Mayor of London

Transport for London

Proof of Evidence

William Steadman

Town & Country Planning Act 1990
Planning Appeal

Appeals by Circadian

Land at south side of Chelsea Creek, Chelsea Harbour Drive, Chelsea Harbour

January 2005

Planning Inspectorate Reference:
APP/H5390/V/04/1148781
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PP/02/01324/MAJM

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1.0 Introduction

1.1 My name is William Steadman. I hold a Bachelor of Science degree in Environmental Science and Geography from the University of Bradford and a Masters degree in Town & Regional Planning from the University of Sheffield.

1.2 I am employed by Transport for London (TfL) as a Senior Planning Officer and I have responsibility for advising the Mayor on the transport implications of planning applications referred to him under the Town and Country Planning (Mayor of London Order) Order 2000. I have held this position since 2002.

1.2 Prior to my current role I worked for the London Borough of Greenwich as a Development Control Officer (2000-2002).

2.0 Scope of Evidence

2.1 On 26 February 2003 (CD189) the Mayor of London wrote to the London Borough of Hammersmith and Fulham (LBHF) and the Royal Borough of Kensington and Chelsea (RBKC) confirming his support for planning applications referred to him by both authorities but constituting one single scheme. On 20 August 2003 (CD188) the Mayor of London opted not to exercise the power to direct refusal of LBHF's resolution to grant planning permission for their part of the scheme subject to a S106 Agreement. RBKC refused their part of the scheme on 28th October 2003.

2.2 TfL is the strategic transport authority for London. TfL advises the Mayor of London on the strategic transport implications of planning applications referred to him under the Town & Country Planning (Mayor of London) Order 2000 and is a statutory consultee on planning applications on the Transport for London Road Network (TLRN), for which it acts as Highway Authority.

2.3 The appellants acquired the power station site from London Underground, who became part of Transport for London in July 2003. The transfer of the site to the appellants was completed on 7 March 2000. The transfer included a negotiated, commercial overage provision. The regulatory arm of TfL is separate from TfL Group Property and any consideration of the appeal proposals has been purely on planning and transport grounds.

2.4 My evidence will explain in planning policy terms how this decision is supported and will also offer responses to the issues identified in the letter dated 21 September 2004 from the Planning Inspectorate to the Greater London Authority and the transport objections raised by the Rule 6 third parties. The Planning Inspectorate requested a view from TfL on whether the proposal is in accordance with national policy contained in PPG13 (CD130), with particular regard to:

(i) the impact of the proposal on traffic generation and overall travel patterns having regard to the desirability of achieving development that minimises the need to travel, particularly by private car;

(ii) the effect and adequacy of the proposed improvements to public transport;

(iii) the impact of the development on the traffic congestion in the local area;

(iv) the proposed level of car parking.

2.5 The transport grounds for objections identified by the third party Rule 6 statements can be summarised as follows:

a) the proposed housing density constitutes over-development that will result in an adverse impact on the local road network and existing public transport services;

b) the proposed public transport improvements will not improve site accessibility or provide adequate capacity to facilitate modal shift and/or accommodate the trips generated by the proposed housing density;

c) the proposed bus service improvements will not be attractive or reliable due to local road congestion created by the appeal scheme;

d) the proposed car parking is too low to meet demand.

2.6 Despite invitations to the consultants acting on behalf of the Rule 6 third parties, TfL has been unable to establish the precise details of the objectors' case and reserves its position accordingly.

2.7 In addressing the transport issues identified above, TfL's evidence will comprise an assessment of the appeal scheme's acceptability in planning policy terms, which is informed by a technical assessment of the impact of the proposals on the operation of TLRN, bus service capacity and reliability and the adequacy of the S106 package to

mitigate trip generation impact and improve public transport accessibility. The technical evidence is provided by Nick Bond of Savell Bird and Axon. My evidence will comprise a planning policy assessment of the appeal proposals and consider:

a) the planning policy context;
b) the site and development proposals;
c) TfL's role in the planning process;
d) a policy assessment of the site's accessibility ;
e) a policy assessment of the proposed car parking;
f) a policy assessment of the public transport improvements identified in the Sustainable Integrated Transport Strategy (SITS).

2.8 The planning policies identified as relevant in the consideration of the appeal proposals are set out at Appendix 1. It is anticipated that these policies will be set out in the Statement of Common Ground between TfL, LBHF, RBKC and the appellant.

3.0 Site Description and Development Proposals

3.1 The appeal proposals comprise redevelopment of Lots Road Power Station and Chelsea Creek, and land off Thames Avenue to the south of Chelsea Creek. Chelsea Creek forms the boundary between the London Borough of Hammersmith and Fulham and the Royal Borough of Kensington and Chelsea.

3.2 The appeal proposals on the London Borough of Hammersmith and Fulham site comprise the demolition of buildings ancillary to Lots Road Power Station and the redevelopment to provide 382 residential units together with 267 car parking spaces, a gymnasium and associated works to Chelsea Creek and Chelsea Basin, including the construction of three bridges over the creek.

3.3 The appeal proposals on the Royal Borough of Kensington and Chelsea site comprise conversion of the Power Station to provide 420 residential units together with 360 car parking spaces and retail, office, leisure and restaurant uses.

3.4 The site is bounded by Lots Road to the north, the SITA waste transfer system to the north east, Chelsea Harbour to the south and south West and the River Thames to the east. The site is accessed from Lots Road and Harbour Avenue, which form part of the Borough Road Network. The Strategic Road Network is accessed at the junction of Lots Road and Cremorne Road (A3220) which currently operates as a three way priority. Cremorne Road forms part of the TLRN.

4.0 TfL's role in the planning process

4.1 The Greater London Authority Act 1999 established Transport for London as a strategic transport authority and executive arm to the Greater London Authority. TfL is accountable to the Mayor of London and responsible for implementing the Mayor's Transport Strategy and managing the transport services for which the Mayor of London is responsible. TfL is responsible for both planning and delivering the provision of transport facilities and occupies a unique position in terms of its capability to provide a multi-modal and integrated approach to these key functions. TfL comprises London Underground Limited, London Bus Services Limited, London Rail, London River Services, Docklands Light Railway and the Public Carriage Office. Although the Mayor does not have direct responsibility for the National Rail Network in London, he does have some powers of instruction and guidance.

4.2 TfL advises the Mayor on the strategic transport implications of planning applications referred to him under the Town & Country Planning (Mayor of London) Order 2000. The Town & Country Planning (Mayor of London) Order 2000 defines the extent of the Mayor of London's planning powers. The London Plan – Spatial Development Strategy for Greater London (2004) (CD174) is the development plan the Mayor of London will use to assess planning applications referred to him. The Mayor's Transport Strategy (2001) (CD180) is a material consideration to which he will have regard. TfL is also a statutory consultee on planning applications adjacent to the TLRN, for which TfL acts as Highway Authority.

4.3 In making representation on referable planning applications TfL is responsible for considering the transport impact of development proposals on public transport operability and capacity and the performance of the TLRN. The scope of TfL's planning and service provision responsibilities enables a strategic and integrated approach

to be taken in the delivery and operation of all modes of transport and their interface with the development process.

4.4 In its consideration of major development proposals TfL's function can be identified as two fold: (1) to consider at a local level the impact of a development on the operational and capacity requirements of individual modes of public transport and the performance of the TLRN with a view to adequately mitigating adverse impact through the planning system; (2) to inform planning policy decisions about relating land use type and density to a location's existing and future public transport accessibility in order to reduce traffic congestion and maximise sustainable travel patterns by influencing the modal split.

