MAYOR OF LONDON

Delivering Increased Housing Output

Technical Report for the London Plan (Spatial Development Strategy for Greater London) Alterations Examination in Public

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Executive summary

The new housing targets set out in the London Plan Alterations are a significant increase on the existing targets. As such, they are a measure of the Mayor's commitment to drive up housing supply in order to address London's economic and social challenges. The scale of this increase, from 23,000 to 31,090 homes a year, means that it is clearly right to consider the extent to which this new target is deliverable.

However, this 35% increase is not perhaps the step change that it at first appears to be. Firstly, it should be viewed in the context of the significant increase in housing delivery that has already taken place since the Mayor and GLA were established. Secondly, there is clear evidence that the preconditions and policy framework are either in place or being put in place to increase housing output still further. Finally, the Mayor expects that the outcome of the current Review of Powers of the Mayor and GLA will enable housing investment and planning decisions across London to be more effectively brought together - setting clear priorities that will maximise housing delivery.

The recent increase in housing output is clear when looking back to 1999. In this calendar year, immediately prior to the creation of the GLA, 17,131 new homes were delivered from conventional sources. By 2004/5 this had increased to 22,885 homes. Adding on the supply of non-self contained housing and the number of long term empty properties returning to use, took the total output to 27,364 homes in 2004/5, already over half way towards the proposed new target. This does not appear to be a one-off increase, but is rather part of a longer-term acceleration in housing delivery in London, as supply starts to respond to the high levels of demand for new homes in the region.

There has been an increase in refusals of planning permissions in London over the last ten years. This can be attributed to a range of problems within the planning and development processes. Nevertheless, the growth in the total housing pipeline has accelerated even faster than the growth in the delivery of new homes. There has been a doubling of residential planning permissions granted since 1999; that is an increase in the annual pipeline from 23,971 new homes in 1999 to 51,477 in 2004/5. By March 2006, London's total cumulative development pipeline had risen to 163,155 homes, of which 59,421 are under construction.

It is clear that much of this pipeline is due to some of London's major strategic sites, such as Stratford City, Wembley, Silvertown Quays and further phases of Greenwich Millennium Village, being given planning permission and moving into the delivery phase. These sites will inevitably take some years to build out. While developers' market assessments have an impact on the build out rate, there is little evidence of residential developers land-banking sites. The Barker Review also argued that house builders do not land bank on a significant scale - primarily because of the negative effect on capital returns – a view that is backed by the house-building industry in London. There is evidence that some major housing associations have been acquiring land in anticipation of future funding allocations. This has provided increased certainty of delivery of the recently announced Housing Corporation investment programme in London for 2006 –2008.

Taken together, this would imply that this increased pipeline does demonstrate an appetite for further increases in housing delivery, reflecting the change in culture and attitude in the London development industry as a result of the Mayor's clear commitment to increasing supply. It also shows that, if some of the potential barriers to delivery in the development and planning process were tackled by adopting the changes proposed in the Review of Powers, then there are opportunities to drive delivery up further and faster.

The preconditions and policy framework are also in place to support a further increase in housing delivery. After a couple of years in the doldrums, there is evidence that London's housing market is picking up. Over the last year there has been an 8% increase in London prices compared to a UK average of 6%. House prices in the east sub-region, where there is the greatest capacity for increased output, have risen on average by 71% between 2000 and 2005, compared to 53% across London as a whole.

The policy context within which this new housing should be built is set out in the London Plan, the Housing Supplementary Planning Guidance and the Sub-Regional Development Frameworks. These are supported by the London Housing Strategy, which is published by the London Housing Board, comprising the key public sector housing stakeholders in London. This strategy aligns its aims and investment priorities entirely with the London Plan.

The London Housing Capacity Study has shown that there is the land capacity to develop new homes without infringing on any of the other key policy aims of the London Plan, such as the protection of green belt or metropolitan open space, safeguarding employment land where it is needed, building to appropriate densities, and taking into account constraints such as transport accessibility, air quality, flood risk and waste requirements. The Plan has been flexible on the release of strategic employment land to facilitate housing development, which has provided a significant boost to supply. The Plan also gives guidance on the implementation of a mixed-use policy, differentiating between its implementation in central London and the rest of the capital.

To move from planning to delivery, the key public sector agencies – English Partnerships, the LDA and the Housing Corporation are working to bring land forward for development, to direct the investment of public subsidy to deliver in line with the aims of the London Plan, and to enable the construction industry to develop the capacity and skill base required to deliver increased output.

The Mayor expects that, following the Review of Powers, these agencies will be brought together in a new Housing Investment Panel alongside agencies, such as Transport for London, that are investing in the infrastructure necessary to maximise the potential of sites to deliver new homes. This will enable clearer direction, more effective phasing, and the joining up of investment, resulting in a stronger focus on the delivery of new homes. It will also ensure that there is a clearer set of regional strategic priorities, which will ultimately provide better value for money.

There is no doubt that there is a serious shortage of housing across all tenures in London. In fact, for the 10-year period 2002 to 2012 the London Housing Requirements Study, published in December 2004, identified a need for 35,400 homes a year to clear the backlog of those living in unsuitable housing and to provide homes for London's growing population. New housing must also be able to meet the full range of housing needs, in particular, the need for affordable homes that are suitable for families.

Over the last two years housing output has exceeded the growth in the number of households, beginning to tackle the backlog of housing need. The increased output proposed in the Alterations should reverse the increase in overcrowding and homelessness that took place between 1991 and 2001. However, it would clearly be inappropriate to set a target for new homes based on need alone without recognising that any delivery target is constrained by the availability of land on which to develop those homes. Similarly, when setting the targets for housing mix (which is not a policy being reviewed in these Alterations) the Mayor has put sustainability and deliverability at the core of the decision-making process.

To achieve this, the London Plan aims to achieve a balanced tenure and size mix. This will meet existing and future need, as well as achieving wider policy aims, such as delivering sustainable and mixed communities, helping those on low to middle incomes into home ownership and addressing the employment needs of key public services workers. The London Plan targets also take into account development economics; that is the effect of housing mix on the viability of development, taking into account the availability of public subsidy. On this basis the London Plan and London Housing Strategy set the target that 50% of new housing should be affordable, of which 35% should be social rented housing and 15% intermediate housing.

Since its adoption in 2004, the flexible and pragmatic implementation of these London Plan targets through the planning process, supported by the London Housing Strategy and its investment programme, has been at the core of successfully increasing housing delivery. The Mayor will continue to seek the best possible mix of new housing in the interests of all Londoners, given the funding available and taking into account other national and regional priorities for housing investment.

The most obvious effect of the targets set out in the Alterations is a large-scale shift in the spatial distribution of new housing delivery to the east, including, but by no means limited to, the Thames Gateway Opportunity Areas. However, it is not the case that all new housing will be built in the east, as significant increases in output are also possible in west and north London. Nevertheless, the largest increase in capacity is in the east, accounting for 46% of all new housing. Much of this capacity is clearly a regional opportunity to meet need, as overall there is more capacity than need for housing in the east sub-region. This presents an opportunity to build on the existing regeneration of the area and to develop new mixed communities.

As stated above, the east of London has seen price rises well above the London average in recent years. This trend is likely to increase as a result of the 2012 Olympics. In the social and intermediate sector there is strong evidence of an existing desire to take up opportunities for cross-borough mobility where these are available. London is already far ahead of the rest of the country in delivering choice in the social and intermediate sectors and is now linking this to mobility, with clear plans in place to drive this further forward. Therefore, there is both a demand for these new homes in the east and the means of delivering the mobility to match demand and supply.

The importance of transport and social infrastructure in ensuring the sustainability of new communities has been stressed in many responses to the Alterations. For transport, the current investment programme, the largest in London since World War Two, provides a fundamental underpinning to the later phases of the capacity figures. Public transport accessibility, based on both current provision and future projections, was a fundamental consideration in formulating the density figures used to calculate the new housing delivery targets set for each borough.

The reviews of the London Plan and Mayor's Transport Strategy currently underway will also ensure a focus on delivering the transport infrastructure necessary to support economic growth and increased housing output.

The issue of social infrastructure including schools and health services, and the provision of utilities is also important. The Mayor has been working with Government departments and utilities providers to ensure that social infrastructure is planned in accordance with the proposed housing targets. However, it is not homes that need social infrastructure but the people who live in them. In fact, many of the people who will move into new homes in London are already living in the capital and levels of in-migration are unlikely to be affected by the amount of house building in London. Therefore, failing to build new homes will not reduce the need for social infrastructure. Not increasing housing provision will simply increase overcrowding, homelessness, the use of temporary accommodation and increase the problems of affordability in the market.

On the other hand, building new homes could help alleviate pressures on existing social infrastructure, rather than adding to demand. It enables families to move into more appropriate housing, reducing their demands on existing infrastructure. It provides planning gain that may go some way to supporting the development of new infrastructure, and it enables more planned and effective deployment of existing and new social infrastructure. The Alterations provide the opportunity for the Mayor to work more effectively with central government to plan the provision of future social infrastructure.

Therefore, while the increase in the housing targets is clearly a challenge, it is one to which London is already rising. The Mayor's commitment to driving up housing supply has already achieved half the increase necessary, with organisations in both public and private sectors showing a willingness and capacity to deliver. The market, preconditions and policy framework are all aligned to enable the delivery of increased housing output and the Review of Powers presents an opportunity to drive this forward.

31,090 homes a year for the next ten years is deliverable. These homes are desperately needed to tackle London's housing problems of affordability, homelessness and overcrowding which, if not addressed, will become a major block on the economic and social well-being of the capital.

Introduction

This report is published to support the Mayor's proposed housing provision Alterations to the London Plan. These Alterations were published in October 2005 and are the subject of an Examination in Public (EiP), which commences on 13th June 2006.

The Alterations propose that the annual housing provision target for London is increased from the current 23,000 homes per annum set in the London Plan published in February 2004, to a new target of 31,090 per annum over the ten-year period 2007/8 to 2016/7. The published Alterations also propose new borough targets. These proposals are based on the 2004 London Housing Capacity Study (LHCS). They are consistent with the Government's Sustainable Communities Plan. They also reflect the recognition by Government in its response to the Barker Review of Housing Supply that there is a need for a significant increase in housing output, and that this need is greatest in southern England, including London.

There is a serious shortage of housing in all sectors in London. The Housing Requirements Study published by the Mayor in December 2004 estimated a requirement of 35,400 homes a year for the period 2002/3 to 2011/2.

The LCHS demonstrated that there is sufficient land available in London to achieve the new target of 31,090 homes per annum, which represents a 35% increase in output from the 23,000 target. In publishing his proposals for new targets, the Mayor is aware that delivering the increased output requires a number of other matters to be taken into consideration. The purpose of this report is to show that the targets are realistic, sound and deliverable. The following sections demonstrate that the Mayor has given full consideration to the issues of how housing sites can be brought to the market, the impact of the planning process, the need for infrastructure funding, including transport, education and health, and the issues of marketing new housing on brownfield sites.

As set out in the published Alterations, "*the delivery of these targets is dependent on adequate funding for transport infrastructure, social infrastructure and affordable housing. This funding should ensure that development is sustainable and provides an appropriate mix of provision in terms of type and affordability in accordance with the policies set out in this Plan. Delivery will also be affected by market factors*."

The first section of this report sets out the basis for the recommended housing provision target of 31,090 homes, and demonstrates how this increased target is consistent with London Plan policies. This section provides further detailed analysis of the status of sites assessed in the LHCS and also summarises the scenario testing carried out within this and the published Sustainability Appraisal.

The second section examines land availability, taking into consideration the impacts of land ownership, land assembly and demand for commercial land uses.

The third section demonstrates that the targets are based on appropriate assumptions on housing density and mix and that the sustainability of development in terms of transport, social infrastructure, and the provision of water supply and sewerage have been adequately considered.

The fourth section analyses recent development trends in terms of approvals, starts and completions. In this context it is important to note that housing output from all sources is already significantly above the existing delivery target of 23,000 homes a year. It considers local authority planning performance is improving. It also demonstrates the extent to which sites identified in the LHCS are progressing through the planning system.

The fifth section reviews market and economic factors impacting on the delivery of higher housing output, in particular looking at the availability of public funding to support affordable housing output.

The sixth section reviews the impact of the current perceived skills shortage on housing development and assesses house-builders' capacity to achieve a significant increase in housing output.

The final section demonstrates the soundness of the regional approach, recognising the geographical mismatch of capacity and demand, and deals with concerns relating to the concentration of development and its resulting social polarisation. It considers what measures need to be put into place to attract residents to these new communities, and at the same time illustrates latent demand for increased mobility within London.

Overall, the report demonstrates that, subject to appropriate action by other government agencies including appropriate funding support, the 31,090 annual target is robust, realistic and deliverable. It also highlights that delivery of increased housing supply would be improved if additional planning and housing powers currently under review were given to the Mayor.

1. London's Housing Capacity

This section sets out how the estimates of housing capacity were arrived at for London and each borough, and the assumptions made about their translation into housing starts.

1.1 Housing provision targets

The findings of the 2004 LHCS were published in July 2005. The study provides the evidence base to underpin proposals for new housing provision targets in the London Plan. The targets have been formally submitted as part of the first Alterations to the London Plan to be tested at the EiP in June 2006.

The Alterations propose a new annual housing target for London of 31,090[1]. This is an increase of 35% over the existing London Plan housing target of 23,000 additional homes per year. Individual borough targets have been used to arrive at the London-wide target.

These proposals were put to the Mayor in July 2005, followed by a process of consultation with the London Assembly and the GLA's functional bodies between July and September 2005. Informal consultation was also undertaken with the London boroughs to seek early feedback on the new housing targets and to ensure any final amendments to the base capacity figures were made prior to the formal public consultation stage. 13 responses were received from the 33 London boroughs.

Amendments were made to the proposed borough targets where an adequate justification was provided. Through this process two boroughs put forward strong cases for amendments to their provisional capacity targets. This had an effect of reducing the overall housing provision target from the originally proposed figure of 31,505, as published in the LHCS report (July 2005), to 31,090.

The formal public consultation stage began in October 2005 and concluded in January 2006. Responses were received from 32 London boroughs and a number of other organisations.[2] These responses will form the basis for issues to be discussed at the EiP. However, it is expected that any significant concerns will be resolved prior to the EiP through round table discussions.

A table showing the proposed borough targets that make up the London wide target of 31,090 is in Annex 1. This also gives a comparison with the existing housing targets and the percentage change for each borough.

The LHCS was undertaken in four phases (see Table 1.1 below). The capacity figures that underpin the proposed housing targets are only for the period 2007 to 2017, hence only capacity in Phases 2 and 3 were used for housing targets. Phase 1 records what was being built or was in the development pipeline at the time of the study. Phase 4 picked up all the residual capacity that was not appropriate for other phases, including the capacity identified in major schemes that have been phased over a long period.

[1] This figure may be subject to change as a result of the public consultation process.
[2] The London borough of Enfield was the only borough that did not respond to the formal consultation.

