

Missed Opportunity Areas:

Traffic and transport implications of the Brent Cross and Battersea Power Station developments

Despite awareness of the need to meet higher standards of urban design and promote healthier forms of travel, plans for two of London's few remaining massive development sites (so called 'Opportunity Areas') will create development with built-in car dependency.

Plans for Brent Cross would double the size of the shopping centre, include 7,500 homes, create parking for 20,000 cars and generate up to 29,000 additional car trips a day but provide no significant new public transport. The developers claim there will be a huge shift to public transport, walking and cycling but do not say how this will be achieved. The claim should not deceive the planning authorities.

An extension of the Northern Underground Line underpins proposals for Battersea Power Station, but 3,250 parking spaces are also included. Instead of being largely car free, a riverside development in Central London will be a traffic magnet built on acres of car parking.

Proposals for the Opportunity Areas should create transport conditions that meet 21st Century needs within the development itself and contribute to the improvement of transport conditions in the surrounding areas. The current proposals do neither and are a missed opportunity.

Executive summary

Neither the Brent Cross nor the Battersea scheme follows emerging best practice in designing development that promotes sustainable transport while reducing congestion and supporting alternatives to the car in surrounding areas

Public transport access to both sites is currently inadequate; transport improvements are necessarily part of both development schemes.

Neither development has:

- areas of car-free housing
- sufficient access to amenities or transport for existing local communities
- measures to improve the permeability for walking and cycling over permeability for cars (“filtered permeability”) which would make walking and cycling quicker and more convenient for shorter journeys.

Brent Cross

Transport plans for Brent Cross are particularly poor. They require:

- more road capacity in an effort to deal with 29,000 additional car trips a day on an already congested road network
- inadequate plans for new public transport
- at least 12,000 car parking spaces in addition to an existing 7,600
- shops and services designed to attract people from a large catchment area, with less concern for providing services for local communities
- failure to link to existing walking and cycling routes
- a Framework Travel Plan which claims a shift from the car to sustainable transport modes but lacks the measures to deliver it.

Battersea

The Battersea development has a mixed performance on transport. It requires the extension of the Northern Line with new stations at Nine Elms and Battersea, although funding arrangements for this are still uncertain. But it also has:

- high levels of parking provision
- lack of clarity about linking walking and cycling routes across the development with surrounding areas
- shopping facilities designed to attract custom from a London-wide catchment area.

Main recommendations

- The Secretary of State should call in the Brent Cross application for a public inquiry
- The Mayor of London should insist on travel plans which provide for the vast majority of travel to and within large developments to be on foot, by bicycle or by public transport
- The Mayor should also insist on much tougher parking standards in the replacement London Plan
- The London Borough of Wandsworth should make approval of the application for Battersea Power Station conditional on a substantial reduction in planned car parking provision.

Introduction

London has 33 so-called 'Opportunity Areas'. These are major development sites, each with the capacity to provide at least 5,000 jobs or 2,500 new homes, or a combination of the two, and a range of other facilities and infrastructure.

Brent Cross Cricklewood in the outer London Borough of Barnet, and Vauxhall Nine Elms Battersea in the inner London Borough of Wandsworth are two of the largest such Opportunity Areas. In the draft replacement London Plan the former is said to have capacity for 20,000 jobs and at least 10,000 homes and the latter 15,000 jobs and at least 10,000 homes.

Each of these Opportunity Areas presents development potential so substantial that they could shape the transport and environment conditions not just of their own surroundings but of a whole London sub-region for the foreseeable future.

Climate change and the need for healthier, more active travel are two of the factors contributing to a new resolve to overcome traffic domination and meet higher standards of urban design. The Opportunity Areas are a chance to show how this should be done. They are also an opportunity to change the transport conditions of the urban and suburban places where many people already live.

It makes much more sense to build eco-quarters in towns and cities, where local facilities already exist and connections can be made with existing transport networks, than to deposit car-dependent 'eco-towns' in more remote locations outside towns and cities. International experience in places such as Freiburg shows that it is possible to create highly attractive and desirable developments that are largely car-free and where most travel is on foot, bike or public transport. Battersea and Brent Cross should seek to emulate these rather than the traditional car-based deserts that have laid waste to our cities and suburbs.