4.5 TfL has undertaken a review of the assumptions, methodology, analysis and results of the Transport Chapters of the originally submitted and Regulation 19 Environmental Statements to consider the impact of the appeal proposals on the operational and capacity requirements of individual modes of public transport and the operation of the TLRN. An endorsement and understanding of the trip generation impact by mode enabled TfL to identify the improvements required to mitigate the impact of the proposed development and advise the Mayor of London on the acceptability of locating a high density residential development on the appeal site based on its existing and future accessibility by public transport. The technical highways and bus network planning issues reflecting this process will be considered by Nick Bond.

Representation made on the appeal proposals

4.6 The Mayor of London made representation on planning applications submitted to LBTH and RBKC and referred to him on 25 June 2002 and 2 July 2002 respectively. Transport for London's assessment of the transport impact of the development is contained within the Mayor of London's report dated 28 August 2002. This report provided TfL's endorsement of the analysis contained within the Transport Assessment and the package of transport improvements offered by the Sustainable Integrated Transport Strategy (SITS) considered necessary to mitigate the impact of the development and promote the use of sustainable alternatives to car use. The Mayor of London expressed a need for the S106 agreement to provide sufficient flexibility and certainty so that the appropriate improvements in public transport could be delivered. The Mayor of London advised that the traffic generation impact on the TLRN was considered acceptable, but expressed concern that the number of car parking spaces should reflect the site's future public transport accessibility and the parking standards adopted in the London Plan.

4.7 On 26 February 2003 the Mayor of London considered a revised planning application for the appeal site and advised that in transport terms the trip generation impact of the appeal proposals could be mitigated by the package of transport improvements proposed in the SITS. The Mayor of London reiterated the need for the S106 agreement to contain sufficient flexibility and certainty to ensure that infrastructure and service improvements to public transport would be delivered and phased in response to occupation of the development.

4.8 On 20 August 2003 the Mayor of London wrote to LBHF supporting that element of the appeal proposals within its jurisdiction and confirming that his power to direct refusal would not be exercised. The Mayor of London referred to the site as being one of a few large opportunities within central London that could deliver a significant contribution to the

(draft) London Plan's housing targets. The Mayor stated that although the site presently had relatively poor accessibility, improvements could be achieved in the short term through enhanced bus services and in the long term through improvements to the West London Line and 'Orbirail'. The Mayor also concluded that given the improvements to public transport, the density of development proposed for the site was considered to meet the guidelines set out in the (draft) London Plan.

5.0 Site Accessibility Assessment

Planning Policy Context

5.1 It is common ground that site accessibility is identified by national, regional and local planning policies as a determining factor in the consideration of appropriate land use and density. I discuss below the key policies and guidance relating to site accessibility used to assess the development proposals and advise the Mayor of London not to direct refusal of the appeal proposals.

5.2 In general, planning policy identifies the relationship between accessibility, land use and density as influencing travel patterns and journey lengths. In an assessment of a development's potential to reduce the need to travel and promote sustainable travel patterns, site accessibility needs to be considered in terms of its proximity to the public transport network, location relative to employment, retail, education and leisure opportunities, and public transport capacity. These factors can be used to help determine housing location and density and provide one measure of how well development can satisfy planning policy objectives.

Planning Policy Guidance Note 13: Transport (PPG13) (CD130)

5.3 National planning policy identifies site accessibility as one important consideration in determining appropriate land uses and densities. PPG 13 seeks to integrate planning and transport to promote accessibility to jobs, shopping, leisure facilities and services by public transport, walking and cycling and to reduce the need to travel especially by car. Land use planning is recognised as having a key role in shaping the pattern of development and influencing the location, scale, density, design and mix of land use to reduce the need to travel, reduce the length of journeys and improve accessibility by sustainable modes of transport to jobs, shopping, and leisure facilities and services.

5.4 The ability to achieve this broad policy objective will depend partly on a site's location relative to those jobs, shopping, leisure facilities and services, the journey time required to access them, and the availability of public transport services to meet the travel demand created by specific development proposals. This places emphasis on the need to re-use previously-developed land and buildings within urban areas to avoid the inefficient use of land, and promote housing developments that maximise the potential of urban sites located in areas of good public transport accessibility, existing or proposed. In determining planning applications, PPG 13 requires local authorities to accommodate housing within urban areas which are accessible by a choice of modes, and negotiate for improvements in public transport as part of development proposals to improve accessibility by sustainable modes of transport. These policy objectives are consistent throughout strategic and local planning policy.

Planning Policy Guidance Note 3: Housing (PPG3) (CD124)

5.5 The influence of site accessibility is addressed in PPG 3 which seeks to create more sustainable patterns of development and reduce car dependence by exploiting and delivering accessibility by public transport, walking and cycling to jobs, education and health facilities, shopping, leisure and local services. Local Authorities are required to allocate housing sites which consider the location and accessibility of development sites relative to jobs, shops and services by modes other than the car, the potential for improving such accessibility, and the capacity of existing and potential public transport infrastructure.

5.6 In creating sustainable residential environments PPG3 supports making the best use of land and linking development with public transport by exploiting opportunities to locate larger housing development around major nodes along good quality public transport corridors, while ensuring housing development is accessible by a range of non-car

modes. PPG 3 stresses the need to avoid the inefficient use of land by seeking greater intensity of development at places with good public transport.

The London Plan

5.7 The London Plan recognises the importance of site accessibility and location as inherent within the objective of making the most sustainable and efficient use of space by encouraging development intensification in areas that reflect public transport accessibility and are compatible with public transport capacity. The London Plan makes explicit reference to the need to improve London's accessibility by minimising the need to travel and the growth of journey lengths, and gives emphasis to the need to promote the integration of development and public transport in order to exploit opportunities to intensify the use of land where current or future accessibility allows and improved connections to employment can be achieved.

5.8 The integration of transport and spatial development is endorsed by policies 3C.1 and 3C.2, set out in Appendix 1 of this evidence. In recognising the need to match development location and intensification with public transport accessibility and capacity, the London Plan commits to increasing the capacity, quality and integration of public transport while ensuring improvements are co-ordinated with development priorities and phasing. Policy 3C.16 requires local authorities to control location and density of development to help reduce traffic congestion and improve conditions for people who use public transport, walk or cycle. Policies 3C.19, 3C.20 and 3C.21 require local authorities to promote improvements to the bus network, walking and cycling in their consideration of development proposals. Policy 6A.4 identifies transport improvements as a priority for planning obligations required to accommodate proposed development.

5.9 Policy 4B.3 of the London Plan seeks to maximise redevelopment potential by achieving the highest possible intensity of use compatible with local context, the design principles in Policy 4B.1 and with public transport capacity. Policy 4B.3 continues to explain how the Mayor will refuse planning permission for strategic referrals that, taking into account context and potential transport capacity, under-use the potential of the site. Paragraph 4.45 of the London Plan refers to table 4B.1 as providing a strategic framework for defining appropriate density ranges at different locations by relating the type of urban area within which a site is located to site accessibility and recommended car parking standards. The site accessibility is measured using the PTAL (Public Transport Accessibility Level) methodology. This method is discussed in more detail at paragraph 5.12.