Table 1.1: London Housing Capacity Study phases

Phase	1	2	3	4
Start	April 2004	April 2007	April 2012	April 2017
Finish	March 2007	March 2012	March 2017	March 2027

Further information regarding the identified capacity in all phases is provided in section 1.5 below.

Converting identified capacity into actual housing will be a key challenge for London over the target period 2007 to 2017. The following sections will highlight issues that need to be understood when planning the delivery of the proposed housing provision targets.

1.2 Sources of capacity

The LHCS assessed housing capacity for each London borough by considering the different sources of housing supply over the four phases set out above (Further information regarding the sources of capacity can be found in the July 2005 *LHCS*). Four sources were examined:

- large sites – individually identified sites above the gross site area threshold of 0.5 hectares
- small sites - development on sites smaller than 0.5 hectares, which are impractical to identify individually but which can be assumed to be generated on a fairly regular basis from numerous similar opportunities
- non self-contained accommodation
- vacant dwellings returning to use.

Large site capacity was identified by way of an individual site assessment using a computerised system designed for capacity analysis.[3] Various assumptions were applied in the large site assessment, which are outlined in Section 1.3 below.

The total capacity arising from the large site component between 2007 and 2017 has been estimated at 181,650 units. The vast majority (56%) of this capacity comes from the east sub-region. The north and west sub-regions have somewhat lower contributions at 13% each, followed by the central sub-region at 11%. The lowest contributor to large site capacity is the south sub-region at 7%.

The three other sources of capacity were calculated by an allowance based on past trends.

For the small site component the capacity for net additional dwellings between 2007 and 2017 has been estimated at 98,120 units. The majority of the small site capacity is in the east sub-region at 34%. This is closely matched by the contribution in the central sub-region at 31%. The south sub-region provides 15% of the small site capacity, whilst the north and west sub-regions provide 10% each.

[3] Known as the LHCS System and is available at http://lhcs.london.gov.uk/Logon.do

The capacity for net additional dwellings between 2007 and 2017 from the non self-contained component has been estimated at 17,520. The central sub-region contributes the highest concentration of non self-contained dwellings at 51% followed by the east at 27%. The west contributes 11%, the south 9% and the north contributes the lowest at 2%.

For vacant dwellings returning to use, the capacity for net additional dwellings between 2007 and 2017 has been estimated at 13,490. The central and north sub-regions have the greatest potential from vacant dwellings at 29% and 22% respectively, followed by the west at 19% and east at 17%. At 13% the south sub-region contributes the least amount of capacity arising from vacant dwellings returning to use.

Table 1.2 below outlines the sources of capacity by sub-region on an annual basis between 2007 and 2017. These figures differ slightly to those published in the LHCS due to amendments made to vacancy figures from the Office of the Deputy Prime Minister (ODPM) and the large site capacity of some boroughs.

Table 1.2: Sources of annual capacity by sub-region (2007–2017)

Sub-region	Large site capacity	Small site allowance	Non-self contained	Vacancies	Total
Central	2,058	3,002	892	395	6,347
East	10,095	3,331	479	228	14,133
West	2,409	993	182	253	3,837
North	2,373	1,019	42	295	3,729
South	1,230	1,466	157	178	3,031
London total	18,165	9,811	1,752	1,349	31,077
Percentage	58%	32%	6%	4%	100%

The table above breaks down the capacity figures underpinning the proposed housing targets by the sources of supply. The large site capacity contributes to over half the total capacity for the target period (58%). Large site capacity therefore represents the key component of the capacity in London and will be the focus of achieving the proposed housing targets.

Given the significance of the large site capacity, further information regarding the assumptions behind these figures is outlined in Section 1.3 below.

1.3 LHCS assumptions

The full set of assumptions used in the LHCS is set out in the report published in July 2005. These assumptions were based on London Plan policy, factoring in what kind of development would be permissible and what would not be.

The assumptions generally related to the large site capacity estimates and were assessed individually against each identified housing site. In order to derive a capacity estimate for a large site, the LHCS system had a number of assumptions built into it that interacted with details of the location. The key assumptions related to the density calculation for each site and what a site could realistically yield in terms of units. There were also a number of assumptions that formed constraints on capacity to ensure the quantum of development was achievable.

Key aspects of the London Plan were applied as defaults within the LHCS system. For example, development was not permitted on green belt or metropolitan open space, and it was also limited on particular types of employment land.

The main assumptions that were included in the LHCS are:

- protection of open space
- protection of employment land
- site densities based on the London Plan Matrix
- accessibility based on Public Transport Accessibility (PTAL) estimations
- air quality, flood risk, noise pollution and pylons could constrain development on a site (strategic constraints)
- ownership, infrastructure, environmental setting and contamination could constrain development on a site (local constraints)
- large site development should be in accordance with employment land release targets and waste requirements.

Open space

The LHCS excluded any large site that was formally identified as a protected open space by the London Plan or a borough's Unitary Development Plan (UDP). The study did not seek or predict any potential housing capacity from Green Belt, Metropolitan Open Land, Areas of Outstanding Natural Beauty, Sites of Special Nature Conservation Interest, or any Public or Private Open Space identified on a UDP proposals map. However, boroughs could propose capacity on open space as additional capacity where it was justified and appropriate for local circumstances.

Employment land

During the development of the LHCS a number of boroughs expressed concerns that sites currently protected for employment use should not be assumed as having a housing capacity. Whilst this was recognised, it would have been unreasonable to preclude all employment sites. Historically these sites have accounted for much of London's new housing as London's manufacturing and economic base has changed.

Government guidance also indicates that boroughs should assess the need for all such employment sites in relation to demand and take a reasonable view of the desirability and practicality of continued protection.[4]

The LHCS excluded any large site in the general locations indicated by the *London Plan* as a Strategic Employment Location (SEL).[5] This exclusion removed many protected employment sites from the initial housing capacity assessment process. However, it was possible for boroughs to incorporate housing capacity from sites within SELs where this could be justified.

[4] ODPM, *Revised Planning Policy Guidance 3 Housing*. Stationery Office (2005).
[5] See London Plan, *Annex 2– Strategic Employment Locations*, GLA (2004).

Protected employment sites that were specifically identified on UDP maps but are not part of SELs were also given a nominal housing capacity reduction of 50%. This was to reflect that, even with an intensification of employment use, only part of the site would be potentially realisable for housing. The capacity for a site could be refined by indicating a site is suitable for mixed-use redevelopment, which would effectively reduce the amount of area available for residential development.

Protection of employment sites was also applied to sites that are protected by UDP policies.[6] In this case their initial nominal housing capacity was set at 75% (discounted by 25%). Boroughs could also input their own estimate of future housing potential, and also apply local knowledge to indicate residential constraints (for example, contamination, site assembly difficulties, or poor residential environment – see below).

Density

The LHCS used the SRQ matrix from the London Plan to generate a default density for each large site. This is an assessment based on the site area, the PTAL and the setting of the site, and the mid-point of the relevant density ranges that were used.

The mid point of the SRQ matrix is set out in Table 1.3 below. The table shows the density ranges in the SRQ matrix in brackets and the calculated mid-point of the range for each combination of Setting and PTAL.

The setting is based on neighbourhood level analysis (grouped census output areas) of 2001 Census returns. Neighbourhoods with more than 75% flatted development were designated as Central. Neighbourhoods where existing development consisted of more than 75% flats and terraced houses were designated Urban, and the remaining neighbourhoods were designated Suburban.

These designations are not seen as prescriptive or necessarily valid at individual site level. To ensure the setting was accurate, borough users were encouraged to use their local knowledge to select the most appropriate designation that would be part of the default density calculation.

Table 1.3: Density matrix assumptions

Setting	Accessibility index (PTAL)	Dwellings per hectare (Dph)
Central	6 to 4	338 (240-435)
Urban	6 to 4	115 (55-175)
Suburban	6 to 4	80 (50-110)
Central	3 & 2	125 (100-150)
Urban	3 & 2	80 (50-110)
Suburban	3 & 2	48 (30-65)
Urban	1 & 0	40 (30-50)
Suburban	1 & 0	40 (30-50)

[6] Referred to as Other Industrial Sites in the GLA Draft Industrial SPG (2003)

Public transport accessibility

The linkage between public transport accessibility and broad development potential is central to London Plan policy 4B.3 *Maximising the potential of sites* which sets out a residential density and parking provision matrix related to levels of public transport accessibility. Increased development potential through higher density is positively related to higher public transport accessibility.

Public transport accessibility is measured by the PTAL index. London boroughs and Transport for London (TfL) have used the PTAL concept for a number of years to assess the accessibility of a site by public transport. The PTAL method measures access to the public transport network, and takes into account the walk distance/time from an origin to a bus stop or station and the wait time (as a function of the number of services and service frequency). PTAL index scores are calculated for a 100m grid across London. A PTAL index score can be calculated for a current network level of service and for forecast years.

Three different PTAL layers were supplied by Transport for London (TfL) to assist in the density calculation. These included a layer for 2004 accessibility levels, a layer for accessibility levels covering 2011-16 and a layer for accessibility levels covering 2016-2021. The appropriate PTAL level was used in relation to the phase to which a site was assigned. This allowed the study to take account of the potential for increased densities arising from major future public transport projects. The public transport assumptions used to generate the PTAL layers are based on Table 3C.1 of the London Plan.

Strategic constraints

A group of strategic constraints were included in the LHCS to take account of strategic environmental issues affecting London. The strategic constraints consisted of

- air pollution
- flood risk
- noise pollution; and
- pylons.

The study identified the effect of these constraints on each site using a map of each constraint and simple spatial analysis. The sites either fell into a *low, medium* or *unsuitable* banding, depending on the constraint.

Constraints that were *low* did not affect a site's capacity. However, the identification of at least one *medium* constraint reduced a site's capacity by a minimum of 10%. This reduction graduated to 25%, 34% or 50% depending on how many other *medium* constraints were present. If a site was deemed to be *unsuitable* for a given constraint the housing yield for that site was reduced to zero.

Local constraints

A number of local constraints were included in the LHCS to be defined by the borough users. These included

- ownership constraints
- local infrastructure constraints
- environmental setting constraints
- contamination constraints.

Borough users were able to classify if a site had *low* or *medium* constraints due to the above factors, or whether a site was entirely *unsuitable* due to one or more of these constraints. Again a *medium* constraint would drop a site's capacity by a minimum of 10%. This would graduate to a reduction of 25, 34 or 50% depending on how many other *medium* constraints were present. All *unsuitable* sites were reduced to zero.

Employment land release targets and waste requirements

The large site capacity figures were reconciled against industrial and warehousing land release estimates and the land requirements for waste facilities to ensure that large site capacity did not consume more land than was available for residential development. A reconciliation exercise was undertaken that identified that the LHCS was assuming more employment land for residential purposes than was available. To account for this and to ensure there was enough brownfield land to accommodate future waste facilities the capacity figures were restricted.

Annex 2A sets out the effect of the reconciliation on each borough and the resulting capacity reduction. The overall reduction in capacity for each borough amounted to 4,296 units per annum across London (in Phases 2 and 3). This reduction has been included in the final capacity figures that were used to set the housing provision targets.

The next section describes the make up of the large site capacity and illustrates how each borough will bring this capacity forward over the four phases.

1.4 Sources of large site capacity

As described in Section 1.2, over half of the capacity comes from large sites (58% in total). As part of the individual assessment of a large site's capacity, each is defined as an *approved*, *allocated* or *potential* housing site:

- Approved and allocated sites are confirmed housing sites that have already been recognised for housing through the provision of planning permission or by reference in a planning document (e.g. planning briefs or a borough's UDP, etc). Housing may be just one of several proposed uses for these sites.
- Potential housing sites are those that have not been formally recognised in the planning process but have been assessed as potentially contributing to housing supply in the future. The total unit potential for these sites is restricted by the LHCS assumptions mentioned above.

Of the total large site capacity for all phases, 22% is made up of approved sites, 47% of allocated sites and 31% of potential housing sites. In terms of the large site capacity used to underpin the new housing targets (Phases 2 and 3 only), 16% is made up of approved sites, 56% allocated sites and 28% potential housing sites.

Therefore, 72% of the identified large site capacity used to underpin the housing provision targets is already part of the planning process in some way. The remaining 28% represents what has been characterised as windfall development in past studies.

Table 1.4: Sources of large site capacity by phase

Housing site	Approved	Allocated	Potential
Phase 1	88%	6%	6%
Phase 2	25%	52%	23%
Phase 3	0%	63%	37%
Phase 4	0%	31%	69%
Total	22%	47%	31%
Total (Phases 2&3)	16%	56%	28%

The large site capacity[7] for each borough for the target period (2007 – 2017) is shown in Annex 4. This highlights the proportion of a borough's large site capacity that is in the planning process – either through planning approval or by being an allocation.

Most London boroughs have a high proportion of their large site capacity in the planning process over the target period. Only Haringey, Southwark, Barking and Dagenham and Lambeth have potential housing site proportions of over 50%. These boroughs will have to work the hardest in order to achieve their targets, given the lack of development certainty for a high proportion of their identified large site capacity. The boroughs that have a higher percentage of their large sites in the planning process will have more certainty in reaching their housing targets – so it is noteworthy that 15 boroughs have over 80% and all but five have over 50%.

It is useful to see how much of the large site capacity in each phase is in the planning process and how much is still be to be confirmed.

Annex 5 sets out borough capacity by source for 2004-7. This shows that much of Phase 1 capacity is already approved and will be built out before 2007. There are still a number of boroughs that have allocated or potential large sites identified. This is particularly true for the boroughs to the right of the graph: Kingston, Waltham Forest, Haringey, Newham and Southwark (Merton had not identified any capacity in Phase 1). In these cases boroughs assumed that identified sites without planning approval at the time of the study (The cut off date was April 2004) would be granted approval by 2007.

[7] Including *additional capacity* (site data that could not be recorded in the LHCS system) - see the LHCS report (2004) for further information

Annex 6 covers Phase 2, the period from 2007 to 2012. Again this shows the predominance of boroughs that have large site capacity within the planning process. Only two boroughs, Lambeth and Barking and Dagenham, have less than 50% of their large site capacity within the planning process. A number of boroughs even have over 50% of their large site capacity approved in Phase 2. This highlights that a significant amount of capacity within the first 5 years of the housing targets is already in the development pipeline.

Annex 7 covers Phase 3, the period from 2012 to 2017. Given this phase is a number of years away there are no approved larges sites. Allocated housing sites or potential housing sites provide most of the large site capacity. Most boroughs have over 50% of their sites allocated. However, a large number of boroughs will rely on potential sites coming forward in this phase. Islington and Sutton in particular are relying on all of their large site capacity in this phase coming forward from potential housing sites.

Finally Phase 4 is covered in Annex 8. This phase is for the 10 year period from 2017 to 2027 and is not part of the housing target period. This is the most difficult phase to predict for, although a number of boroughs do have allocated large sites in this phase. These will typically be significant developments that are phased over a long period of time (for example, the Kings Cross development in Camden). A number of boroughs have also identified potential sites that could come forward for development in Phase 4. Nine boroughs have not identified any large site capacity in Phase 4. This information should not be interpreted as indicating that these boroughs have reached their full capacity on large sites, rather that information was not available to predict capacity this far into the future. Another capacity study will be undertaken in 2009 that will investigate this further for each borough.