The Campaign for Better Transport recently published a report called *The Masterplanning Checklist for Sustainable Transport in New Developments*¹ which set out the proven planning principles that enable less car dependent travel patterns for residents of new developments. This was intended to apply to growth areas and the eco-towns (at a time when their location was still being discussed) but can be adapted for existing built areas.

Missed Opportunity Areas measures the proposals for Brent Cross and Battersea against the principles of the Masterplanning Checklist.

The principles of the Masterplanning Checklist can be summarised as follows:

- Development should not be located near major trunk roads or motorways but should be adjacent to, or within existing urban centres.
- Major developments should have dedicated public transport routes. Homes should be a maximum of 800m from major public transport hubs where there should be cycle storage but minimal car parking. Development should not go ahead until public transport access is in place.

¹ *The Masterplanning Checklist for Sustainable Transport in New Developments* is available on the Campaign for Better Transport website at:
http://www.bettertransport.org.uk/system/files/Masterplanning_Checklist_2008.pdf

- Car parking standards of less than 0.5 spaces per unit should apply, car parking should be charged and be separate from homes. A high proportion of housing should be car free. Local facilities should have only limited car parking.
- Developments should be above a minimum density level (100 dwellings/hectare).
- There should be good provision of local facilities and jobs.
- Streets should be designed to be people centred and encourage walking and cycling. 20 mph limits should apply.
- Developments should be designed so that other modes are faster and more convenient than the car.
- Smarter travel programmes should be used from the outset including residential, school and workplace travel plans, a travel co-ordinator, car-clubs.

In addition, other principles should also apply to development within existing urban areas, for instance development should:

- Make good deficiencies in the existing development pattern, for example by providing new local centres and facilities, improving access to green space or supplying missing links in walking and cycling networks in order to reduce the need to travel in existing communities.
- Make it less necessary to travel for work by, for example, establishing workstations where people could work locally.

Neither the Brent Cross nor the Battersea development scheme scores well against the items on the Masterplanning Checklist. On the contrary, both schemes as currently conceived are retrograde, traffic generating projects.

The Brent Cross project, in particular, might have been expected in the 20th Century but should not be built in the 21st. It should not be contemplated for an urban location where the shortcomings of car-dependent development are so clear.

This report considers these two development sites both because they are designated 'Opportunity Areas' and because the final decisions on outstanding planning applications for each of them have yet to be made.

There is still a chance to get it right.

What's proposed at Brent Cross and Battersea?

A full planning application has been made for the Brent Cross Cricklewood development, and an outline application for Battersea Power Station and its surrounding land, which is part of the much larger Vauxhall Nine Elms Battersea (VNEB) opportunity area. The sites are respectively 151 and 21 hectares (though the whole of the VNEB area is around 200 hectares). Brent Cross is in outer London, and Battersea Power Station in inner London separated from the Central Activities Zone only by the river. VNEB is by far the largest remaining redevelopment area of central/inner London.

Both applications are for mixed use developments, and, in addition to homes and retail space, include offices, a hotel and a range of amenities.

Brent Cross

It is claimed that the Brent Cross scheme, based on an extension of the Brent Cross Shopping Centre, will provide a new town centre with an additional 75,000 square metres of retail space, mostly located north of the North Circular Road, with 7500 homes and the rest of the development located south of the North Circular Road. It is one of at least three major development schemes in the southern half of the London Borough of Barnet, the others being at Colindale (10,000 homes) and Mill Hill East.

Transport for London (TfL) has been critical of transport and other aspects of the Brent Cross proposals. Among other concerns, it has criticised the level of car parking, the poor provision of public transport and the failure to integrate transport and spatial development. It has also been concerned that public transport improvements be provided in the early stages of the development.

In March 2010 the Mayor announced his approval for Brent Cross saying he was satisfied that "the application fulfils the need to have the kinds of transport links that will bring fluidity and rejuvenation to Brent Cross while avoiding potential problems caused by any extra traffic." The Secretary of State is now deciding whether to call in the application for a public inquiry.

Battersea

The Battersea Power Station scheme in the London Borough of Wandsworth will re-use the power station and create about 51,000 sq m of retail space and 3800 homes most of it on land around the power station.