5.10 Paragraph 46 continues to explain how the matrix is not static as it provides a tool for increasing housing density in situations where transport proposals will change the public transport accessibility ranking. It is clear that the policy emphasis is one of maximising the development potential of sites, and that the density ranges are not designed to be restrictive where it can be demonstrated public transport accessibility and capacity are sufficient.

5.11 The draft Supplementary Planning Guidance on Housing Provision (December 2004) (CD192) describes the role of PTAL within the context of Policy 4B.3. Paragraph 5.8 concludes that low PTAL scores do not in themselves preclude development and stresses that they are only one factor that should be used in assessing development proposals and site potential. Paragraph 5.7 explains that table 4B.1 should not be seen as prescriptive, and should be applied flexibly in the light of local circumstances, recognising that higher densities may be possible where this can be justified by local circumstances.

The Public Transport Accessibility Level (PTAL) methodology

5.12 As a guide to deriving an appropriate density, table 4B.1 of Policy 4B.3 provides a density, location and parking matrix that recommends density ranges using PTAL (Public Transport Accessibility Level) as an indicative measure of site accessibility. PTAL is adopted by the London Plan as an appropriate tool for measuring site accessibility to the public transport network.

5.13 PTALs provide an indicative measure of accessibility from a point of interest to the public transport network. The current methodology was developed in 1992 by the London Borough of Hammersmith and Fulham (LBHF). The tool has been reviewed, tested and agreed by the London Borough-led PTAL development group as the currently most appropriate for measuring the density of the public transport network at a particular point. PTALs have been used over a number of years by London Boroughs to assess development proposals in London and are endorsed in the London Plan.

5.14 The PTAL is based on the average walk and wait time to the network and the number of public transport services available and their frequencies. A site's PTAL is derived by calculating walk times from an identified point of interest to all public transport access services. The PTAL method assumes maximum walking times of up to 8 minutes to access bus services and 12 minutes to access train services. These times are based on surveys used to establish the average distance people are prepared to walk to access public transport modes. Using an average walk time of 4.8 km/hour this equates to 640 metres to access bus services and 960 metres to access a rail station. This sets the maximum distance from a given point for a public transport service to be included in a PTAL calculation.

5.15 The PTAL then incorporates a measure of service frequency by calculating an average waiting time based on the frequency of the

service at each public transport node. The most frequent service of each mode is given a higher weighting (1) than the rest of the services for that mode (0.5). A reliability factor (rail services have a higher reliability factor than bus services) is included and the total access time is calculated and converted into a measure referred to as an Equivalent Doorstep Frequency. These are summed for each public transport service within the catchment and the Public Transport Accessibility Index (PTAI) for each mode is then added to give a single value (Appendix 2). The PTAI is translated into a PTAL score categorised between levels 1 to 6, where 6 represents a high level of accessibility and 1 a low level of accessibility:

PTAL	Range of Index
1a (Low)	0.01 – 2.50
1b	2.51 – 5.00
2	5.01 – 10.00
3	10.01 – 15.00
4	15.01 – 20.00
5	20.01 – 25.00
6a	25.01 – 40.00
6b (High)	40.01 +

Source: Measuring Public Transport Accessibility Levels (June 2003) (CD291)

5.16 The PTAL is therefore a reflection of (a) the walking time from a specific point of interest to where the public transport network can be accessed, (b) the number of services available within a walking catchment defined by the average distance people are prepared to walk to access the public transport network and (c) the average waiting time based on the frequency of public transport services available within this catchment. PTAL constitutes a valid, yet indicative, measure of a site's accessibility.

5.17 PTALs do not provide an absolute measure of accessibility as they do not consider the significance of a site's location relative to other locations. A site's relative location is an important measure of its accessibility as it will influence journey times between places of

residence and employment, retail, education and shopping destinations, and the area coverage the public transport network provides within a given journey time catchment. In addition, PTAL does not provide an indication of whether there is sufficient capacity on public transport services to accommodate increased demand or take account of individual travel behaviour. Futhermore, PTALs do not consider the quality of the urban realm and the pedestrian environment, which will influence an individuals' motivation to walk to access public transport services.

5.18 PTAL is based on an average walking distance and does not take into account those people who will be prepared to walk beyond what PTAL considers to be an average distance to access public transport services. For example, Fulham Broadway London Underground station provides convenient access to the centre of London and is within 1200 metres of the appeal site. TfL considers it reasonable to assume that a proportion of residents occupying the proposed development will access Fulham Broadway London Underground station if the services available meet their overall journey requirements; the trade off between the walk access time and the total journey time justifies the decision to walk further than the average walk distance to access the public transport service.

5.19 An assessment of accessibility that goes beyond the parameters of PTAL will allow a more informed judgement of how a development can satisfy national and strategic planning policy objectives. The influence of location and accessibility on land use and density is discussed in more detail at paragraphs 6.24-6.26 of this evidence.

<u>PTAL assessment of the appeal site</u>

5.20 The London Plan defines the Royal Borough of Kensington & Chelsea and the London Borough of Hammersmith and Fulham as inner London for the purpose of setting car parking standards. The site is defined in

the evidence of Colin Wilson as urban by reference to table 4B.1 of Policy 4B.3 and part central and part urban by reference to the draft Supplementary Planning Guidance on Housing Provision (December 2004). The appeal proposals comprise redevelopment of the site to provide mostly flats and a housing density of 557hr/ha. The London Plan Table 4B.1 recommends guideline housing densities in the range of 450-700 hr/ha are achieved in urban settings benefiting from a PTAL of 4.

5.21 Planning policy identifies site accessibility and public transport capacity as relevant factors when determining housing location and density. TfL has undertaken a site specific PTAL assessment based on four points of interest within the site. These include the centre of the site, the two principal site access points located on the Lots Road frontage and a point located in the southern part of the site. This enables a more accurate representation of the site's public transport access to be calculated and the points of interest are identified at Appendix 3. TfL has based its assessment on the assumption that the SITS will fund (1) frequency improvements to the C3 bus services from 6 to 8 buses per hour, (2) the introduction of a new bus service operating at 6 buses per hour and (3) construction of a new station on the West London Line with a planned frequency of 4-6 trains per hour by 2012.

5.22 The table below provides a comparison between the site's existing PTAL score and the future PTAL score assuming public transport improvements earmarked for implementation through the S106 Agreement. The PTAL spreadsheet output is contained at Appendix 2.

Scenario	**Point of Interest 1**	**Point of Interest 2**	**Point of Interest 3**	**Point of Interest 4**
Existing	PTAI 10.44 PTAL 2	PTAI 8.25 PTAL 2	PTAI 5.63 PTAL 2	PTAI 9.05 PTAL 2
Existing + WLL + bus improvements	PTAI 16.24 PTAL 4	PTAI 14.66 PTAL3	PTAI 10.66 PTAL 3	PTAI 14.29 PTAL 3

The results show how the site will benefit from an average PTAI of 14.00 which represents a very high scoring PTAL 3 based on improved access to rail and bus services proposed and funded by the SITS. Point of interest 1, which represents the north western fringe of the site, enjoys a PTAL of 4, while the other three points of interest have a PTAL of 3.

PTAL conclusion

5.23 The PTAL assessment shows that the site benefits from an average high scoring PTAL 3. The proposed density of 557hr/ha is consistent with the density range (450-700hr/ha) recommended for urban sites with PTALs of 4, and above the density range (300-450hr/ha) recommended for urban sites with PTALs of 3. It has been outlined in this evidence how site accessibility is only one factor to consider when determining land use and density and how PTAL provides only one measure of accessibility. Furthermore, it has been demonstrated that the density ranges identified in Table 4B.1 are not intended to be applied rigidly if it can be demonstrated that site potential can be maximised in circumstances where the requirements of Policy 4B.3, the wider objectives of the London Plan, and national planning policy guidance are satisfied.