For reference each borough's large site capacity is also shown on individual graphs in annexes 4 to 8. These outline large site capacity by source and phase for each borough.

1.5 Distribution and phasing of capacity

The LHCS was undertaken in four phases. Much of the analysis outlined above has presented the breakdown of the large site capacity and its corresponding phasing. This section combines all sources of capacity and highlights the phasing of the total capacity by borough.

Annex 9 shows the total capacity for each borough by phase. The distributions across the phases vary for each borough and it is clear that some have a significant proportion of capacity within Phase 4, which does not form part of the capacity used to underpin the proposed housing targets. This is particularly evident in Barking and Dagenham, given that over 50% of its identified capacity is allocated to Phase 4.

The figures underpinning the graph in Annex 9 are provided in full at Annex 3 and the sub-regional aggregates are outlined in Table 1.5.

Table 1.5: Sub-regional total capacity by phase

Sub-region	Phase 1	Phase 2	Phase 3	Phase 4	Total	Percentage
Central	20,076	36,550	26,927	43,081	126,635	24%
East	30,195	82,699	58,627	54,982	226,503	43%
North	5,384	24,191	13,098	16,782	59,455	11%
South	9,126	18,174	12,140	14,453	53,893	10%
West	10,510	21,185	17,190	12,164	61,048	12%
Total	75,291	182,799	127,982	141,462	527,534	100%

As shown in Table 1.5 above, Phases 2 and 3 yield the largest amount of capacity on an annual basis. Phase 1 is for 3 years and equates to an annual capacity of 25,097 units. Phases 2 and 3 are for 5 years and they equate to an annual capacity of 36,559 and 25,596 respectively. Phase 4 is for 10 years and equates to an annual capacity of 14,146 units.

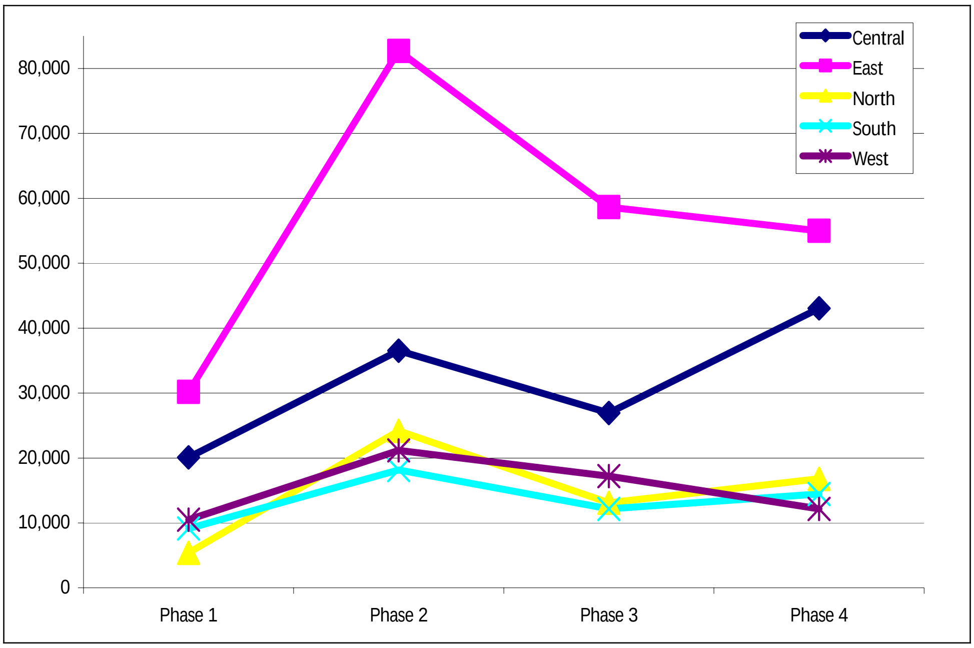
It is important to recognise the effect of phasing capacity in terms of overall housing output. As the above figures show, capacity will begin to reduce in Phase 3, and capacity in Phase 4 is less than half of that in Phase 2.

Boroughs will be monitored against the proposed housing provision targets on an annual basis. However, it is useful to see the breakdown of total capacity across Phases 2 and 3 for each borough as it illustrates how this capacity will come forward against yearly output targets over the ten-year period 2007 to 2017. This is set out for all boroughs in Annex 10.

The boroughs to the left of this table should be able to meet and exceed the annual housing target in the first 5 years (Phase 2). However, they may struggle to keep up with those levels of output in the following 5 years (Phase 3). The boroughs to the right will have the inverse problem, as capacity is low in the first 5 years but then increases in the second 5 years. Only the City of London has a 50:50 split between the two 5 year phases. This is because there are no large sites identified for development within the City's boundary and the capacity is only sourced from small site development (which is split evenly for all boroughs across the phases).

The east sub-region has the largest proportion of total capacity at 43%. Figure 1.1 below shows the phasing of each sub-region's capacity by percentage contribution. The temporal distribution of capacity for each sub-region is very similar across the phases. The only major exception is the north sub-region's large proportion of capacity in Phase 2, and the corresponding low proportion in Phase 1. The central sub-region also has a high proportion of its capacity in Phase 4. Large site capacity is especially significant in the east sub-region due to the large number of sites available for development in the Thames gateway area. The large proportion of capacity in the east sub-region is predominately in Phase 2 (37%), capacity that accounts for nearly 82,700 units.

Figure 1.1: Total capacity by sub-region and phase



Looking at Phases 2 and 3 in isolation highlights the make up of the capacity for the target period (2007 – 2017).

Significant capacity in the east over Phases 2 and 3 is generated by the significant amount of large site capacity available. The east sub-region also has the highest amount of small site capacity. The central and south sub-regions both have a higher amount of small site capacity over other sources, whereas the other three sub-regions have a higher amount of large site capacity. Overall, the availability of large sites in the central sub-region is declining; this is reflected in the overall decrease in its capacity.

For all sub-regions the lowest contributor to capacity is from non self-contained dwellings, followed by vacant homes being returned to use.

1.6 Scenario testing

The results of the LHCS were tested in a variety of ways to see what effect a deviation from the agreed assumptions would make. This process resulted in a set of alternative scenarios against which the final capacity figures were tested. The final composite scenarios were presented in the LHCS report and are outlined in Table 1.6 below. Scenario D represents the final total capacity figure and the other five scenarios show high and low variations based on amendments to the assumptions used to estimate capacity. These figures are also available at borough level.

Table 1.6: London Housing Capacity Study scenarios

Scenarios	Assumptions		Total capacity
Scenario A	*Large sites*	All potential sites use the bottom of the density matrix	**267,517**
	Small sites	No uplift	
	Other	New flood and noise constraints included	
Scenario B	*Large sites*	All potential sites use the density matrix mid point	**288,476**
	Small sites	Uplift is dropped to the next percentage level	
	Other	New flood and noise constraints included	
Scenario C	*Large sites*	All potential sites use the density matrix mid point, and PTALs have been increased by one level	**301,421**
	Small sites	Uplift dropped to the next percentage level	
	Other	New flood and noise constraints included, and existing constraints reduced to a maximum reduction of 10%	
Scenario D	*Large sites*	All potential sites use the density matrix mid point	**310,775**
	Small sites	Default values	
	Other	Default constraints used	
Scenario E	*Large sites*	All potential sites use the top of the density matrix	**337,730**
	Small sites	Uplift increased to the next percentage level	
	Other	Existing constraints reduced to a maximum reduction of 10%	
Scenario F	*Large sites*	All potential sites use the top of the density matrix, This has also included the use of employment sites excluded by the boroughs	**406,838**
	Small sites	Uplift increased to the next percentage level	
	Other	Existing constraints reduced to a maximum reduction of 10%	

Note that the figures presented in table 1.6 above have been updated since the publication of the LHCS report in 2005. This is a result of small changes made to the final capacity of a selection of boroughs following the initial consultation on the draft Alterations in September 2005. However, it must be noted that all site yields for allocated and potential housing sites were maintained as advised by the boroughs, given it was not deemed appropriate to vary these assumptions

Initially individual variables were tested to see how sensitive the capacity figures were to each. In order to produce a manageable set, a number of variables were combined and rationalised and a composite of different scenarios was produced. These scenarios were based on variations to particular variables used in the study. Section 1.3 has provided a summary of the assumptions used, and Table 1.6 above outlines a summary of the assumptions behind the final scenarios.

A key assumption related to the density variables used, which are based on the application of the London Plan's SRQ density matrix.[8] For all potential housing sites the mid point of the applicable range within the density matrix was used. This assumption was based on achieving the most sustainable unit yield for each individual site given the matrix was developed using principles of sustainable residential quality.[9]

The density ranges in the matrix are predicated on assumptions relating to household size for different density ranges. For example, suburban development on remote sites assumes 4.6 habitable rooms per unit, while high-density development on a central site with good public transport access assumes only 2.7 habitable rooms per unit. It is not possible to convert habitable rooms strictly to number of bedrooms (a small flat other than a studio flat would normally have one additional habitable room, a family house or flat would normally have 2), or necessarily to convert habitable rooms to occupation levels in terms of people. Large market units will not always be fully occupied while small social units may be over-occupied.

The application of the density guidance in the London Plan should, however, enable the provision of a range of dwelling types to meet the range of needs identified in the GLA's Housing Requirements Study and the guidance on housing mix set out in the Mayor's Housing Supplementary Planning Guidance and in the *London Housing Strategy* (2005). The LHCS uses the midpoint in the applicable density matrix range to ensure the most sustainable estimate on potential housing sites.

Increasing densities for a site towards or above the top of the appropriate range is inevitably going to make it more difficult to provide larger dwellings. Increased unit output may therefore be at the expense of ensuring appropriate housing outputs. Scenarios that assume densities at the top end of the density matrix will have this negative effect. Sites with densities at the lower end of ranges would in principle allow for an increase in the proportion of family type dwellings.

As noted in Section 1.3 above, another major assumption was the protection of employment land. These assumptions have been maintained throughout the scenario testing except for Scenario F which has included development on sites that have been individually excluded by the boroughs as protected employment (these sites are on top of those that have been safeguarded in policy).

Another assumption varied in the scenario testing was small sites uplift. This uplift was to allow for future intensification of small site development and increased town centre development in certain boroughs. The uplift was a percentage increase on the projected small site figures to ensure that the small site contribution for each borough was realistic. The uplift proportion was increased or decreased for particular scenarios to mimic high or low small site development in the future. This allowed for the testing of small site assumptions, and how this would affect the overall capacity for each borough.

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[8] See London Plan, p177

[9] *Sustainable Residential Quality: Exploring the Housing Potential of Large Sites*, Llewlyn-Davies (2000).

Strategic and local constraints were maintained as presented in Section 1.3 above. These have not been individually assessed; their combined effect has been altered.[10] The effect of these constraints has been reduced in Scenarios C, E and F above, as a maximum constraint of 10% is applied where these assumptions are present.

The local and strategic constraints have consideration of flood and aircraft noise. However, new information was made available to further assess flood risk and also road noise pollution.

Updated flood risk information was supplied by the Environment Agency, which provided greater detail relating to areas of high tidal or fluvial flood risk within the extent of the flood risk area that had already been considered in the LHCS system. Given the complementary nature of the new flood risk information, it provided a means of further restraining development within the flood risk zone that was susceptible to *high* tidal or fluvial flood risk, as defined by Planning Policy Guidance Note 25: *Development and Flood Risk*.

Sites that were at *high* risk from either tidal or fluvial flooding had their site yields further constrained. For example, the overall effect of a further 10% reduction in capacity on sites that were within the high risk zones resulted in a further 4% decrease in capacity.

Noise pollution information came from recent analysis undertaken by the GLA, which considered the effect of road noise (the LHCS system only looked at the impact of aircraft noise). This was looked at in a variety of ways, though the overall effect on capacity was minimal. For example, when sites within areas of *high* noise levels were excluded and the capacity of sites within areas of *medium* noise levels were reduced by a further 10%, this resulted in an overall reduction in capacity of 3%.

The scenarios presented show variations on the total capacity derived in the LHCS. These show the effect of varying the assumptions that underlie the study. However, the scenarios do not present viable capacity options given that these variations do not conform with the agreed methodology of the study.

What the scenarios do provide is a testing of the assumptions and an illustration of what potential capacities exist in London if the assumptions are varied beyond what was agreed at the beginning of the study. The outcomes are very much proportionate to the level of adjustment made to the assumptions used. A key shift is shown in Scenario F where the addition of land (from excluded employment sites) helps the capacity to increase by 24% over the default capacity figures (or 17% more than Scenario E which has the same assumptions but does not use the employment sites).

As part of the formal planning process leading to the publication of the Alterations, a sustainability appraisal (SA) was also undertaken. The purpose of a SA is to promote sustainable development through the better integration of sustainability considerations into the preparation and adoption of plans. The SA process should be viewed as an integral part of good plan-making, involving ongoing iterations to identify and report on significant effects of the plan and the extent to which sustainable development is likely to be achieved.

[10] Please refer to the LHCS report for an explanation of the application of the Local and Strategic constraints.

The LHCS was predicated on identifying housing capacity in response to identified housing need. The SA concluded that the capacity figures, in sustainability terms, are highly dependent on the implementation of a wide range of London Plan policies. These include objectives for a well-designed city; promotion of social inclusion and tackling deprivation and discrimination, for example through the provision of affordable housing, community facilities and focusing development on locations well served by public transport.

The SA identified that flood risk is a key sustainability issue for London and there is likely to be pressure from increased housing development in the floodplain as a result of the capacity figures. Reducing flood risk is not explicit in existing London Plan objectives but avoiding development in areas at high risk of flooding should be a sustainable objective.

The appraisal of options for housing has allowed sustainability effects to be compared. The options assessed at this time were those that were originally derived in the study (see Table 1.7 below). However, as noted above these have since been amended slightly to take account of minor changes made post consultation. Given these changes were small they were not deemed significant enough to undertake a further SA of the effects, as these would essentially be unchanged.

Table 1.7: Capacity options for sustainability appraisal

Option	Annual Regional Housing Target
A	29,421
B	31,533
C	34,351

The key issues identified by the SA as negative outcomes resulting from an increase in housing output tend to focus around managing resources, such as protecting biodiversity, improving river and canal ecological and amenity value and maintaining London's historic environmental and cultural assets. Those with the potential to be positive outcomes focus on social and economic issues, such as tackling poverty and social exclusion, improving access to employment opportunities and affordable housing.

The consultants undertaking the SA concluded that the housing figures based on the final capacity figures (option B above) were likely to be the most sustainable option. In comparison to the options derived during the scenario testing, the final capacity figures are considered to have the best balance between positive and negative effects, providing more potentially positive impacts, whilst allowing more potential for mitigation of negative effects.