Comments from TfL on Battersea have also been critical of the amount of car parking proposed; the application for outline planning permission has not yet been determined.

Location in relation to the road network

Within existing urban areas there is less choice of location for development and few if any locations in London are far from the major road network. That said, the proximity of Brent Cross to the major road network will make car travel more likely, indeed the proposals are designed to facilitate it. The new town centre will straddle the North Circular A406, and the site is bounded to the west by the A5 (and various rail lines) and to the east by the A41 Hendon Way. The A406 and A41 are both on the Transport for London Road Network (TLRN) and the A5 on the Strategic Road Network. The M1 begins at the north-west corner of the Brent Cross site at Staples Corner.

The transport proposals for Brent Cross include alterations and 'improvements' to no fewer than 30 highway junctions. TfL concludes that: 'There is a major emphasis in the planning application on providing additional highway capacity and junction improvements to establish the primary means of access to the site.' *The Cricklewood, Brent Cross and West Hendon Area Development Framework*, adopted as Supplementary Planning Guidance by Barnet Council in 2005, forecast that 29,000 additional cars would enter the area in a 12 hour weekday period though both developers and council now claim that this is an overestimate.

The essentially triangular VNEB site on the other hand is defined by the river to the north and the A3025 and the A3216 to the south and west; the former is part of the TLRN, the latter only a borough road. The planning application also includes a series of alterations and improvements to various road junctions.

Public transport

At the moment neither site has adequate access by public transport. The Brent Cross site currently has a Public Transport Accessibility Level (PTAL) of between 1 and 5, where 6 is most accessible. (PTALs are a measurement of proximity to public transport and are used in various ways, for instance to guide the provision of new public transport services or to determine the amount of parking in new development, though for this purpose their use is arguably misguided).

Much of the Brent Cross site is difficult to access from the rail network. Most locations within it are more than 1 km from Cricklewood Station (Thameslink) to the south and Brent Cross Tube station on the Northern Line is cut off by the Brent Cross flyover and its access roads, where the A41 crosses the North Circular. TfL says that 'The location of existing public transport nodes, with the exception of the existing bus station, is divorced from the core of the regeneration area which makes accessibility difficult.'

Considering its location in central/inner London the VNEB area feels remarkably remote. Rail access is either from Battersea Park or Queenstown Road stations to the southwest or Vauxhall Tube to the north east. The PTAL level at Battersea Power Station ranges from 2 to 4.

Both the Brent Cross and Battersea Power Station sites can be reached by a number of bus services.

The transport elements of the Brent Cross scheme are described by TfL as 'complex'. Three main changes are proposed to improve public transport access: a relocated bus station in the shopping centre on the north of the A406 with new bus routes and higher frequencies on existing routes; a new Brent Cross station north of Cricklewood on the Thameslink Midland mainline and a 'Rapid Transit System' consisting of a minibus plying a route from Cricklewood Station to the shopping centre and Brent Cross underground station via the new 'town centre'.

However, the walking routes to the new bus station would be longer and it would be located immediately next to the noise and pollution of the North Circular Road, which at that point has ten lanes. The so-called Rapid Transit System would be poor value for money, according to TfL, and would only be funded by the developers for a short time. Critics claim the existing Thameslink Cricklewood and Hendon stations will be likely to close if Brent Cross Thameslink is built as the stops would then be too close together. TfL does not consider that the public transport and other

measures to mitigate the transport impact of the Brent Cross scheme will be effective in achieving the shift to walking, cycling and public transport that it says is vital to its success. The planned public transport provision for this enormous development project bear no comparison to new tram or other rail services provided for equivalent schemes elsewhere. The developer could be accused of proposing no more than the bare minimum of new public transport to secure planning approval.

By contrast the central transport element of the Battersea proposal is for an extension of the Northern Line from Kennington with new stations at Nine Elms and Battersea. Transport for London is exploring innovative funding arrangements that would take account of future tax receipts and include a role for, or contribution from, the developer. A strategic transport study for an Outline Planning Framework for the VNEB concluded that the Northern Line Extension plus a package of bus, highway, walking, cycling and river transport improvements would provide the necessary increase in transport capacity to support the development.