5.24 Notwithstanding the value of PTAL to assess a site's accessibility to the public transport network, it does not provide an absolute measure of accessibility. As PTAL offers only an indicative guide to measuring a site's accessibility to the public transport network, consideration needs to be given to alternative ways of assessing site accessibility when making decisions about land use type, development densities and levels of car parking in accordance with the planning policies previously identified in this evidence. As the London Plan seeks to achieve the highest intensity of use, a site's PTAL should not been seen as a constraint if it can be demonstrated that the appeal scheme

provides a sustainable transport solution in accessibility and public transport capacity terms, and satisfies national planning policy and the other policies in the London Plan.

Other accessibility measures

5.25 The appeal site's inner London setting is an important factor to consider when assessing its accessibility relative to required destinations or trip ends. An understanding of this relative location can provide a more meaningful reflection of site accessibility. A site's location relative to required destination e.g. ease of access to employment, leisure, retail and education can be better understood by establishing the journey time catchment from the site to and through the public transport network. A measure of journey time catchment gives further meaning to the concept of site accessibility and can provide a more detailed understanding of the appeal site's location and the potential for the proposals to reduce the overall need to travel, promote the use of sustainable travel patterns and maximise the site's redevelopment.

5.26 CAPITAL (Calculator for measuring Public Transport Accessibility in London) was developed by London Transport and is an established tool for measuring travel times to or from specific locations, and gives consideration to the value or use of the public transport network. As CAPITAL is well suited to providing a point or site specific accessibility measure, there are difficulties in developing a strategic London-wide comparative index that would justify its reference in the London Plan. For this reason the London Plan uses indicative PTALs to provide a London-wide comparative index of accessibility to, but not through, the public transport network.

5.27 It would be reasonable to consider CAPTIAL in a similar way to other transport models that are not referred to in planning policy but are commonly used to assess the acceptability of development proposals

in planning policy terms. Typical examples include highway modelling tools such as TRANSYT, ARCADY and PICADY and public transport capacity models such as RAILPLAN.

5.28 CAPITAL provides a useful tool to further assess the appeal site's public transport accessibility and the appeal scheme's acceptability in planning policy terms.

5.29 The CAPITAL method provides an indication of the appeal site's location relative to destination and journey time. Appendix 4 provides an illustrative representation of the area that can be accessed by the public transport system from the appeal site within travel times of up to one hour journey time. The extent of this area is compared to an outer London site in Greenford that also benefits from a PTAL of between 3 and 4. Appendix 5 highlights the number of jobs that can be accessed within 30, 45 and 60 minute catchments from both sites.

5.30 It can be seen that within a 30 minute journey time catchment the appeal site is within access of 285,875 jobs while the Greenford site, despite its comparable PTAL score, is within access of 51,342. A 45 minute journey time catchment from the appeal site provides access to 1,556,265 jobs compared to only 236,064 from the Greenford site. Unlike PTAL, CAPITAL provides an indication of the value of the appeal site's proximate location to employment destinations to emphasise the value of the appeal site's inner London location in relation to its overall level of accessibility to and through the public transport network.

5.31 A site's PTAL does not take into account the ability of public transport network capacity to carry trips generated by new development proposals. The SITS proposes funding improvements in transport accessibility and capacity to (1) improve the site's accessibility by public transport and non-car modes and (2) enhance the attraction of these modes to occupiers of the proposed development and the

surrounding area. The ability of the public transport network capacity improvements to fulfil these two objectives is examined in the technical evidence of Nick Bond. This demonstrates an accordance with the London Plan Objectives 1 and 5 to achieve higher density and intensification in line with public transport accessibility and capacity, Policy 3C.2 and its aim of matching development to transport capacity and Policy 4B.3 and its aim of maximising site potential by ensuring development achieves the highest possible intensity compatible with public transport capacity.

Summary

5.32 In the determination of appropriate land use and density, planning policy recognises site accessibility as influencing the ability to reduce the need to travel, reduce journey lengths and provide for the opportunity to access sustainable modes of transport. It has been highlighted that the acceptability of the appeal scheme is related to its proximity to the public transport network, the ability of that network to provide sufficient choice and capacity, and its location relative to employment, retail, education and leisure opportunities.

5.33 The appeal site currently enjoys a PTAL of 2 and this will increase to an average high scoring PTAL of 3 when the public transport improvements secured by the SITS are implemented. It has been demonstrated that PTAL does not provide an absolute measure of accessibility and should not be singularly used to determine land use and density. Other planning issues require consideration and these are considered in the evidence of Colin Wilson of the Greater London Authority. An examination of the site's accessibility that acknowledges the use and constraints of PTAL, and other measures of accessibility such as CAPITAL, concludes that the appeal scheme is considered to satisfy the planning policies designed to maximise site potential in a manner that promotes sustainable travel behaviour and responds to local context.

5.34 This view is based on an assessment of accessibility that supports the proposed housing density by concluding that the site's inner London location provides opportunities to access employment, retail, education and leisure facilities by a range of public transport services operating within sufficient capacity to accommodate the number of trips generated by the development.

6.0 Car Parking

6.1 PPG13 acknowledges that the availability of car parking has a major influence on the means of transport people choose for their journeys and seeks to use parking policies, alongside other planning and transport measures, to promote sustainable transport choices and reduce reliance on the car for work and other journeys. PPG13 requires local authorities to ensure that, as part of a package of planning and transport measures, levels of car parking provided in association with development will promote sustainable travel choices.

6.2 PPG13 recommends that development plans set maximum parking levels designed to be used as part of a package of measures to promote sustainable transport choices, reduce the land take of development, enable schemes to fit into central urban sites, promote linked trips and access to development for those without use of car and to tackle congestion. Paragraph 55 stresses that it should not be assumed that where a proposal accords with the relevant maximum parking standard it is automatically acceptable in terms of achieving the objectives of PPG13.

6.3 The appeal scheme proposes a total of 667 car parking spaces. On the RBKC site 360 spaces are allocated to 420 residential units. On the LBHF site 267 spaces are allocated to 382 units. The remaining 40 spaces comprise metered bays that are relocated from Lots Road into the basement parking to improve traffic flow along Lots Road. TfL has assessed the proposed level of parking in relation to the policy guidance set out in PPG 3, PPG 13 and the London Plan. The guidance aims to strike a balance between reducing traffic congestion and promoting sustainable transport choices without discouraging new development by imposing unduly restrictive car parking standards.

6.4 The appeal applications propose 0.78 (627 spaces: 802 units) spaces per residential unit. This level of provision is in conformity with the

London Plan parking standard of 1 to less than 1 space per unit in developments located in central or urban location, comprising of mostly flats and enjoying PTALs of between 2 and 6. The London Plan recognises that public transport accessibility should be used to assist in determining appropriate residential density and the appropriate level of car parking provision.

6.5 TfL considers the proposed parking levels to accord with Policy C3.22 of the London Plan which seeks to regulate parking in order to minimise additional car travel, reduce trip lengths and encourage the use of other, more sustainable modes of travel. A combination of restraining proposed car parking levels to 0.78 spaces per unit and funding improvements to public transport through the SITS S106 package is considered to improve public transport accessibility and use in accordance with policy objectives of reducing car dependence and traffic congestion and encourage sustainable travel patterns.