The above summarises how the capacity figures have been subsequently assessed through the scenario testing and SA process. These processes have allowed for the final capacity figures to be tested against a range of factors - first to assess the sensitivity of the assumptions used and, second, to assess the sustainability of the capacity figures against two reasonable options.

2. The availability of land

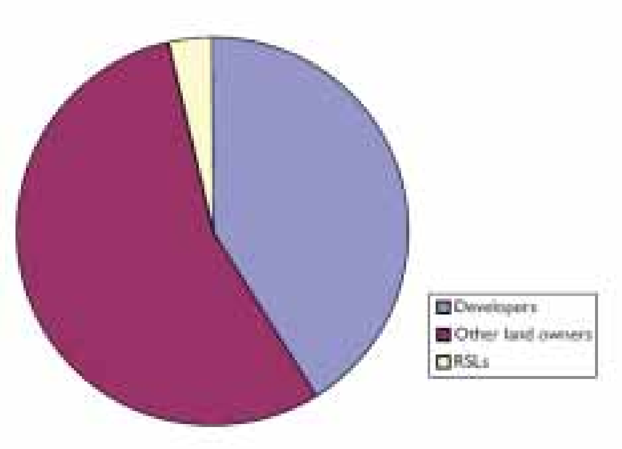
New homes in London will predominantly be built on brown field land and often on sites that are currently used for other purposes. So, bringing land forward for development and issues around land assembly are potentially significant constraints. Given that London's residential development market has apparent high barriers to entry – legal, financial and cultural/political, this section outlines what is being done and what should be done to bring forward land for residential development in a more timely fashion.

2.1 Land ownership

Private developers own 40% of London's private sector development land. Registered Social Landlords (RSLs) own a small, but significant portion of development land, with other landlords owning the rest.[11]

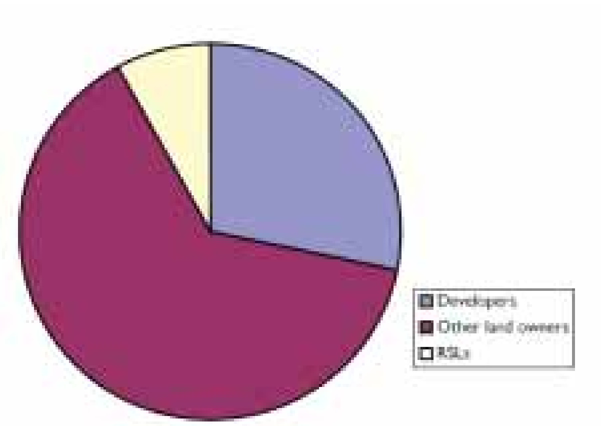
The latest data is shown in figures 2.1 and 2.2 below.

Figure 2.1: Ownership - planning pipeline by number of private units



Source: London Development Research 2006

Figure 2.2: Ownership - planning pipeline by number of schemes with private units



Source: London Development Research 2006

[11] London Development Research, *The Blue Book 2006* (2006)

On average the sites that are owned by private developers tend to be larger than those owned by others.

The GLA has made initial enquiries relating to the level of land banking amongst RSLs. The HC's London Office has stated that for the 2006/08 bid round 15% of the homes which were recommended to the ODPM for funding were to be built on sites already owned by RSLs. The GLA has also contacted the RSLs with the largest development programmes who deliver the bulk of new social housing in London. So far it has received responses from seven of the G15 housing associations, indicating that the total RSL landbank is over 5,000 homes. Issues around the development pipeline are discussed in Section 4.

The LHCS gives a clear steer as to where the greatest number of houses can be provided over the next 10 years. Some 141,300 homes, or 45% of the additional homes target has been identified for the east London Sub-region. As seen in figure 1.2 in Section 1, the bulk of these new homes in east London will come forward from a portfolio of potentially challenging brownfield sites. These are characterised by low development values (partly caused by lack of socio-economic and transport infrastructure, environmental problems, market failure and economic decline) and high development costs (due to contamination, in adequate utilities and flood risk). Consequently, the role of public sector agencies in bringing these sites forward is key.

2.2 Public sector interventions

There is a significant amount of vacant and under-developed land in London held by the public sector.

A useful source of information is the Register of Public Sector Assets managed by English Partnerships (EP), which highlights significant landholdings held by public sector bodies. This is in addition to information held on National Land Use Database (NLUD) also managed by the same agency. This register has identified 49 hectares of surplus land in London. The British Railways Board owns the vast majority of this land.

EP and the LDA are the two agencies in London with a specific remit to bring forward brownfield land for development. The engagement of the LDA and EP will not be confined exclusively to the London Thames Gateway (LTG) as each agency is intervening elsewhere in London. However, their role in bringing forward land for development in the LTG will play a critical role in determining whether the Mayor's housing targets are achieved.

Each agency has powers of compulsory purchase and makes interventions in land cases that fall into three broad categories where

- land is in full ownership
- land is in part ownership of an agency and another party necessitating a joint venture arrangement
- land is in majority/full ownership by another party with EP/LDA playing a key brokerage role through influence and advice.

Both agencies are currently engaged in activities that demonstrate their ability to overcome the challenges presented by bringing forward brownfield land for housing development.

LDA interventions

The LDA aims to help deliver up to 35,000 additional homes by 2020 in line with London Plan affordability targets. Housing delivery is planned on sites located in the Thames Gateway, reflecting the Mayor's London Plan and Economic Development Strategy. Those sites are

- Royal Arsenal
- Royal Albert Basin
- Lewisham Gateway
- Silvertown Quay
- The Olympic Park
- The Warren, Woolwich
- Thames Barrier Park East
- Landmark Site
- Silvertown Way
- South Dagenham .

The Agency will deliver mixed-tenure, mixed-use developments that will contribute to delivering sustainable communities and London Plan objectives. The Agency will continue to facilitate housing delivery through the Single Regeneration Budget programme and its brokerage role in major projects such as Ashburton Grove and Wembley.[12]

The LDA is also working on behalf of the Olympic Delivery Authority (ODA) to deliver the Olympic legacy of over 9,000 new homes on the Olympic site.

EP interventions

EP is working through a range of interventions to support the delivery of new housing in London, including:

- Involvement in land remediation and assembly on a number of major sites.
- The London-wide Initiative, which will provide 4,000 homes through three consortia, of which 25% should be social and 50% should be affordable to key workers.
- The First Time Buyers Initiative, which will provide finance mechanisms to assist first time buyers to enter home ownership.
- The MODEL project, working with the Ministry of Defence to free up land for housing development by consolidating their land needs and making best use of the surplus sites.

EP's work at both Greenwich Peninsula and Barking Riverside illustrate the extent of its activities. Since 1999 EP has been working with Greenwich Millennium Village Limited, a consortium between Countryside Properties and Taylor Woodrow, to develop out Greenwich Millennium Village. This is a development that ultimately will comprise some 2,950 homes of which 30% will be affordable homes for either social rent or shared ownership.

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[12] LDA, *Draft Corporate Plan 2006-09*

For this project, EP has provided a serviced and remediated site in return for an initial land premium and shares in any future profits once the developer has achieved its normal development return. This has allowed a degree of flexibility, in terms of both the design and sustainability standards to be achieved, above those of ordinary developments in London.

EP is also working with Meridian Delta Limited (a consortium between Lend Lease and Quintain) on the remainder of the peninsula. 10,000 homes will be built of which 38% will be affordable. EP will receive an initial land premium as plots of land are drawn down. In addition to this, once private sector costs and an appropriate return have been received, EP will receive a share in future profits.

At Barking Riverside, which has been identified in the *Sustainable Communities Plan* as one of the principle zones of change for strategic development, EP is working in a joint venture with Bellway Homes (BRL). 10,800 homes will be built to a standard of quality not previously achieved in the area, and which the market alone would not be able to achieve.

Extensive remediation and site preparation has already taken place and work is still on going. A management company will be formed to manage the whole site including the large areas of high quality public realm and public open space. BRL have agreed with the London Borough of Barking and Dagenham (LBBD) that the site should include 35% of development as affordable housing, of which up to 45% will be social rented accommodation. The scheme will also provide a large number of affordable homes at sale values of circa £230/sq ft (£160,000 for two bed apartment) as opposed to current values in the Canary Wharf, Stepney and Greenwich areas where a similar 2-bed apartment would cost £224,000.

Other public sector agencies' land interests

In addition to the LDA and EP there are other public sector bodies that have major landholdings. These include

- Transport for London/London Underground/London Buses
- Ministry of Defence and Other Government Departments
- National Health Service Trusts
- Local Authorities.

EP and the LDA are seeking to work with these agencies to bring their land forward for development where appropriate. For example, the LDA is presently working in partnership with TfL to provide residential accommodation above a new station at Dalston Interchange. As part of this project it has brought together land owned by LB Hackney to produce a more comprehensive approach to the redevelopment of this area.

2.3 Land assembly

Private developers own 40% of London's private sector development land. It is therefore important that actions are taken to encourage them to develop this land for residential use where it is appropriate.

In response to these concerns, the London Housing Board identified two areas of work in October 2003 to be explored by specially convened taskforces: Sustainable Communities - mobility & choice (which is discussed in Section 7); and Increasing Supply – land & development. This second taskforce was led by the GLA, with representatives from a wide range of partner organisations, both public and private, and published its report in July 2004.

Its recommendations subsequently fed into the 2005 *London Housing Strategy* (LHS) and the joint Government Office for London (GOL)/GLA/Association of London Government (ALG) Housing Delivery Plan (HDP), launched in January 2005. These have also informed a wide range of other processes, including responses to the Barker Review and the Cabinet Committee on London MISC26[13], and they will feed into the review of the London Plan.

The taskforce identified a range of issues that delay or hinder the assembly of land for residential development. These included lack of adequate infrastructure, insufficient skills and capacity among the house-building sector, insufficient planning capacity and the public sector's role in identifying and bringing forward unused, publicly owned, land. These issues are considered in sections 3, 6, 4 and 2.2 of this report respectively.

The issues relevant to land assembly were:

- A lack of incentives to encourage landowners to release land.
- High levels of planning risk for developers; the planning application process can be long and complicated and the outcomes of planning decisions are not consistent across boroughs, tying up developers' funds for some length of time.
- The expectation of long-term increases in land values can be a disincentive to releasing land.
- Great difficulty in undertaking land assembly on sites where there are multiple owners of land parcels.
- London boroughs lack any real financial incentives to allow and promote new developments.
- Change of use and mixed tenure (discussed further in Section 2.4).

[13] The Cabinet Committee on London (MISC 26) published its report "Building On Success - London's challenge for 2012" on 4th April 2006.

The Task Force made a number of recommendations, many of which have already been taken forward either in the London Housing Strategy (LHS) or HDP:

- EP and the LDA to play an enhanced role in bring land forward - "*take a lead role in assembling complex sites for development*" - as recommended by the Barker Review (LHS and HDP and described in Section 2.2).
- An extension of the information base for public sector land could be available to the market, and linked to proposals to encourage release of this land (MISC 26).
- Bringing together existing compulsory purchase capacity in a single London-wide agency which would have the skills and resources to advise public bodies on compulsory purchase procedure or undertake it on their behalf (HDP and LHS).
- Development of models for levering private finance into delivering affordable housing. This was part of EP's contribution to the HDP.

However, the majority of recommendations sought to address some of the difficulties faced by private developers seeking to assemble and bring forward land for housing:

- Developing proposals to offer incentives to Local Authorities promoting new development. The ALG committed to do this in the LHS and HDP and it was featured as a recommendation in the Barker Report.
- Ensuring that boroughs' Unitary Development Plans and Local Development Frameworks support the delivery of London Plan targets for new housing. GOL, the boroughs and the GLA jointly committed to this in the LHS and HDP and the review of the Mayor's powers may also impact on delivery here.
- Shifting the presumption in favour of change of use to residential, and encouraging local authorities to promote such change of use where appropriate. This was not picked up in the LHS or HDP but is an issue for the London Plan review.
- Achieving greater consistency across London in Section 106 negotiations. The ALG committed to support this in the LHS and HDP and this issue is addressed in the current and ongoing Review of Powers[14].
- Developing partnership vehicles that can deliver affordable housing and infrastructure – as an alternative to the value capture options set out in the Barker Review. The LHS and HDP commit EP, the LDA and GLA to work together to support the development of these.
- Undertaking further investigation into what makes mixed-tenure developments work. The HC and EP have since jointly published *In The Mix – a review of mixed income, mixed tenure and mixed communities* with the Joseph Rowntree Foundation.
- Setting up a 'platform' for companies to market new housing products to major players and funders. This is a role that could be taken on by the Mayor's new Housing Investment panel, proposed as part of the Review of Powers.
- Developing incentives and removing barriers, by enabling RSLs to build more homes for market sale to cross subsidise affordable homes and making private developers eligible for social housing grant – both of which feature in the LHS and 2006-8 investment programme.

[14] In November 2005 the Office of the Deputy Prime Minister issued a consultation paper, *The Greater London Authority: The Government's proposals for additional powers and responsibilities for the Mayor and Assembly.* Three broad options were identified for planning; significant additional powers; more limited new powers: and minimal change.

2.4 Mixed use and alternative use values

One of the critical elements in ensuring sufficient land is released for housing development is the competition for other land uses. As set out in Section 1 of this report, the draft Alterations targets take into account the need to protect employment land to support London's employment growth targets. However, many of London's large sites are allocated for mixed-use development, which may or may not include housing.

The proportion of a site developed for housing will depend on the relative profitability of different land uses and local and strategic objectives for the broader use of land. In relation to these potential mixed-use sites, the *LHCS* calculations were based on a borough's view of both the proportion of a site that might be developed for housing and the probability that this would be achieved within the 2007/8 to 2016/7 plan period. The realisation of this potential will depend on market factors including the relative profitability of competing land uses, and broader land use planning objectives.

In March 2004 the GLA published the *Mixed use and affordable housing study*, prepared by London Residential Research and CBRE, which assessed different land use capital values and rentals in different locations across London. At that time, the residential market was highly competitive, while outside the central area office development was less attractive. In some key locations, retail and hotel uses were also competitive. Over the last two years there has been a limited revival in the central London office market, but little activity in the area beyond (this will be confirmed by the report of the London Office Review Panel due to be published in April 2006).

There has been a general abatement in house price increases. This has been more marked in some locations than others with some caution as to future prospects. This has two consequences for housing output.

Firstly, where there is a planning policy that allows or encourages non-residential land uses, the proportion of housing to be developed on a mixed use site may be reduced in favour of non-residential development, unless the borough policy has set a clear requirement for proportionate housing provision. On the other hand, the profitability of office or retail provision may provide a potential for cross-subsidy to housing provision.

Secondly, where there is an existing non-residential land use, the existing use value of a site may be positive relative to the potential value of a housing development. Coupled with broader land use policies, this will limit the release of employment sites for housing purposes, or constrain the ability of residential developments on such sites to support affordable housing.