That development should not go ahead until public transport capacity is in place to serve it, is a principle of the *Masterplanning Checklist*. It is also a requirement of the London Plan under policies to integrate transport and development, match development to transport capacity and phase transport infrastructure provision (Policies 3C.1, 3C.2 and 3C.11). The developers of Battersea Power Station propose that the Northern Line Extension be operational before the retail elements of the scheme are occupied. In comparison, the Transport Assessment for Brent Cross, according to TfL, does not show how new public transport capacity will be provided ahead of demand. Far from meeting its claim to achieve a switch from car travel to public transport, walking and cycling, Brent Cross will create a pattern of car dependency from the outset.

Car parking

The Brent Cross application includes 12,000 parking spaces in addition to 6,800 existing spaces in the existing shopping centre and a further 800 which already have planning permission. 1,300 residential spaces would be provided in phase 1 at a ratio of 1:1. Parking for the remainder of the 7,323 planned homes would be provided on a sliding scale of 0.81 to 0.5 spaces per unit. (There is some concern that the developer only wishes to build the first phase as this includes all the additional retail space.) When complete in 2026, there would be a total of around 19,600 parking spaces in Brent Cross.

The application for Battersea originally included a total of 3,974 dwellings and 3,851 parking spaces, since reduced to 3257. Despite the reduction TfL remains concerned about the proposed level of parking, particularly the office, retail and residential parking. At the reduced figure parking would be provided at a ratio of 0.5 spaces per dwelling. Parking would also be provided for the retail element of the scheme (1045 spaces) with the remainder of the parking provision spread among business, community, leisure, hotel and other uses.

In neither development is it proposed to create any areas of car free housing.

Density

It is not possible to work out planned development densities without doing more research. However, both schemes propose quite high rise development (a mixture of blocks and terrace housing at Brent Cross and mostly 15-20 storey blocks at Battersea). In London it is normally in developers' interest to build to higher densities to achieve the maximum number of dwellings on a given site

though they often also want to provide generous parking, which they believe is demanded by potential purchasers. Not providing parking would assist in creating high density but lower rise development.

Local facilities and jobs

Again it is not easy to gauge the adequacy of proposed local facilities without going into a great deal more detail. Both schemes are for mixed use development and include local retail and community space in addition to new homes, offices and leisure facilities. In each case assessments appear to have been carried out to calculate the need created by the developments for such social amenities as doctors' surgeries, dentists and schools.

Apparently 'the wider planning aspiration for Cricklewood and Brent Cross is to provide a town centre location where homes, jobs and services are located in close proximity thus reducing the need to travel', however the approach of the Transport Assessment for this development is, according to TfL, 'heavily weighted in favour of car use'.

Neither development appears to have sought to make good any shortfall in facilities for the surrounding areas and contribute to a wider land use pattern where more needs can be met locally and more journeys can be made on foot or by bicycle. The Outline Application Planning Framework for Vauxhall Nine Elms Battersea recommended that walking and cycling routes be provided through the development to provide access to the riverside from existing estates on the other side of Battersea Park Road but this does not appear to have happened. Far from being just a local amenity, the retail development is intended "to serve a wide catchment and capture some expenditure from competing centres such as the West End, Kings Road, Brent Cross, White City and Kingston". The Battersea application includes 15,000 sq m of community and cultural floor space but, according to the report of the Mayor's Planning Decision Unit 'further discussions are necessary in respect of the size and type of new facilities needed.'

Designing people friendly streets, and encouraging walking & cycling

The level of planned parking provision and therefore of likely traffic volumes on at least some streets and roads implies that the quality of the street environment will be compromised at both developments. Indeed, as already noted, the Brent Cross planning application emphasises the provision of additional highway capacity. Neither development appears to have set out to improve access to amenities or transport for existing local areas in order to contribute to a wider pattern encouraging walking and cycling.

The Brent Cross application includes new or improved pedestrian bridges across the A41 and A406 but it is not clear at what stage of the development these will be built. TfL is critical of the developers for not assessing the quality of pedestrian routes or estimating pedestrian flows at key interchanges or on main corridors between transport nodes, including the strategic walking routes. The developers' Transport Assessment is criticised for failing to 'assess or commit to wider developments which link the development to the wider community and to existing networks, for example the London Ring or Strategic Walk Network'. The same criticisms are made in regard to cycling. Though the plans claim to provide for cycling within the development they fail to show how they will link up with the wider network of cycling routes beyond it. Though there will be 12,000 new parking spaces for cars there will only be 9,500 for bicycles.