6.6 As the amount of car parking serving the development will influence the vehicle trip generation, consideration must equally be given to minimising the impact on the operation of the Transport for London Road Network and its junctions with the surrounding road network. As the Highway Authority, TfL assesses the traffic generation impact of development proposals and highway alterations on junction and link capacity, bus priority and journey times, loading and servicing requirements and pedestrian and cycle priority. This has been assessed by TfL and is described in detail in the evidence of Nick Bond.

7.0 Section 106 Agreement

7.1 London Plan policies 6A.4 and 6A.5 identify priorities for planning obligations. Affordable housing and transport improvements should generally be given the highest importance and negotiations should seek contributions towards the full cost of all such provision that is fairly and reasonably related in scale and in kind to the proposed development and its impact on the wider area.

7.2 The appeal proposals include improvements to public transport services in the form of the SITS which is to be funded and entered into through a Section 106 agreement between the Appellant, the Local Authorities and Transport for London. The package of improvements comprise financial contributions towards the following:

- bus service and priority improvements;
- the construction of a new station on the West London Line;
- improvements at the junction of Lots Road and Cremorne Road;
- pedestrian and environmental improvements;
- cycle improvements
- School Travel Plan;
- Green Travel Plan

7.3 The evidence provided by Nick Bond provides a technical assessment and justification that the impact on public transport services and highways operation can be individually and collectively mitigated by the components of the SITS. This technical assessment is used to inform the acceptability of the S106 Agreement in complying with planning policy.

Cremorne Road/Lots Road junction improvements

7.4 The S106 agreement makes provision for a £200,000 contribution towards signalisation of the junction to give priority to traffic exiting Lots Road and introduce pedestrian crossing facilities.

7.5 The evidence provided by Nick Bond confirms TfL is content that the proposed junction signalisation is acceptable in capacity and operation terms. The signalisation of the junction will give priority to traffic exiting Lots Road, improve road safety for all users, and include bus priority measures to assist service improvements identified in the SITS that are intended to operate along the eastern arm of Lots Road. The signalisation of the junction will ensure the reliability of bus service improvements identified as part of an overall strategy to improving the site's public transport accessibility and the appeal scheme's acceptability in planning policy terms.

West London Line station

7.6 The S106 agreement makes provision for a £1,000,000 contribution towards the capital cost of constructing the West London Line station. Construction of the station is due to commence in Spring 2005 and be operational in Autumn 2005. It is possible that the station may be constructed before the S106 contribution is made. In the event that permission is not granted, TfL is nevertheless committed to putting together a financial package which ensures the station opening in 2005. TfL is currently in discussions with LBHF and RBKC as to how a combination of S106 revenue and TfL funding can meet the capital and revenue sums required to give certainty to the project.

7.7 The West London Line station contribution is considered necessary and relevant to planning in that it contributes to a package of transport improvements that improve the site's accessibility to public transport

and facilitate development of the site with a proposed density that can be supported in planning policy terms.

Bus Service and Priority Improvements

7.8 The S106 agreement secures a total of £2,350,000 towards bus service improvements needed to provide additional capacity to meet the forecast demand created by the proposed development, improve the site's accessibility by public transport and reduce reliance on the car. The proposals include bus priority measures designed to improve the reliability of existing service diversion and the introduction of a new service. These contributions are considered necessary and relevant to planning in that they contribute to a package of transport improvements that help deliver a housing development that can be supported in planning policy terms.

8.0 Conclusion

8.1 TfL advised the Mayor that the transport impacts of the appeal scheme are acceptable subject to the public transport improvements negotiated and proposed in the SITS.

8.2 In its consideration of the proposed development TfL recognises site location and accessibility to public transport as important factors to take into account when determining appropriate land use and density. An accessibility assessment of the appeal site has considered its proximity to existing and future public transport services, the significance of its inner London location relative to destination and journey time catchment, and the ability of the public transport capacity to accommodate the number of trips generated by the development.

8.3 It is concluded that by virtue of the transport improvements identified in the SITS and the site's proximate location to the public transport network and centres of employment, retail, education and leisure, the proposed development satisfies planning policies designed to maximise the redevelopment potential of urban sites by matching development location and intensification with public transport accessibility and capacity.

8.4 By making provision to improve the attraction of, and accessibility to, public transport services, while restraining car parking at an inner London site, the proposed development is considered to offer a sustainable redevelopment solution that will contribute to minimising the need to travel, reducing the growth of journey lengths and promoting sustainable travel patterns in accordance with national and regional planning policy.

8.5 I recommend that the Inspector allows the appeal.

Appendix 1

Planning Policy Context

Planning Policy Guidance Note 13: Transport (2001) (PPG13)

Relevant Policies

Paragraph 4 states that the objective of the guidance is to integrate planning and transport at the national, strategic and local level.

Paragraph 6 lists the factors local authorities should take into account in their consideration of planning applications in order to deliver the objectives of the guidance

Paragraphs 16 and 21 support the principle of achieving the maximum development potential of sites with good public transport accessibility or around major nodes along good quality public transport corridors.

Paragraph 49 emphasises how the availability of car parking has a major influence on the means of transport people choose for their journeys and concludes that reducing the amount of parking in new development is essential, as part of a package of planning and transport measures, to promote sustainable travel choices.

Paragraph 51 identifies measures which local authorities should develop and implement with regard to car parking

Paragraph 72 recognises how the availability and use of public transport is a very important ingredient in determining locational policies designed to reduce the need for travel by car.

Paragraph 74 lists the public transport factors local authorities are required to take into consideration when determining planning applications.

Planning Policy Guidance Note 3: Housing (PPG3)

Relevant Policies

Paragraph 2 lists the objectives local authorities are required to adopt in their consideration of housing provision.

Paragraph 11 requires local authorities to formulate housing plans that avoid housing development which makes inefficient use of land and provide for more intensive housing development in and around existing centres and close to public transport nodes and introduce greater flexibility in the application of parking standards, which the government expects to be significantly lower than at present.

Paragraph 31 requires local authorities, in deciding which sites to allocate for housing in UDPs, to assess their potential and suitability for development against set criteria.

Paragraph 46 requires planning authorities to promote development that is linked to public transport and mixed use development.

The London Plan: Spatial Development Strategy for Greater London (February 2004)

Relevant Policies

The London Plan was adopted in February 2004 and sets out the Mayor's vision for spatial development in London.

Objective 1 is 'To accommodate London's growth within its boundaries without encroaching on open spaces' and Objective 5 is 'To improve London's accessibility'. Both objectives identify a set of key policy directions.

Policy 3C.1 seeks close integration of transport and spatial development.

Policy 3C.2 seeks to match development to transport capacity.

Policy 3C.3 promotes sustainable transport in London.

Policy 3C.9 commits to increasing the capacity, quality and integration of public transport to meet London's needs.

Policy 3C.10 seeks to phase development with public transport improvements.

Policy 3C.13 commits to enhancing bus priority.

Policy 3C.16 sets out the measures to be included in UPDs to support the commitment towards tackling congestion and reducing traffic.

Policy 3C.17 expects UDP's to include policies that reflect the Mayor's Transport Strategy and the London road hierarchy in the allocation of street space.

Policy 3C.19 commits the Mayor to working with TfL and boroughs to implement Londonwide improvements to the quality of bus services for all.