Beyond central London and Canary Wharf, in more peripheral locations where employment generation is not viable without subsidy, a policy requirement for mixed use will require part of the residential value to cross-subsidise employment generating uses. This will limit the ability of such sites to support affordable housing.

The Sub Regional Development Frameworks provide guidance on implementation of mixed-use policy. They differentiate between its implementation in central London and Canary Wharf and elsewhere in London. It is anticipated that revisions to the *London Plan* will clarify this distinction.

Central London and Canary Wharf

As a general principle, in central London and Canary Wharf where office development is proposed it should provide for a mix of uses including housing. Neither the London Plan nor the SRDF is prescriptive as to the amount of housing - that depends on local circumstances, which are best addressed through local development documents. The only exception that can be made to this principle is in circumstances where it will compromise the achievement of broader objectives, for example to sustain important business clusters, such as in the City or Canary Wharf. In these circumstances offsite housing provision must be secured through a planning agreement.

Central London boroughs currently take three different types of approach to the implementation of strategic mixed-use policy. In the western parts of central London, which already have a varied mix of existing uses, some boroughs require the increment to office stock to be matched by a similar increase in housing. In the eastern parts of central London, which tend to be dominated more strongly by existing office uses, financial contributions to offsite housing provision may be made through planning agreements and secured in a ring-fenced fund. One borough also operates a geographically specific policy for Preferred Office Locations.

With such a range of approaches to the implementation of strategic mixed use policy within central London, there is concern that it should have an equitable impact on developers, recognising that variations in the office market will yield different housing outcomes in different sub areas. This will be monitored carefully to see whether a more consistent approach is required. It will also be necessary to see whether the implementation of local mixed-use policy for other elements of non-residential development, for example retail and leisure, adversely affects other strategic objectives such as to sustain the West End as a shopping location of 'international' stature.

Rest of London

Much of the office market beyond central London and Canary Wharf faces structural challenges often associated with declining demand from traditional large-scale office occupiers. The resultant surplus office provision provides an opportunity for broadly based mixed-use re-development, usually in and around town centres. As a higher value use, housing will have a key role in such schemes together with leisure and retail. In locations that remain competitive for offices, and where there is scope to re-position and rejuvenate the market, these mixed-use redevelopments should also include some office space, providing this can be justified by strategic and local demand assessments.

The issue of market impacts on housing output and subsidy requirements is considered further in Section 5.3 below.

3. Density and infrastructure

This section demonstrates that the proposed new targets are based on realistic and achievable assumptions on housing density and mix. The sustainability of higher levels of residential development is then discussed in terms of transport, social infrastructure, and the provision of water supply and sewerage.

3.1 Density and housing mix

The London Plan density matrix gives guidance as to the appropriate housing density for potential development sites, accounting for levels of public transport access and the location of sites in relation to town centres. The matrix also incorporates the nature of the existing built environment, which can be categorised as central, urban or suburban. The maps used to assess Public Transport Access Level (PTAL) and neighbourhood character were included in the published report of the LHCS.

The density matrix recognises that the bedroom size mix of development will vary between different types of location. The density matrix therefore includes guidance on habitable rooms per unit as well as dwellings per unit for the different density ranges. Assumptions as to the average number of habitable rooms per dwelling vary between 2.7 habitable rooms per unit for central high-density flats to 4.6 habitable rooms per unit for a remote suburban low-density development.

The principles of Sustainable Residential Quality (SRQ) inherent within the London Plan density policy and matrix are based on the range of unit types and sizes across London that are required to meet the range of housing need in the capital. These estimates are in accordance with the London Plan policy on housing choice, and the guidance on housing mix set out in the Mayor's Housing Supplementary Planning Guidance.[15]

Density assumptions for large sites.

The LHCS based its assessment of the housing capacity of large sites on the application of the London Plan density matrix.

Where sites already had planning permission, were already the subject of planning briefs, or had been otherwise allocated for housing, then housing capacity was assessed on the basis of the planning consent or planning brief that had been supplied by the local planning authority. For the 15% of sites that were categorised as potential sites, but had not been publicly identified as appropriate for housing, the density matrix in the London Plan was applied to the site, and capacity was assessed at the midpoint of the appropriate density range.

The use of the midpoint of the appropriate density range as the basis for assessing the housing capacity of any given site ensures that a range of unit sizes is deliverable. While using unit density estimates at the higher end of the scale would have increased the figure arrived at for unit output, such estimates would have been based on assumptions of lower numbers of habitable rooms per unit. This would have generated an imbalanced mix of dwellings in relation to what is appropriate to a location, with the potential to produce too few houses with 3 bedrooms or more. Application of lower density assumptions could have potentially constituted underdevelopment.

[15] GLA, *Housing- Supplementary Planning Guidance*, (2005)

The capacity assessment for each major site also had regard to the Public Transport Access Level (PTAL) assessed as applying to the site for the development phase. Development occurring in Phase 3 between 2011/2 and 2016/7 therefore had regard to the projected PTAL as at 2011. Development in Phase 4 occurs after 2017/8 and is therefore not included in the proposed Alterations targets (which relate to the period 2007/8 to 2016/7). The unit capacity for potential sites was constrained where it was considered that a proposed capacity figure would constitute over development or an inappropriate mix of housing. Consequently the targets proposed from large sites are based on an appropriate dwelling output relative to housing requirements. The targets are not dependent on developments that would be considered in the context of London Plan policies on SRQ to constitute over-development.

Density assumptions on smaller sites

Housing capacity targets for small sites were based primarily on a continuation of past trends, the basis of the calculation being annual unit output on small sites in the period 1998-2002. These figures were also adjusted to reflect policy changes which could generate increased output, such as proposals for town centre intensification, provision of flats over shops and other non residential uses, and relaxation of car parking provision requirements. Trends in density identified from an analysis of planning permissions in 2004/5 were also taken into account. The table in Annex 11 gives information on the net density of development for schemes approved in 2004/5 as compared with data from the Office of the Deputy Prime Minister (OPDM) on the net density of previous years' completions.

While ODPM data shows that net density of development increased from 54 dwellings per hectare (dph) in 1996-1999 to 59 dph in 2000- 2003 (data for 2004 is not as yet reliable), analysis of the net density of 2004/5 planning applications gives a London average of 125 dph. This represents an increase of 120% on the most recent completion data and demonstrates that a significant increase in density can be achieved without any increase in the annual land take of new development. Indeed, the LHCS assumes a lower average density at 112 dph. This reflects that the unit mix of recent approvals is biased towards smaller units. The LHCS unit output assumptions have been intentionally constrained to enable this bias to be corrected.

A separate analysis of 2004/5 approvals was undertaken to assess the extent to which the density of small sites was higher than for recent completions. It should be noted that many small sites may be in locations in which higher density ranges apply, and consequently may produce significantly more than the small sites upper limit of 10 units in the 1999 capacity study.

The analysis produced an average small site density of 123 dwellings a hectare (compared with a large sites average of 140dph), which is more than double the overall average density for all recent completions- that is 59 dph. In 2004/5 planning permissions were granted for some 22,860 homes on small sites. This compares with 9,185 completions a year from small sites as assumed in the LHCS and draft Alterations.

In estimating borough small site output uplifts relative to historic trend to 2002 the policy changes referred to above generated borough uplifts varying between 10 and 50%, with an overall London-wide uplift of 24%. Some boroughs have suggested that these uplifts may be predicated on increases in density, which are not appropriate or achievable. This analysis shows that these uplift assumptions are relatively cautious when compared with the increased densities already in the pipeline.

These uplift proportions relate to increased capacity arising from intensification. These were calculated prior to the reconciliation of the employment land release figures referred to in Section 4.2.1 of the LHCS and Section 1 of this report. Once the reconciled employment land figures are taken into account there is only a 3% increase in London wide small site capacity in relation to trend based projected capacity (as shown in Annex 2B). The assumed increase in small site capacity through higher density is therefore almost cancelled out by a reduction in site availability. The extent to which this is true varies between boroughs, depending on the assumptions made about the extent of intensification and employment land protection.

3.2 Transport infrastructure

A central theme of the London Plan is the co-ordination of land-use and transport development, in terms of policy, location and phasing. The Plan emphasises that there should be a concentration of development in locations that have good public transport provision, which in turn will encourage a reduction in the dependence on private cars. If London is to accommodate its growth without an unacceptable commensurate increase in congestion and pollution, then new growth must be focussed where it can best be served by existing or planned public transport and access to shops and services by walking and cycling.

The transport impact of new housing will depend on a number of locational, transport provision and socio-economic factors. Generally, the transport impact in terms of peak period travel will be less marked in residential areas compared to locations where there is a concentration of employment (here the transport impact is in rush hour peak periods).

London Plan and Mayor's Transport Strategy

The Mayor's Transport Strategy (MTS) and the London Plan form, in combination, an integrated strategic transport and land-use policy framework for London. The MTS contains policies and proposals to provide an integrated approach to transport provision and development that will make major improvements to the pubic transport network and tackle traffic congestion. Improving the quality, accessibility, capacity and coverage of public transport are key aims. The MTS focuses strongly on delivering significant enhancements to the bus network, which is of particular importance for the provision of housing in inner and outer London where the rail network is less dense.

Locating new development in areas of good public transport accessibility increases public transport usage. These higher public transport revenues support improved public transport services. These in turn encourage more public transport usage and less car dependency. Signs of this virtuous cycle are becoming evident across London:

- Between 2000/1 to 2004/05 bus journeys risen by one-third (approximately1.8 billion trips per year).
- In the same period bus network mileage has increased by 26%.
- Between 2001 and 2004 there has been a 10.5% increase in public transport journeys per head compared with a 1.8% decrease in car journeys per head.
- Despite an increase in London's population, there has been a 1% decline in Inner London traffic, and only a 0.5% increase in Outer London traffic levels, between 2001 and 2004[16].

[16] TfL, *London travel report,* (2005)

A detailed assessment of the transport implications of the draft London Plan forecast growth and the transport programme was undertaken by TfL in 2003[17]. The quantum of population growth, which is a key determinant of travel demand growth, is broadly similar, at a London wide level, between the draft London Plan and the London Plan Alterations (10% population growth between 2001 and 2016 in both forecasts). The population and employment forecasts result in a growth in travel between 2001 and 2016 of 2 million trips per day. This should be set within the context of the 26 million trips per day on London's transport networks. TfL's analysis concluded that overall, the planned schemes will provide sufficient capacity to support the expected growth in jobs and population across London. The proportion of the rail network experiencing crowded conditions will reduce if the planned schemes are implemented, although some sections of the network will continue to be crowded.

The TfL analysis was undertaken at an aggregate level, to ascertain the broad strategic fit between forecast household, population and employment growth, and future transport provision. TfL will continue, as part of the 'Plan, monitor, manage' approach to monitor existing and forecast travel demand and transport capacity. More detailed local transport assessments will of course be required for specific developments proposals.

Implementing the Mayor's Transport Strategy

The capability of London's transport network to accommodate the forecast increase in travel related to the growth in households, population and employment has been assessed, taking into account the proposed infrastructure improvements and the policies contained in the MTS. Annex 12 sets out the major transport infrastructure projects, shown in Figure 3.1, which is presented for information only and does not represent a change to the statutory plans. A number of major rail projects are under construction, seeking approval, or being planned, including:

- Crossrail delivers the strategic capacity to support development on a large scale, assists in enabling regeneration and forms a strategic backbone linking existing and planned public transport schemes. Crossrail 1 provides the most significant element of additional capacity and enhancement to accessibility through central London (on an east-west axis). In the longer term, following on from Crossrail 1, Crossrail 2 will further improve capacity and accessibility.
- Phase 2 of the Channel Tunnel Rail Link (CTRL), programmed for completion in 2007, will enhance international capacity and accessibility. By 2009 it will provide increased capacity for commuting, and link central and east London to the wider Thames Gateway, South East England and Europe.
- The Thameslink Upgrade programme will serve a north-south axis through Central London allowing more through services, increased interchange opportunities and longer trains, with connections to Gatwick and Luton airports, an interchange with Crossrail at Farringdon and CTRL at Kings Cross / St Pancras.
- The East London Line project will extend and upgrade the existing London Underground service, converting it into a new metro-style rail service. Phase 1 will serve New Cross and New Cross Gate, extend the service southwards to West Croydon and Crystal Palace, and northwards to Dalston. It is scheduled for completion by 2010. Phase 2 is planned to extend the line west to Clapham Junction and connect to the North London Line stations at Canonbury and Highbury & Islington.

[17] TfL, *Analysis of the Transport Programme to support the Draft London Plan*, (2003)

In addition there will be significant upgrades to the London Underground network, through the Public Private Partnership (PPP) programme. These include:

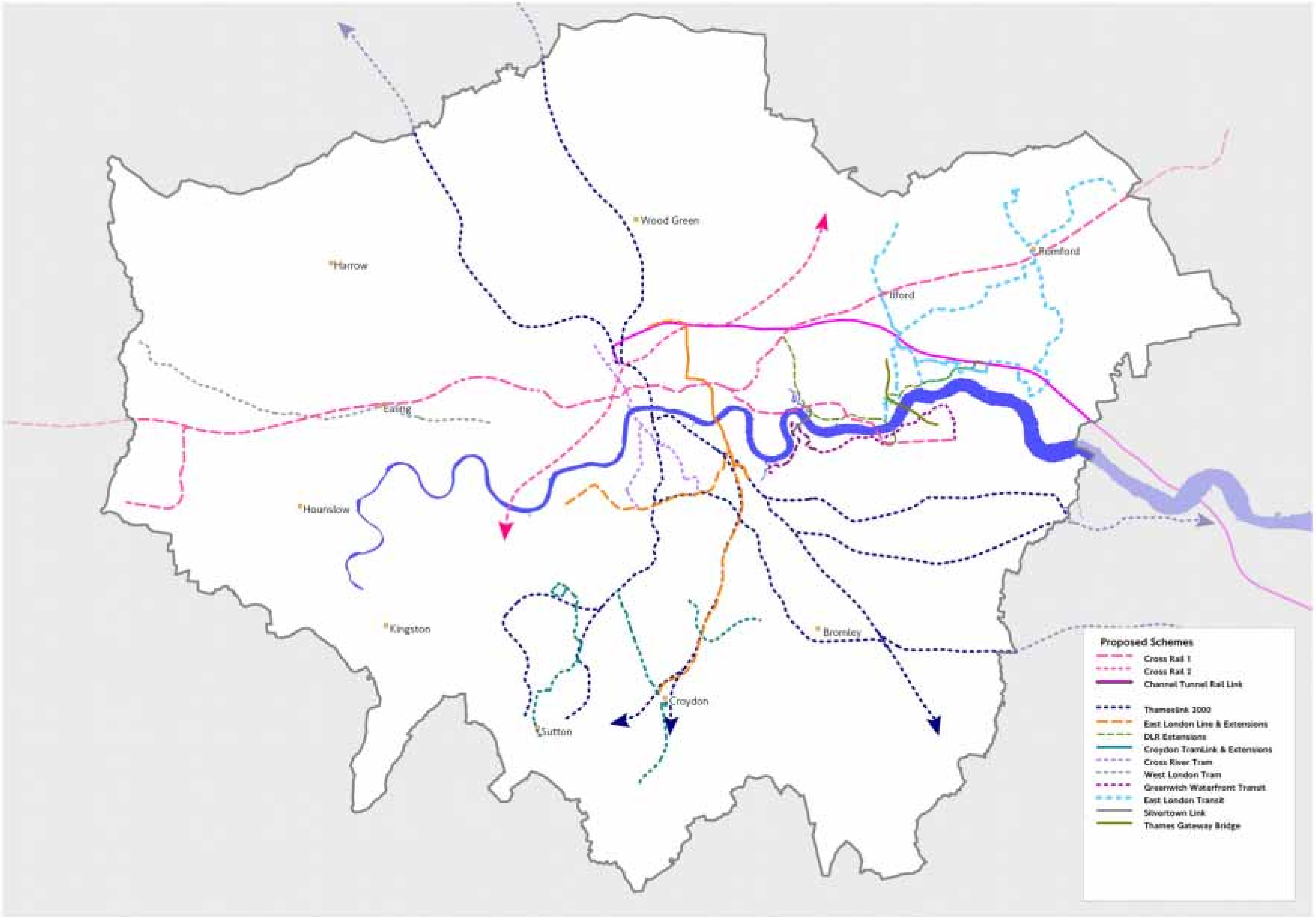
- Jubilee Line capacity improvements, lengthening trains from 6 to 7 cars (completed in 2006) and upgrading the signalling by 2009 to allow for up to 30 trains per hour to operate in the peak periods.
- Northern Line capacity improvements through re-signalling will increase line capacity by over 20% by 2012.
- Waterloo & City capacity upgrade in 2006/7.
- Victoria Line upgrade and train fleet replaced by 2013.
- District Line train fleet refurbished by 2009.
- Upgrades to stations to increase capacity.

