position in relation to the application for the Croydon Gateway Arena development.

It is normal practise for a developer for a scheme such as this to submit a Traffic Management Report (TMR) which should include details of highway improvement works, how the traffic impact of the development will be minimised (particularly in relation to the operation of buses and trams), junction designs, traffic routings, charging schemes for car parking and other traffic mitigation measures. The TMR needs to be agreed and in place prior to scheme implementation and should be submitted to the Council for its approval in consultation with TfL.

The latest version of the TMR for this development, dated May 2006, was produced by the applicant's transport consultant and submitted to TfL in June 2006. A full review of this document has been undertaken and an initial coordinated response from the relevant divisions within TfL has been issued. Assessment of the TMR and the development's traffic impacts is currently ongoing.

TfL were not satisfied with the work that had been done in relation to the modelling / traffic capacity assessment aspects of the TMR and have requested that a more robust assessment be undertaken. Some progress has now been made, however, further detailed work is still required.

MAYOR OF LONDON



VAT number 756 2769 90

Other aspects of the TMR have also been reviewed. These relate to the access strategy, car parking, Variable Messaging System (VMS), pedestrian and cycling related issues, public transport, servicing arrangements and Travel Plans. Whilst TfL can work towards achieving an agreement in principle for such aspects of the TMR, full agreement can only be given at the detailed design stage, when engineering aspects such as highway junction layout and traffic signal operation and timings are finalised. This follows only once full planning approval is given.

Our Directorate of Road Network Development (DRND) team are working with the applicant's transport consultants in order to reach an acceptable solution. The ultimate aim of this work is to fully develop and formally agree the TMR during the detailed design stage that follows full planning approval. It is understood that the application has been called in and is currently with the Government Office for London (GOL).

I hope the above provides you with a good understanding of TfL's current position on the transport related issues arising from the application for the Croydon Gateway Arena development. If you do have any further queries, please contact my Senior Engineer, Mr Devinda Kumarasinghe, on 020 7027 3435.

Yours sincerely

Peter Hendy

#### ---- Original Message -----

From: sim, lain

To: steve.collins@addiscombe.net

Cc: Price, Andrew

**Sent:** Friday, January 05, 2007 5:21 PM

**Subject:** Impact of tram extension on traffic in Croydon

Dear Steve

I wonder if I could help out with this.

Clearly there have been many meetings between LBC and TfL on the Crystal Palace Tramlink extension over the last few years, as you have recorded. The Council is supporting the principle of extending Croydon Tramlink to Crystal Palace and has lobbied for this, but this does not mean 'extend at any cost'. Council officers are working with the TfL Tramlink project team to ensure the full environmental impact of the scheme is understood and is acceptable - much as Croydon Council did through planning, design and construction of the initial Croydon Tramlink network.

TfL will be carrying out a traffic impact assessment which will include the A232 not least because it is one of their roads. I am asking them to ensure that we can assess the impact on local roads as well. Clearly additional tram movements across the A232 will mean more delay for road traffic at this point and we need to understand the effects and the downside of this in the context of the benefits that the Tram extension would bring eg modal shift from car to tram. All this will be public information in due course and recorded in the supporting documents for any future application under the Transport and Works Act.

On your last point I can confirm that TfL are in the early stages of building a traffic model for Central Croydon. I cannot be sure when this will be available. Certainly the intention is to have an up to date base model into which can be factored the traffic impact of major schemes like the arena. Whilst this has been done in the past ie the traffic impact of the Gateway arena was predicted and taken into account before the resolution to grant planning permission, the availability of an up to date model can only improve our understanding and make it quicker and easier to assess the cumulative impacts of new major town centre schemes as they come along.

If I haven't answered all your questions please come back to me.

Best wishes

Iain Sim