Policy 3C.20 requires UDP policies to improve conditions for walking.

Policy 3C.21 requires UDP policies to improve conditions for cycling.

Policy 3C.22 requires local authorities to develop parking strategies that ensure 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.

Policy 4B.3 seeks to maximise the potential of sites.

Policies 6A.4 and 6A.5 identify priorities for planning obligations.

The Mayor's Transport Strategy (July 2001)

Relevant Policies

The Mayor's Transport Strategy sets out the Mayor's vision for transport in London to 2011.

Paragraph 2.4 identifies making London an accessible city as a key objective for the Mayor.

Paragraph 3.9 identifies what is necessary to make London an accessible city.

Policy 3.7 identifies the issues the Mayor will give due weight to in his exercising his functions in relation to planning applications.

Paragraph 4A.5 and 4A.6 identify the ten key transport system priorities.

Policy 4F.1 commits to transforming people's experience of travelling by bus by tackling the problems of unreliability and slow journeys, and states that buses must be reliable, quick, convenient, accessible, comfortable, clean easy and safe to use, and affordable.

London Borough of Hammersmith and Fulham Unitary Development Plan (2003)

Relevant Policies

Policy TN1 identifies the broad objective as seeking to ensure that the Council's policies for transportation planning have regard to providing adequate accessibility for persons and goods to all land uses.

Policy TN2 seeks to ensure the integration of transportation and land use planning through development.

Policy TN5 seeks to ensure development makes adequate provision for pedestrians.

Policy TN6 seeks to ensure development makes adequate provision for cyclists.

Policy TN7 seeks to prevent the impact of development on the Borough Road Network

Policy TN11A seeks to control increases in travel and transport demand associated with development within the context of reducing vehicular road traffic and additional roadside parking.

Policy TN17 seeks to ensure the adequate and appropriate provision of frequent, accessible, safe, reliable, regular and sustainable public transport services.

Policy TN21 seeks to improve public transport services in connection with mitigating the impact of development and promoting acceptable alternatives to car use.

Policy TN22 supports the improvements of bus services through the control of development.

Policy TN26 supports development that exploits the use of the river Thames for the operation of public transport services.

Policy HO7 'Residential Density' sets out the criteria under which residential development can deliver a higher density than that outlined as the maximum standard.

Royal Borough of Kensington and Chelsea Unitary Development Plan (2002)

Relevant Policies

Paragraph 7.3 sets out the transport objectives.

Policy TR1 seeks to ensure that high trip-generating development is located in areas well served by public transport.

Policy TR2 seeks to maintain, improve and provide safe and convenient crossing facilities for pedestrians on all roads.

Policy TR4 seeks to protect and encourage provision of new direct pedestrian accesses.

Policy TR5 seeks to improve and introduce cycle facilities in the Borough.

Policy TR6 seeks to review the operation of major junctions which are a barrier to cycle movement and introduce measures to help cyclists.

Policy TR8 seeks to ensure that cycle routes are provided where necessary to improve accessibility through development sites.

Policy TR9 seeks to require, where appropriate, the provision of cycle parking facilities in residential developments.

Policy TR12 outlines the Council's support for the improvement of local passenger services on the West London Line, including the provision of new stations.

Policy TR13 outlines the Council's support for the improvement of existing stations.

Policy TR14 seeks new bus services and improvements to existing bus services.

Policy TR15 seeks to improve bus services by identifying and introducing traffic management schemes on bus routes, including bus priority measures to reduce delays to buses, and by bus stop improvements.

Policy TR16 seeks improvements in facilities where public transport users interchange between types of transport.

Policy TR17 seeks the provision of interchange facilities where none presently exist where they enhance the public transport network.

Policy TR23 encourages increased use of the River Thames and Grand Union Canal for public transport and freight movement.

Policy TR24 seeks to ensure that road improvements required by development proposals are safe and, if necessary, improve safety.

Policy TR25 seeks to improve the efficiency of major roads within the Borough whilst not increasing overall traffic flows.

Policy TR35 requires an assessment of the impact of new development on public transport infrastructure, the highway and on the environment.

Policy TR36 seeks to resist development which would result in any material increase in traffic, parking, road congestion, or decrease in road safety, or unacceptable environmental consequences.

Policy TR37 seeks developer contributions for improvements to transport services.

Policy TR38 seeks to limit the number of off-street parking spaces provided in non-residential development to meet essential need only.

Policy TR42 seeks to require new residential development to include off-street parking up to the maximum adopted Council standards, except in locations where services are readily accessible by walking, cycling or public transport; which provide for people where the demand for car parking is likely to be less than for family housing.

Policy TR44 advises that the Council will normally resist development which would result in the net loss of on-street residents' parking.

Appendix 2

PTAL spreadsheet output

Existing PTAL

PTAI Calculator (Manual)

Parameters

Walk Speed (metres/min)	80
Bus reliability (mins)	2
Rail reliability (mins)	0.75
Peak hour services	

Site		Stop	Route	Distance (metres)	Frequency (vph)	Weight	Walk Time (mins)	Service Wait Time (SWT) (mins)	Access Time (mins)	Equivalent Doorstep Frequency (EDF	Accessibility Index	
Site 1	Bus Service	7G01	11	119.7		0.5	5.25	6.29	11.53	2.60	1.30	
526,262.31		7G01	22	419.7		0.5	5.25	5.00	10.25	2.93	1.46	
176,956.41		7G14	C3	27.3		1	0.34	7.00	7.34	4.09	4.09	
		7G07	328	668		0.5	7.58	5.00	12.58	2.39	1.19	
		X1	391	591		0.5	7.39	7.00	14.39	2.09	1.04	
	Rail Services											
	River Services			517	2	1	6.46	15.75	22.21	1.35	1.35	
												10.44 PTAL3
Site 2	Bus Service	7G01	11	493		0.5	6.16	6.29	12.45	2.41	1.20	
526,441.20		7G01	22	493		0.5	6.16	5.00	11.16	2.69	1.34	
177,086.38		7G14	C3	231		1	2.89	7.00	9.89	3.03	3.03	
		7G07	328	445		0.5	5.56	5.00	10.56	2.84	1.42	
	Rail Services											
	River Services			667	2	1	8.34	15.75	24.09	1.25	1.25	
												8.25 PTAL2
Site 3	Bus Service	X1	391	578		0.5	6.60	7.00	13.60	2.21	1.10	
526,436.62		7G14	C3	240.7		1	3.01	7.00	10.01	3.00	3.00	
176,877.92												
	Rail Services											
	River Services			313	2	1	3.91	15.75	19.66	1.53	1.53	
												5.63 PTAL2
Site 4	Bus Service	7G01	11	517.6		0.5	7.47	6.29	13.76	2.18	1.09	
526,387.80		7G01	22	517.6		0.5	7.47	5.00	12.47	2.41	1.20	
176,963.96		7G14	C3	232.7		1	2.32	7.00	9.32	3.22	3.22	
		7G07	328	636.1		0.5	7.98	5.00	12.98	2.31	1.16	
		X1	391	600		0.5	8.00	7.00	15.00	2.00	1.00	
	Rail Services											
	River Services			484	2	1	6.05	15.75	21.80	1.38	1.38	
												9.05 PTAL2

Future PTAL

PTAI Calculator (Manual)

Parameters

Walk Speed (metres/min)	80
Bus reliability (mins)	2
Rail reliability (mins)	0.75
Peak hour services	