TfL is also expanding the capacity and coverage of the DLR network in east London:

- Four new stations were opened in December 2005 with the DLR London City Airport Extension - West Silvertown, Pontoon Dock, London City Airport and King George V.
- The extension from City Airport under the Thames to Woolwich Arsenal is planned for completion in 2009.
- The capacity of the service on the Bank – Lewisham section of the network will be increased with the introduction of three-car trains in 2009.
- An application has been submitted for powers to build the DLR extension to Stratford Regional and International Stations. This extension, planned to open in 2010, will convert the North London Line into a DLR service between Canning Town and Stratford and lead to the opening of four new stations.
- DLR is also examining route options for the extension from Beckton, via Barking Riverside to Dagenham Dock.

Three new river crossing schemes - the Woolwich DLR crossing, the Thames Gateway Bridge connecting Thamesmead and Beckton and the Silvertown Link, will provide vital links between employment and residential areas north and south of the river; improving sub-regional and local movements by road and public transport and stimulating regeneration without encouraging long distance commuting by car.

Map 3.1: Planned future transport schemes



TfL is developing proposals for new and extended tram schemes, including:

- The Cross River Tram, which will serve Camden, Kings Cross, Euston, Holborn, Waterloo, Elephant & Castle, Brixton and Peckham, providing a public transport service to regeneration areas and congestion relief to the Northern line.
- The West London Tram will connect several town centres and areas of denser population in West London such as Shepherds Bush, Acton, Ealing, Hanwell, Southall and Uxbridge, replacing two primary bus routes that currently carry over 23 million passengers per year.
- TfL is also examining a number of options for extending the Croydon Tramlink, which would, in the longer term, provide a comprehensive network across a large section of south London. The TfL 5 Year Investment Plan contains funding for the project development of the Beckenham Junction to Crystal Palace extension.

The bus network will play a key role in accommodating the forecast growth in travel. A comprehensive programme of improvements to the bus network is underway in terms of service frequency, network coverage, reliability, quality, information, security and accessibility of vehicles. These improvements have already led to an increase in ridership and made bus travel a more viable alternative than travel by car for many more journeys. The bus network has the advantage of being relatively flexible in terms of increasing capacity in a short timescale to meet expected demand and serve new developments.

In east London, TfL is also developing a network of high quality bus based Thames Gateway Transit routes. The project combines the East London Transit and the Greenwich Waterfront Transit schemes into an integrated bus based network, linked by the public transport priority lanes on the proposed Thames Gateway Bridge, which will significantly improve cross-river public connectivity within the Thames Gateway. The first phase of East London Transit, north of the Thames serving Ilford, Barking, Barking Riverside and Dagenham Dock will be operational in 2008, and the first phase of Greenwich Waterfront Transit south of the Thames, serving Abbey Wood, Woolwich and North Greenwich will be operational in 2009.

An important factor in reducing car dependency is providing good walking and cycling access to developments, integrated with existing networks to provide convenient access to local services and transport interchanges is. TfL is implementing a comprehensive programme of walking, public realm, cycling, interchange improvements and mobility management initiatives as part of its Five-Year Investment Programme.[18] TfL is also developing Road Network Management plans to optimise the use of road capacity and make the most effective use of road space. The largest single project will be the Western Extension to the Congestion Charge zone, which will effectively double the size of the congestion charging scheme area. The extended zone will become operational in early 2007.

[18] TfL, *Five Year Investment Programme*, (2005)

3.3 Social infrastructure – schools

The GLA's 2005 demographic projections incorporated the distribution of new housing proposed in the revised borough housing targets (October 2005). These projected that there would be an increase of about 50,000 5-10 year olds by 2016, but no significant increase in 11-15 year olds by 2016.

The increase in 5-10 year olds is predicted to be concentrated in central and east sub-regions. There would be a growth in 11-15 year olds in central, but the increase in east would not be until after 2016. Short-term reductions in the numbers of 11-15 year olds to 2016 were also projected in north and south sub-regions.

The Department for Education and Science (DfES) has not yet published any estimate of additional secondary or primary school requirements for this ten-year period, although some initial work has been undertaken on the planning of secondary school places to 2010. In the absence of any such work the GLA has used its own population projections to predict the likely consequences for school places.

On the basis of these projections and discounting any assessment of current deficits or surpluses in existing provision, it can be estimated that about 120 extra primary schools will be needed by 2016 (mainly located in east, central and west London). While there may not be a need for any overall increase in the provision of secondary schools until after 2016, this disguises the fact that there may need to be some further provision in the central sub-region with some over-provision in other sub-regions.

The Mayor is in discussion with the DfES on the need for longer term planning of secondary and primary school provision in London, to take into account the potential geographical redistribution of London's population.

3.4 Social infrastructure – health

The pattern of health care in London is complex and is constantly changing in response to perceived health priorities as set out in key Government policies and to the community's actual health needs. There are a number of significant pressures and drivers for this change which include:

- changing models of care
- redevelopment of the health estate
- reorganisation within the health service
- changing population profiles.

Changing models of care

The generic model of care is changing in response to a political priority to create a patient-centred National Health Service (NHS), to prioritise prevention, to contain cost and secure value for money. In essence the emerging model requires treatment and services to be closer to people and will result in the movement of services from acute sites into primary care settings and people's own homes.

The key spatial implications of this trend are the consolidation of health facilities on acute sites with some rationalisation and the creation of new health provision within local communities. These local health facilities may be co-located with other services or activities. They will provide a wider range of health services than traditional GP surgeries, such as diagnostics and day surgeries, and require larger spaces.

Redevelopment of the health estate

The level of investment in the provision of health facilities has risen markedly in recent years, marking possibly the biggest hospital building programme in the history of the NHS. In 2005 in London the Private Finance Initiative (PFI) projects under construction were valued at £640 million. Major schemes, both PFI and publicly funded, worth in excess of a further £3 billion are under active planning or negotiation. Smaller schemes, being delivered by the Local Finance Trusts or LIFTS (public-private partnerships at the Primary Care Trust level), are currently valued at £365million. This gives some context for the level of investment and for the investment needs implied by the growing population. For 2005/06 the strategic capital programme (excluding PFI and LIFT) was £350million and in 2006-07 will be £374million.

Reorganisation within the health service

The NHS is currently being reorganised. In London, this will result in changes to the structure of the Strategic Health Authorities (details currently under consultation), but Primary Care Trusts (PCTs) will remain coterminous with the boroughs. However, in the medium term a move towards practice-based commissioning has the potential to radically alter the way services are delivered. This process may well have spatial implications as the diversity of providers and quite possibly buildings and spaces increase.

Changing population profiles

Health service planning has until recently been relatively short term and reactive with a patient and performance focus. More recently the plans of the PCTs have been developed in a three-year time frame. A new round of Strategic Service Delivery Plans (which set out investment plans in relation to health needs) will cover the period from 2006-09. In addition new tools are being developed to assist the strategic matching of demand to supply. Unfortunately it is not yet possible to undertake this exercise in a meaningful way either at a pan London or sub-regional level.

However, the revised housing capacity targets and subsequent housing-based population projections have been used to generate estimates of the likely cost of new facilities and services implied by the new populations. This exercise has been undertaken using the London Healthy Urban Development Unit (HUDU) model, which calculates the health requirements of predicted populations. Using empirical data the HUDU model generates the consequent costs of health services and facilities for the four broad sectors – primary, intermediate, mental health and acute services.

The global estimate for London of the health costs of households relating to the new homes provided over ten years has been estimated at £385 million capital cost and £396 million revenue cost[19]. However, it should be noted that a significant part of this requirement relates to the needs of existing households who will move to new homes, rather than to population growth.

The housing capacity targets will impact on the location of health provision requirements but not the absolute level of health requirement - which relates to people not dwellings. Re-housing existing overcrowded households and households currently living in poor quality housing into new homes should significantly reduce health costs, especially in those parts of London where these problems are concentrated. These factors are not taken into account in the overall cost estimates.

These figures offer a guide to the scale of provision that will be necessary. They do not necessarily reflect the full extent of the changes that are outlined above, for example in changed models of care. Nor do they include any assumptions about the potential contribution to costs from public sector funding or from development based planning obligations or other private funding sources.

The emerging approach to capacity planning within the health service should enable strategic and local matching of supply and demand in the near future. This process will then fully reflect the qualitative, operational and organisational changes outlined above. It will enable the gaps to be identified as a basis for decision-making, prioritisation and alignment of development and health plans.

3.5 Social infrastructure - other

While the provision of health and education services is essential to sustainability, there are only two aspects of the matrix of social infrastructure that is needed in order to deliver sustainable communities.

The GLA has not been able to undertake a comprehensive assessment of other social infrastructure requirements arising from the projected distribution of housing growth over the next 10 years. This is primarily because full information on existing surpluses and deficits in existing levels of provision is not available on a comprehensive basis. Moreover there are not explicit population based service level standards for certain forms of social infrastructure.

In addition, as highlighted in Section 3.4 on health, some of the households that will be re-housed already live in London and consequently make demands on the services in those locations in which they currently live. The demand for services in existing areas of overcrowding should therefore fall. It may therefore be possible to redistribute resources from areas of surplus capacity to areas of population growth.

[19] These calculations are based on the assumption that the NHS will absorb the revenue cost as mainstream funding becomes available after a period of two years. They thus exclude the cost of services for any cohort of population after two years.

However the GLA has sought to use the Social Infrastructure Framework, a tool sponsored by ODPM and developed in partnership with HUDU as a starting point for such an assessment. This provides a methodology for planning for the whole range of social infrastructure. It uses similar spreadsheet tools to the HUDU model for health but goes beyond this by setting out the process by which social infrastructure can be delivered. As this tool becomes operational it will provide an opportunity to better integrate the planning of social infrastructure with development plans at the strategic and local levels.

The tool was recently used to generate estimates of the need for social infrastructure in London Thames Gateway. The Thames Gateway Development Investment Framework (April 2004) estimated requirements for the Thames Gateway Zones of Change based on a projected increase of 91,000 households over a 20 year period. Using a series of research studies commissioned by the LDA and co-ordinated by URS consultants these estimates took into account population based service standards where they existed. As most of the projected population growth would comprise new communities on brownfield sites that would not have existing social infrastructure, an analysis of existing surpluses/deficits was less relevant.

The (non health and schools) social infrastructure requirements were estimated as

- 6 new playing fields
- 63 new nurseries
- 6 new police stations
- 3 new fire stations
- 10 libraries
- 9 leisure centres.

It is therefore theoretically possible to apply these estimates to the London-wide projection of 310,900 households over 10 years. Doing this on a straightforward pro rata basis would generate a London-wide requirement of

- 20 new playing fields
- 214 new nurseries
- 20 new police stations
- 10 new fire stations
- 34 new libraries
- 31 new leisure centres.

These estimates are provisional and should be treated with considerable caution. It should be noted that the location of service provision is not always dependent on residential growth – for example police and fire services are required to service non-residential areas as well as residential areas. Libraries and leisure facilities may be best located in town and district centres rather than in residential areas.

3.6 Utilities

It is recognised that the supply of water and sewerage services is critical to the sustainability of residential development. In preparing the five Sub-Regional Development Frameworks (SRDFs) the GLA had extensive discussions with the four water companies operating in London about how much existing services would need to increase to meet planned residential population growth[20]. The Mayor will shortly be publishing the first Water Action Framework for London. This will set out a framework for managing both the water supply and sewerage services in London.

In preparing the SRDFs the GLA had and continues to have discussions with the electricity, gas and telecommunications companies, to ensure that these providers are taking into account the likely distribution of residential growth in the planning of future service provision. The view expressed by providers is that the gas distribution system has adequate capacity for the foreseeable future, but that some reinforcement of EDF Energy's[21] distribution network may be necessary for some major new residential developments.

[20] Thames Water provides sewerage services for the whole of London. Water supply is provided by Thames Water, Three Valleys Water, Essex and Suffolk Water and Sutton and Epsom Water – with Thames Water supplying three quarters of London's population.
[21] EDF Energy is the new name for the recently merged London Electricity and Seeboard group of companies.

4. The planning process

This section demonstrates that the potential additional housing that has been identified in the LHCS is already coming forward through the planning system. Despite some planning process constraints and concerns over the adequacy of skills and resources in local planning departments, there is already sufficient housing capacity in the development pipeline, as evidenced by the number of approvals. Further, previously unidentified sites ("windfalls") are providing additional housing opportunities. This section also considers how the current Mayoral Review of Powers could further improve the planning and development process.

4.1 Planning performance

Concern has been raised over the speed with which the planning system is delivering its decisions and the impact this may have on rates of housing delivery. One role of a Local Authority's development control service is to ensure that once planning applications are received they are processed in a timely manner. While in recent years London Authorities' Planning Services have shown improvements in delivering opportunities for housing development, it is imperative that they continue to do so for the foreseeable future to meet the capital's housing requirements.