The plans for Battersea Power Station include a commitment to extend the Thames Path along the river edge but the Transport Assessment for Battersea fails to show how the site will integrate with or improve the existing cycle network or provide for cycle access through the site. A total of 5369 cycle parking spaces are proposed throughout the site in line with TfL standards. TfL considers that the public realm will be of a high quality but that further information is required on how the development will link with the existing walk and highway network.

Making walking and cycling faster and more convenient than the car

People choose their mode of transport according to its convenience and cost. The cost and availability of parking, for instance, is a well known determinant of whether people drive. Designing developments to make other modes faster and more convenient than the car is a principle of the Masterplanning Checklist. Designing the street network to allow the passage of pedestrians and cyclists but not cars at certain junctions (known as filtered permeability) is one way that this can be done, making local journeys take longer by car than on foot or by bicycle.

Neither at Brent Cross nor at Battersea, are there known to be plans to design the road network along these lines.

Smart travel measures

Smart travel measures (often called “smarter choices”) are intended to influence travel behaviour in order to reduce car use and encourage travel by more sustainable means. Travel plans are a package of such measures as applied to a particular destination. They are almost universal for London schools, increasingly being taken up for workplaces and the development of a travel plan is generally an essential condition for approval of major planning applications.

The Brent Cross applicant has prepared a Framework Travel Plan. While this sets out progressive changes in modal share it does not show how this will be achieved, how the package of infrastructure improvements or constraints on vehicle use and parking will contribute towards such changes or how the site-wide travel plans will contribute to achievement of Framework Travel Plan targets. Also, as TfL points out, the achievement of modal shift targets requires public transport capacity to be available ahead of demand but, as noted above, the Transport Assessment for Brent Cross does not show how or when this will happen.

The plans for both Brent Cross and Battersea include welcome proposals for car clubs.

Conclusion

The scale of the land identified for development at Brent Cross Cricklewood is vast. In the current application the challenges posed by the potential to satisfy 21st Century land use and transport needs have not been met. No new public transport spine has been proposed to serve this development or the other huge developments in the immediate area. No attempt has been made to create a pattern of land use in which journeys can be shorter and most travel can be on foot, by bicycle or by local public transport. Instead the proposed development would depend on a large catchment area and a predominantly car-based clientele creating car scale not human scale development over a wide area. It will provide for car access and generate car traffic exacerbating existing traffic problems on the North Circular Road and other parts of the strategic and local road networks. This is a missed opportunity.

There is more merit in the proposals for Battersea Power Station, based as they are on a new public transport spine. But in a riverside location in central London, the emphasis must be on forging walking and cycling routes and providing local amenities both for the new development and for existing communities. A pedestrian and cyclist bridge across the river to Pimlico and the rest of central London is an obvious but missing element. Links between existing communities and the river should have been provided but have not been. Instead a central London riverside location is to be used to provide parking space for over 3000 cars and parts of the development are designed to attract shoppers from as far way as Brent Cross and Kingston. The Battersea site provides an obvious opportunity to create a largely car free development but instead, as it stands, this is another missed opportunity.

Recommendations

- Secretary of State should call in the application for Brent Cross and hold a public inquiry
- The Mayor of London should insist on travel plans which provide for the vast majority of travel to and within large developments to be on foot, by bicycle or by public transport
- The Mayor should also insist on much tougher parking standards and policies in the replacement London Plan to ensure much reduced provision of parking space in new developments and encourage car free development
- The Mayor should ensure enforcement of policies requiring that new development is served by public transport and that public transport is available before the development is occupied
- The London Borough of Wandsworth should make approval of the application for Battersea Power Station conditional on a substantial reduction in planned car parking provision.

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Campaign for Better Transport

Campaign for Better Transport is UK's the leading authority on sustainable transport. Our ideas have won us the support of national decision-makers and local activists, and have enabled us to secure transport policies that improve people's lives and reduce environmental impact.

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