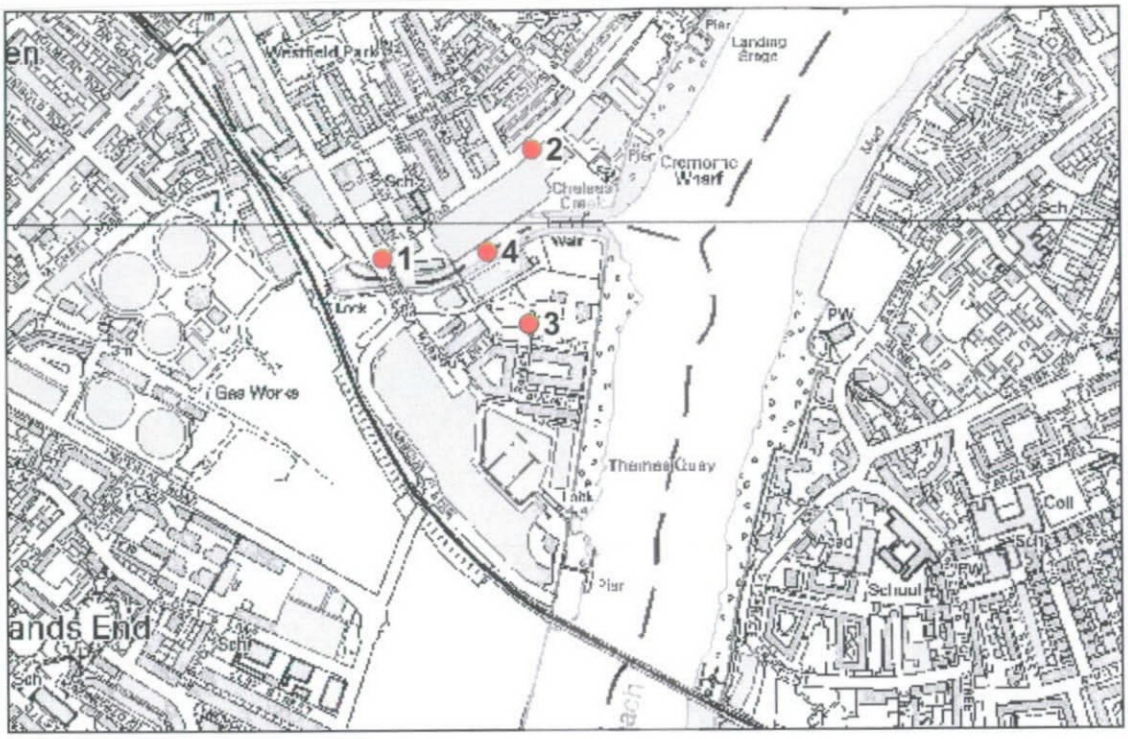
Site		Stop	Route	Distance (metres)	Frequency (vph)	Weight	Walk Time (mins)	Service Wait Time (SWT) (mins)	Access Time (mins)	Equivalent Doorstep Frequency (EDF	Accessibility Index	
Site 1	**Bus Services**	7G01	**11**	419.7	7	0.5	5.25	6.29	11.53	2.60	1.30	
526,262.31		7G01	**22**	419.7	15	0.5	5.25	5.00	10.25	2.93	1.46	
176,956.41		New Stop	**C3**	20	8	1	0.25	5.75	6.00	5.00	5.00	
		New Stop	**New**	20	6	0.5	0.25	7.00	7.25	4.14	2.07	
		7G07	**328**	606	12	0.5	7.58	5.00	12.58	2.39	1.19	
		X1	**391**	591	6	0.5	7.39	7.00	14.39	2.09	1.04	
	Rail Services	WLL Station		391.2	6	1	**4.89**	5.75	**10.64**	2.82	2.82	
	River Services			517	2	1	**6.46**	15.75	**22.21**	1.35	1.35	
											16.24	**PTAL4**
Site 2	**Bus Services**	7G01	**11**	493	7	0.5	6.16	6.29	12.45	2.41	1.20	
526,441.20		7G01	**22**	493	15	0.5	6.16	5.00	11.16	2.69	1.34	
177,086.38		New Stop	**C3**	10	8	1	0.13	5.75	5.88	5.11	5.11	
		New Stop	**New**	10	6	0.5	0.13	7.00	7.13	4.21	2.11	
		7G07	**328**	445	12	0.5	5.56	5.00	10.56	2.84	1.42	
	Rail Services	WLL Station		612.8	6	1	**7.66**	5.75	**13.41**	2.24	2.24	
	River Services			667	2	1	**8.34**	15.75	**24.09**	1.25	1.25	
											14.66	**PTAL3**
Site 3	**Bus Services**	X1	**391**	528	6	0.5	6.60	7.00	13.60	2.21	1.10	
526,436.62		New Stop	**C3**	233	8	1	2.91	5.75	8.66	3.46	3.46	
176,877.92		New Stop	**New**	233	6	0.5	2.91	7.00	9.91	3.03	1.51	
	Rail Services	WLL Station		324.9	6	1	**4.06**	5.75	**9.81**	3.06	3.06	
	River Services			313	2	1	**3.91**	15.75	**19.68**	1.53	1.53	
											10.66	**PTAL 3**
Site 4	**Bus Services**	7G01	**11**	597.8	7	0.5	7.47	6.29	13.76	2.18	1.09	
526,387.80		7G01	**22**	597.8	15	0.5	7.47	5.00	12.47	2.41	1.20	
176,963.96		New Stop	**C3**	129	8	1	1.61	5.75	7.36	4.07	4.07	

	New Stop	New	129	6	0.5	1.61	7.00	8.61	3.48	1.74
	7G07	328	638.1	10	0.5	7.98	5.00	12.98	2.31	1.16
	X1	391	640	6	0.5	8.00	7.00	15.00	2.00	1.00
Rail Services	**WLL Station**		445	6	1	5.56	5.75	11.31	2.65	2.65
River Services			484	2	1	6.05	15.75	21.80	1.38	1.38