Table 4.1 Planning decisions by region, second quarter 2005 and 2004

Region	All decisions (thousands)		Permissions agreed (thousands)		Permissions agreed (%)		Decisions within 8 wks (%)		Decisions within 13 wks (%)	
	2005	2004	2005	2004	2005	2004	2005	2004	2005	2004
London	22.6	24.5	14.8	15.9	76	75	84	80	92	90
Other metropolitan	24.4	28.1	20.3	23.4	85	85	81	77	92	90
Other non-metropolitan	111.5	124.4	90.5	101.7	84	84	79	76	91	90
England	158.6	177.1	125.6	141.0	83	83	80	77	91	90

Source: ODPM

Table 4.1 shows the breakdown of planning decisions made in London and the rest of England during the second quarters of 2004 and 2005. Most of these figures represent decisions made on small sites, not the major sites that are anticipated to deliver the bulk of London's new housing. However, they do show that overall, London is turning around planning decisions at least as fast as the rest of the country. The figures also imply that there is a greater propensity to refuse permissions in London – which is addressed in section 4.2 below.

The ODPM monitors Local Government Performance through the use of Best Value Performance Indicators (BVPIs). Recent analysis of BVPI109, the key planning PI (the percentage of planning applications determined in line with the Government's targets) is shown in table 4.2 below. This indicates that overall, London's planning services have made significant improvements over the past few years in reaching these targets.

Table 4.2 London planning application processing times

Year	% of major applications decided in 13 weeks (BVPI109a target 60%)	% of minor applications decided in 8 weeks (BVPI109b target 65%)	% of other applications decided in 8 weeks (BVPI109c target 80%)
2001/02	45%	51%	67%
2002/03	42%	51%	68%
2003/04	53%	64%	78%
2004/05	58%	73%	84%

Source: ODPM Development Control Statistics

However, the data (set out in full for each London planning authority in Annex 13) demonstrates that this is a varied picture across London. Further, while the authorities have generally shown considerable improvement, there is much to be done to deliver a sufficiently quick turnaround of planning decisions on larger developments.

Delays in decision turnaround have been attributed by some organisations to a lack of financial resources and staff capacity in local planning services. In April 2004, Tim Edmondson Planning Research prepared a report for the Association of London Government, the Association of London Borough Planning Officers and the Royal Town Planning Institute London Branch on the recruitment and retention of planners in London.[22] The report acknowledged that the planning profession is suffering severe staff shortages in London and that these are getting worse. It considered a range of issues and made recommendations to help address staffing shortages caused by fewer people entering the profession and more people leaving it.

London's planning services generally generate their revenue from both planning application fees and council tax. Planning application fees are fixed by Government legislation[23]. The introduction of Planning Delivery Grant is widely held by boroughs to have assisted in improving services. Some authorities are also seeking to generate income through other means such as charging for pre-application meetings.

4.2 Planning decisions

There has been a steady increase both in the number of planning applications made and those refused during the period 1994-2003 (figure 4.1)

The figures in table 4.3 show that since 2000 there has also been a significant increase in the number of schemes and the number of units refused planning permission. They also show that the portion of schemes and units refused has increased since 2000. This increase is all the more striking given the consistent correlation between applications and permissions from 1994 to 2000. This has led to obvious concerns that opportunities for appropriate residential development may not be taken up.

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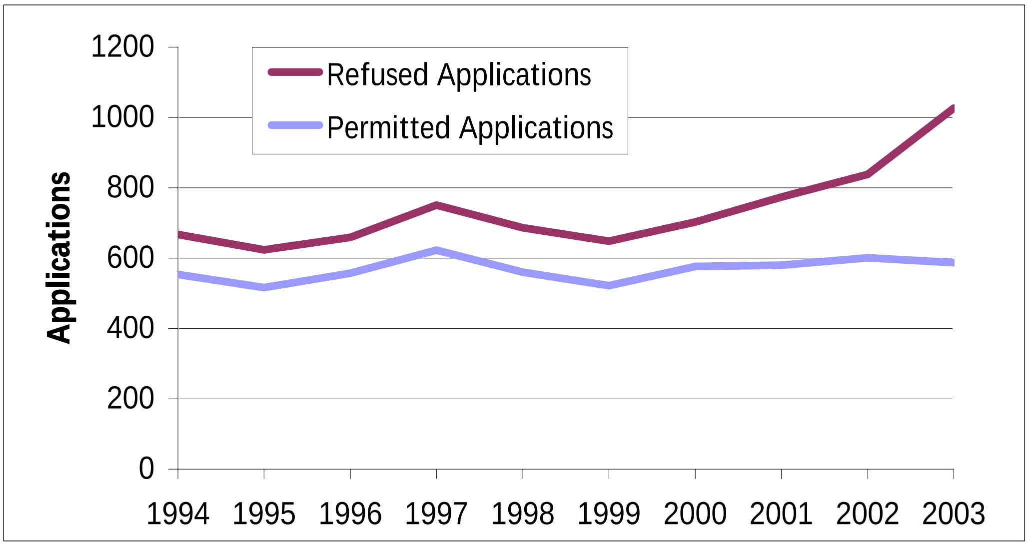
[22] Tim Edmondson Planning Research on behalf of ALG, RTPI London Branch, ALBPO. *'Recruitment and Retention of Planners: Towards addressing the need for planners in London'*. April 2004

[23] The Town and Country Planning (Fees for Applications and Deemed Applications) (Amendment) (England) Regulations 2002 (Statutory Instrument 2002 No. 768)

Figure 4.1 Residential permissions and refusals 1994 – 2003



Source: London Development Monitoring System

Table 4.3 Residential permissions and refusals 1994 – 2003

Year	Permissions		Refusals		Decisions			
	Schemes permitted	No. of units	Schemes refused	Proposed units	Schemes total	Unit total	Schemes approved (%)	Units approved (%)
1994	554	22,412	113	3,049	667	25,574	83	88
1995	516	20,828	108	4,047	624	24,983	83	83
1996	557	26,553	102	3,158	659	29,813	85	89
1997	623	29,856	128	5,110	751	35,094	83	85
1998	560	25,486	126	5,192	686	30,804	82	83
1999	522	23,854	126	3,976	648	27,956	81	85
2000	576	25,442	127	3,898	703	29,467	82	86
2001	580	26,482	194	5,613	774	32,289	75	82
2002	601	34,590	237	7,774	838	42,601	72	81
2003	587	24,524	439	12,640	1,026	37,603	57	65

Source: London Development Monitoring System

Following discussions with GOL, the ALG and the HC, the GLA sent a questionnaire to boroughs to investigate the reasons for this increase in refusal rates. Two thirds of London's Planning Authorities responded and the responses were reasonably consistent in terms of their explanations.

Each borough was issued with a schedule of residential planning applications refused within their Borough in 2002 and 2003 and was asked to annotate the schedule with reason for refusal based on a series of categories. The results are shown in table 4.4 below.

Table 4.4 Reasons for planning refusals

Number	%	Code*	Reason
22	6%	A	Duplicate application
141	36%	B	Revised application subsequently approved
28	7%	C	Application approved following appeal
4	1%	D	Application called in by Secretary of State
22	6%	E	Members overturned officers' recommendation to approve
0	0%	F	Application refused as incomplete and insufficient time within BVPI deadline to resolve outstanding issues
179	45%	G**	Refused as not being in conformity with borough policy
0	0%	H	Refused as considered as not being compliant with London Plan requirements
0	0%	I	Other reasons
396	100%		

* *A single application may have moved through a number of the codes. For the purpose of this exercise the final code has been used, for example, where an application was refused by members and granted by appeal the code entered would be C.*

** *This includes refusals that were upheld through appeal*

Among the key findings from this research are:

- 36% of refused applications (for 10 dwellings or more) were subsequently revised and approved, indicating that there is an opportunity for housing development within refused applications. The extent to which changes were made to these revised applications that made them acceptable is uncertain.
- The largest category of refusals (45%) comprised schemes refused on the basis of non-conformance with borough planning policy. The reasons for this are discussed further below.
- 6% of refusals related to local authority members overturning an officer's recommendation to approve. A number these ere granted permission on appeal.
- 6% of the refusals related to duplicate applications (multiple applications were often made for a site).
- 7% of refused applications were approved following an appeal.
- No applications were recorded by boroughs as refused on the basis of insufficient time, not meeting London plan requirements or for other reasons.
- Many of the applications shifted across a number of these categories. It was also observed that.

Respondents reported that in practice many applications were refused primarily because there was insufficient time within the BVPI indicator deadline to resolve outstanding matters (category F in the table above).

A number of boroughs stated that where an application requires a section 106 agreement, it is very difficult to meet the 13-week deadline. However, at the time of decision, such cases are recorded as refusals on the basis of non-compliance with borough policy. It was therefore not possible, as part of this exercise, to estimate the number of refused applications that could have been positively determined if the time for decision was long enough to negotiate changes.

The fact that 36% of refused schemes were resubmitted and subsequently approved indicates that many schemes were supportable with the required changes. This implies that at least some of these schemes could have been approved without the delay resulting from refusal and resubmission had more negotiation time been possible. However many schemes will have benefited from substantial amendments.

The most common reason for non-compliance with borough policy related to perceived over-development or over-intensive use of a site. In almost all cases this reason incorporated non-compliance issues with a range of policies, for example residential quality and parking. Loss of existing uses also featured frequently as a reason for refusal. Government and Mayoral advocacy of higher density development was also cited as leading to higher refusal rates since it produced schemes with density above levels acceptable to London Boroughs. It should be acknowledged that the London Plan advocates high-density development only where it is appropriate and ensures a wide range of other policy criteria are met.

There was a general consensus among boroughs that staff shortages are not leading to higher refusals rates as agency staff are often employed to fill the vacancies. The quality of agency staff was viewed as generally high, although they accepted that there might be continuity issues for long-term schemes.

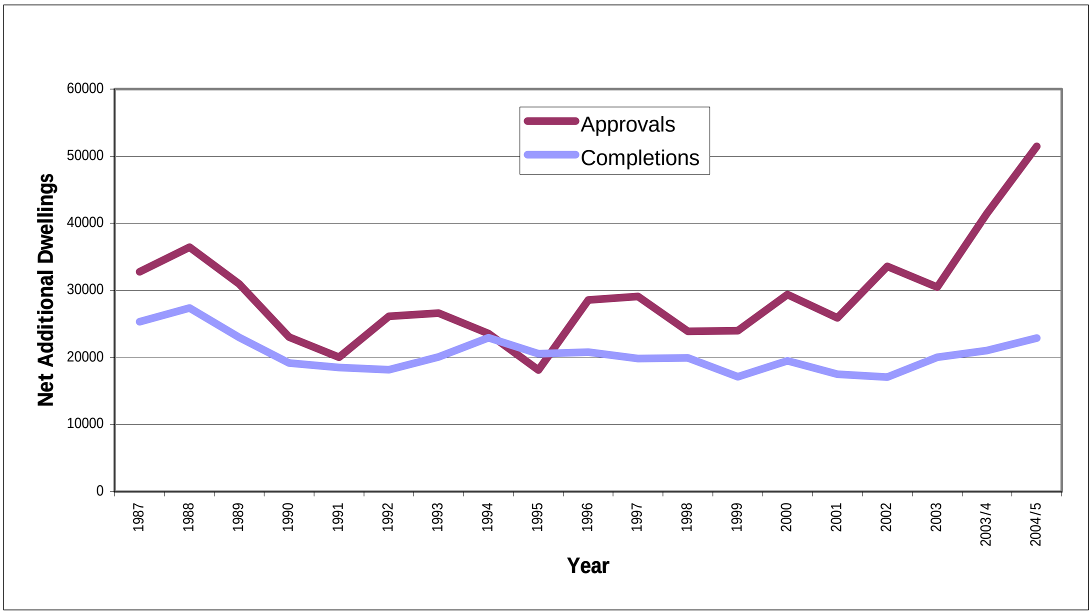
The majority of the boroughs considered that there had been no significant changes in the standard of applications. Supporting information is generally improving, though this may reflect additional requirements on matters such as energy efficiency and biodiversity. Applications where there have been pre-application meetings generally lead to better outcomes. However, there are still a high proportion of applicants that ignore the advice given in these meetings.

Overall, the research has raised as many questions as it has resolved. Further work, now in progress, will report after the end of the EiP, to identify on a case study basis examples of the problems that can be experienced by developers and planners in delivering new housing. While there are clearly frustrations with the performance and staffing of the planning system, in general it is creating opportunities for housing development.

4.3 The planning pipeline and delivery

In addressing immediate opportunities for development, it is essential to ensure that sufficient planning permissions are being granted in order that there are enough opportunities for housing to be developed, that is, to create a planning pipeline. The degree to which this is being achieved can be measured by the relationship between net additional dwellings approved and housing completions. Figure 4.2 below shows the time series from 1987 to date, based on the GLA Housing Provision Survey 2004/05.

Figure 4.2: Approvals and completions 1987-2004/05



Source: GLA Housing Provision Survey 2004/2005

This indicates that in recent years, net additional dwellings approved are surging well ahead of completion rates. In fact, there has been a doubling of residential planning permissions since 1999, with the most significant increase being in 2004/5.

Figures are provided in Annex 14 showing permissions and completions data since 1987. This shows that historically permissions have been higher than completions, running at an average ratio of 1:1.29 throughout the period from 1987 to 2000. However, from 2001 this started to increase rapidly and, at the end of 2004/5 this ratio stands as 1:2.29. As at March 2006, the total development pipeline of planning permissions not yet completed in London stands at 163,155 residential units, of which 59,421 are under construction as shown in table 4.5.

Table 4.5: Residential Pipeline at March 2006

	Total Dwellings (gross)	Additional Dwellings (net)
Dwelling achievable from current planning permissions	163,155	142,290
Dwellings under construction (building starts)*	59,421	51,768

**Note: The construction period of these homes is considered to be beyond 12 months.*
Source: London Development Database

It is clear that much of the growth in this pipeline is due to some of London's major strategic sites receiving planning permission and moving into the delivery phase. These sites will deliver a large number of new homes but will, inevitably, take some years to build out. There are a number of other potential causes of this increased pipeline. Some organisations have attributed it to a growth in speculative land-banking. However, the Barker Review argued that house builders do not land bank on a significant scale - primarily because of the negative effect on capital returns – a view that is backed by the house-building industry in London. Other possibilities raised include the extent to which planning permissions may have been granted that have been revised significantly during the planning process, or which the developers believe have been over-encumbered with a planning gain requirement, and thus are no longer viewed as financially viable.

The extent to which these factors explain the increased pipeline will be further investigated by the GLA. However, should the delivery:pipeline ratio return towards its longer term level, as set out above, then this increased pipeline demonstrates an appetite within the industry for further increases in housing delivery. The Mayor would also argue that tackling barriers to delivery in the development and planning process by adopting the changes suggested in the Review of Powers, would create opportunities to drive up delivery further and faster.

What all this does demonstrate is that in the short term there are significant opportunities for increased housing development – a view also shared in the report, *Residential Development in London 2006* prepared by London Residential Research on behalf of a range of leading Property and Estate Evaluation Firms.

Uptake of capacity identified in the London Housing Capacity Study 2004

The future housing capacity detailed in the LHCS is based on a site analysis as at April 2004. Of the large site capacity 22% was categorised by boroughs as having planning approval; 47% as sites allocated for housing; and 31% as sites not as yet allocated for housing (referred to as 'potential' sites).