14.29 PTAL3

Appendix 3

PTAL points of interest map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Chelsea Creek
Sch
Weir
Link
Gas Works
Thames Quay
Tank
Pier
Mud
PW
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Schuul
ands End
1
2
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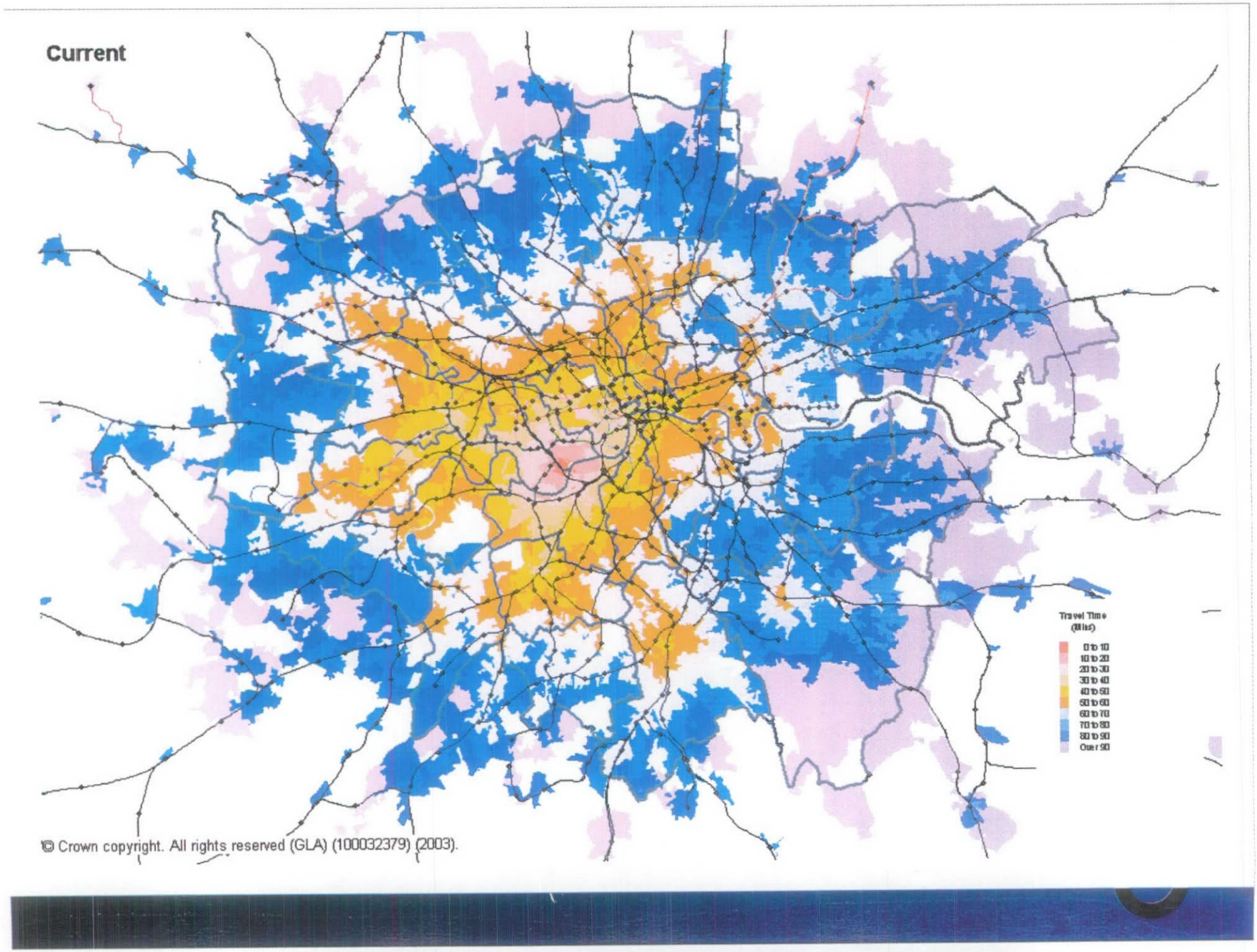
4

Appendix 4

CAPITAL output map


Current
Travel Time (Mins)
0 to 10
10 to 20
20 to 30
30 to 40
40 to 50
50 to 60
60 to 70
70 to 80
80 to 90
Over 90
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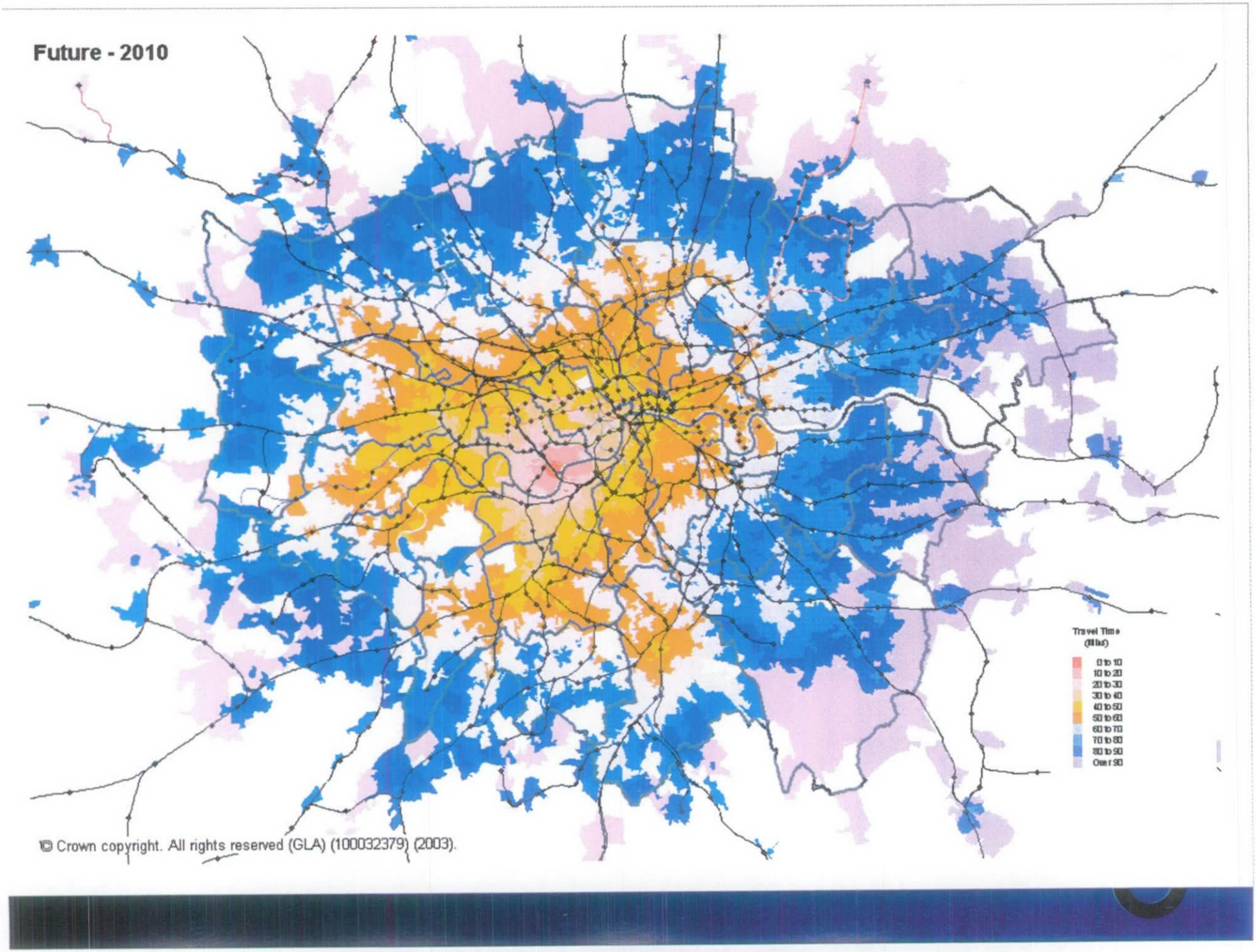
Future - 2010
Travel Time (Mins)
0 to 10
10 to 20
20 to 30
30 to 40
40 to 50
50 to 60
60 to 70
70 to 80
80 to 90
Over 90
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Appendix 5

CAPITAL Lots Road v Greenford output

Lots Road

Greenford

Appendix 6

Employment data

Employment - LTS Data - within London

30 minute catchment	**2,001**	**2,006**
Lots Road	277,839	285,875
Greenford	52,576	51,342
45 minute catchment	**2,001**	**2,006**
Lots Road	1,501,635	1,556,265
Greenford	232,006	236,064
60 minute catchment	**2,001**	**2,006**
Lots Road	2,686,456	2,793,215
Greenford	1,448,050	1,483,864