An analysis of the take up of this capacity was undertaken for the 18-month period from April 2004 to September 2005. This was undertaken through the London Development Database, which the GLA uses to monitor all planning permissions. This analysis found that there were significant numbers of housing permissions granted over and above what would be expected from the LHCS. This came from three sources.

Firstly, more permissions are being granted on unallocated large sites than was expected. Some 84,238 homes received planning permission between April 2004 and September 2005. Of these, 41,875 homes were on large sites identified in the LHCS. Of these homes, the LHCS had categorised the sites on which they are located as follows:

- 19,269 units (46%) on sites recorded as having planning approval[24]
- 12,879 units (31%) on sites allocated for housing
- 9,726 units (23%) on unallocated sites with housing potential.

[24] It is assumed that where these permissions are for sites already recorded as having planning approvals, these are detailed permissions where outline permissions for residential development already existed.

Secondly, there was significant provision from large sites that had not been identified in the LHCS. This accounted for 4,441 homes in the eighteen-month period. On an annualised basis this would indicate that there is a capacity of 2,960 permissions a year through windfall sites not included in the study. Further, this would imply that, assuming a 1:2.29 completions:permissions ratio (as applying in 2004/5) then large site windfalls could produce over 1,292 completions a year additional to capacity included in the proposed Alterations.

Thirdly, there was greater than expected delivery from small sites. Analysis of the planning permissions gives a figure of 37,922 homes on small sites (ie sites under half a hectare) in this eighteen-month period. This would be equivalent to an annualised figure of 25,281 homes. Again, applying the 1:2.29 completions:permissions ratio would imply 11,040 completions a year from small sites. This is well in excess of the 9,812 small site target assumed in the draft Alterations. This demonstrates that the small site targets, including uplifts, which have been questioned by some boroughs, are quite achievable, particularly since small sites will usually involve a shorter development period and a faster completion rate than on large sites.

Taken together, these three sources of additional supply represent a significant windfall, that is capacity coming forward over and above the LHCS expectations. This makes a strong argument that the overall targets are not just realistic but are likely to prove conservative.

4.4 The review of planning powers

A key part of the current consultation on the Review of Powers is the Mayor's role in the field of planning. It is important in this review that a proper balance is struck between local decision-making at borough level and citywide strategic decision-making. To achieve this, the Mayor supports the two options that would create more positive Mayoral planning powers. That is, a power of direction over borough Development Plan Documents (DPDs) and a Mayoral power to direct approval as well as refusal for defined categories of strategic planning applications. If and when required, the Secretary of State's call-in powers would be available to Government.

The key reason for this is that the London Plan provides the context for all planning decisions in London. It acts as the Mayor's overarching strategy for the city, bringing together transport, economic development and environmental plans. It is vital therefore that the Mayor has sufficient powers to deliver his priorities through the London Plan.

With a power to direct borough councils to grant permission for strategic applications, the Mayor would be able to bring consistency and speed to the planning system.

The Mayor already has powers to direct refusal of schemes that are deemed to be strategic, and therefore referable under the GLA Act. It is anomalous and illogical for the Mayor to have such powers on the grounds that such planning applications are strategic and therefore of cross borough significance, yet to have no such power to adjudicate on them until, and unless, the borough itself has approved them. The current scheme, in granting the Mayor the power to direct refusal, offers him only a potential veto, while the absence of a positive power to direct approval effectively gives a borough such a veto. This is unsatisfactory and means that far too many strategic planning applications are referred to a planning inspector, which adds substantially to the time and expense of the schemes concerned.

The Mayor is involved in only a tiny proportion of planning applications (indeed, he sees only 10% of applications defined as 'major' by ODPM), and he therefore needs a way to ensure that non-strategic planning applications – over 99% of the capital's total – are dealt with in accordance with the London Plan. Boroughs routinely take insufficient account of the Plan and it is therefore vital that the forthcoming Local Development Frameworks (LDFs) conform to the London Plan and incorporate the thrust of its strategic spatial policies.

By being given a power of direction over borough DPDs the Mayor would be able to ensure regional spatial policy is delivered. At present, the boroughs ensure that local considerations are taken into account; the Secretary of State ensures that LDFs conform to national policy; but no single body currently has the responsibility of ensuring compatibility with regional policy. This will become increasingly important if the Mayor acquires enhanced powers over housing and waste. The Mayor needs the power to direct boroughs not to adopt DPDs if in his opinion they do not conform to his Plan. This is not a matter that should be delegated to a planning inspector.

If the Mayor is provided with the appropriate positive planning powers, uncertainty about responsibility for ensuring local plans are in general conformity with the London Plan will be removed. Implementation of the London Plan will no longer be damaged by a lack of general conformity. London Plan policies will be applied consistently across London. Boroughs will be more likely to determine strategic planning applications in accordance with the London Plan and there will be fewer planning inquiries into strategic applications. Non-strategic planning decisions will be more likely to take full account of, and be based on, the London Plan, particularly with regard to density, design quality and urban renaissance principles.

A key aim of these new powers is to support an increase in planning permissions for good quality housing schemes, that are compliant with the London Plan and national policy. Strategically important schemes will be fast-tracked to approval.

5. Economic factors and viability

This section reviews the market factors impacting upon the delivery of higher housing completions including the availability of public funding to support the affordable housing element. The section also considers the extent to which output, including the percentage of affordable housing homes, will be affected by changes in land and construction costs and increases in values.

5.1 Housing market impacts on private sector investment

The housing market and the economy are strongly related to each other. In recent times the UK economy has experienced periods of strong growth complemented by a surge in house prices. Nationally rising wealth, increases in population and low interest rates, among other factors, led to a spurt in housing demand and spiralling prices in the late 1990s. However, the rate of annual increase in house prices in the UK has been slowing from a high point of 25% in 2002 to 3% in 2005.

There are a number of contributory factors that can explain this trend. The major determinants of UK house prices are households' expectations of income, their job security and the degree of uncertainty they face[25].

The London housing market can be divided into two sub-markets – the '*income sensitive sub-market'* (e.g. central London) and the '*interest rate sensitive sub-market'*. The 'income sensitive' housing sub-market in London is less influenced by interest rates and house price levels than the interest rate sensitive. Low interest rates and rising incomes experienced in recent years have made housing more accessible for the 'interest rate sensitive' sub market. Although lower interest rates increase affordability, they prolong the debt repayment period for households.

In 2004 and 2005 the overall increase in interest rates and a rise in unemployment levels led to a stabilising of house prices in London. However, towards the end of 2005 London house prices started to rise again. This can be attributed to the substantial bonuses enjoyed by city workers ('income sensitive' market), the one-off interest rate cut in August 2005 and the awarding of the 2012 Olympic Games (which mainly affected east London house prices).

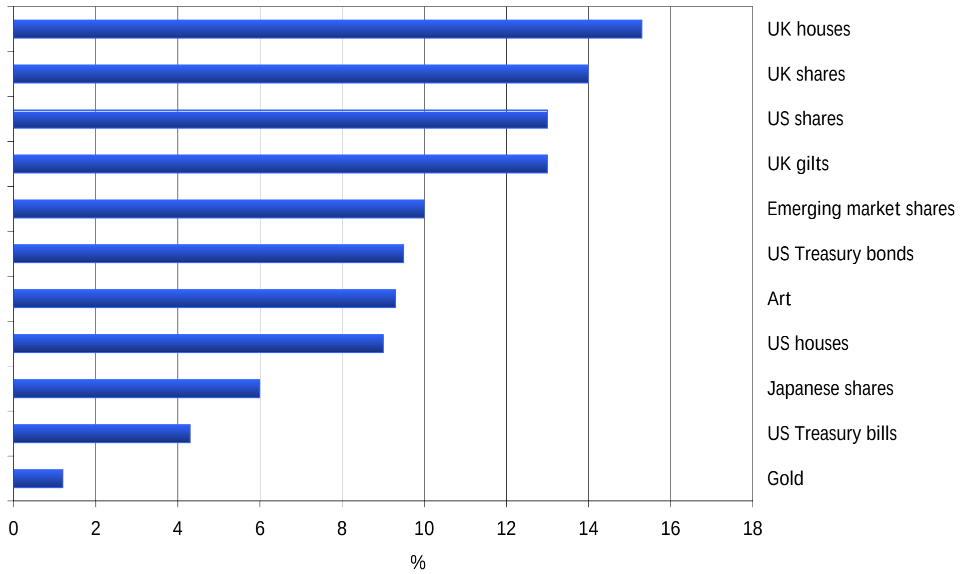
People have different reasons for buying residential property. Some individuals purchase housing to live in, while others may do so in order to attain an asset. The main way in which the housing market affects consumption and investment decisions is through the relationship between house prices the macro economy and financial markets. As house prices decline, households may feel less wealthy and so reduce their spending. A fall in house prices also reduces homeowners' collateral value, meaning that they are able to borrow less in order to finance their spending.

For prospective homebuyers a slowdown in the economy can reduce household income. This dampens demand for housing, which in turn can adversely affect developers' incentives to build more houses. Developers tend to be cautious about building more houses when macro-economic conditions are uncertain.

[25] Bank of England *Inflation Report* (November 2005).

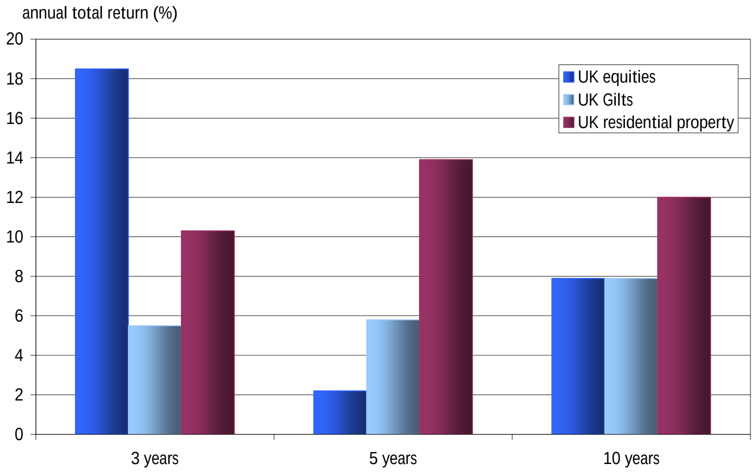
Generally, high investment returns create more incentives for investing in a particular asset for a given level of risk. The high house price increases observed in the late 1980s, the late 1990s and early 2000s in the UK housing market created annual average returns in UK residential property of around 15 % over a 20 year period (1984-2004), see Figure 5.1. Moreover, historic annual returns in the UK residential property have outperformed other types of investment such as shares and bonds.

Figure 5.1: Comparison of average returns for different investments 1984-2004



Source: Barclays Capital; Global Financial Data; Melmosesfineartindex.org; The Economist. Reproduced as in the Economist

Figure 5.2: Annual total returns for different types of investments (%)



Source: bestinvest, based on FTSE all share index, FTABG index and Nationwide house price index at December 2005

Depending on the time horizon considered, historic annual returns in residential property have shown the highest return in comparison to other assets (see Figure 5.2). Except for short-term investment (up to 3 years), investment returns on residential property outperformed equities and gilts up to 10 years.

Reliable information on new private sector completions suggests that private homebuyers buy only a small proportion of all newly built homes. Analysis by London Residential Research (LRR) in 2001 suggested that 50% of all private sector housing completions on their database were sold to institutional, corporate and "Buy to Let" investors, property investment clubs and second home buyers (rather than directly to owner-occupiers). In 2005, the LRR stated that demand for residential development remained strong and that off-plan investors were driving this demand.

This pattern of investment is likely to change over time as rental yield and capital appreciation depend on economic indicators such as interest rates, exchange rates, and growth in the global economy. Many of these investors in private new housing were from overseas. More recently, according to data from the Royal Institution of Chartered Surveyors (RICS), the proportion of sales to overseas buyers rose from 25 % in 2004 to almost 40 % in 2005, driven by rising sales to Asian and European buyers[26]. Further exploration of who invests in new market housing is necessary to better understand housing market and development dynamics. The Greater London Authority (GLA) is currently in the process of specifying a project that will do this.

High house prices do not necessarily mean that private developers will build more houses with the expectation of future capital gains. It is the expectation of future house price growth that encourages private developers to build more houses. Estimation of future house price growth relies not only on macro-economic conditions in the United Kingdom, but also on international macro-economic conditions. Private developers in London could thus be monitoring a range of local and international economic conditions before deciding whether it is worth their while to build more houses.

The views of private developers

Both the Home Builders Federation (HBF) and London First have expressed public support for the London Plan housing Alterations. However they have highlighted a number of factors, which will impact on the extent to which the private sector will invest in increased house building in London.

Primary among these concerns is the need for Government investment in social infrastructure as the costs of such infrastructure cannot be carried solely by developers through planning gain. This is taken together with a need for realistic assumptions about the viability of affordable housing requirements. For most developments, HC grant will be required to achieve the London Plan target that 50% of new homes should be affordable. Planning obligations need to have proper regard to development viability. Proposals for fixed tariff or planning gain supplement arrangements may not be not appropriate for brownfield development in London, where significant site preparation and decontamination are often necessary.

Developers and house builders identify a risk of over-reliance on a few very large brownfield sites, which will take years to develop. To supplement these a wide range of small sites should be made available for housing development. This is advantageous because many house-builders in London have a capacity to develop small sites with implementable planning permission but do not have the capacity to take on the long-term risk involved in the larger more problematic sites.

[26] J. Pickard, 'Overseas home buyers boost prices in London', *Financial Times* (2 March 2006)

There is also a need for greater clarity and consistency in Government, regional and local planning policy requirements, which could be addressed in the review of the powers of the GLA and the review of the role of GOL. Hand in hand with policy consistency is a need for more efficient delivery of planning decisions by regional and local planning authorities, including coordination with TfL and statutory undertakers.

The 2006 Red Book, *Residential Development in London 2006*, recently published by London Development Research, while noting the significant increase in planning permissions, expresses some concern as to the fact that this has not yet translated into a significant increase in housing starts. The report sets out the key preconditions from the investor's (that is, the developer's lenders) perspective as:

- comfort with sales percentages on a developer's existing schemes
- a good level of pre sales before construction starts – as much as 35%
- a pre-let on any commercial space
- a 20% margin on cost at current prices
- comfort on the general selling environment a scheme will be delivered in too.

The report concludes that across London the development pipeline in terms of planning permissions is sufficient to achieve the proposed new housing targets, the exceptions being the City of London, Haringey, Waltham Forest and Kingston. (See Section 4 for more details on the pipeline). The report however points out that at current rates starts are at too low a rate to achieve the 31,090 target, and suggests that there needs to be an increase in starts in a much wider range of boroughs.

The report also sets out a number of factors that are limiting the extent to which planning permissions are being implemented. Among these are inflation in construction costs over and above current increases in sales prices, with an added disincentive to residential build in the strength of existing use values for non-residential uses, including an improvement in the Central London office market. This is seen in an increasingly tough sales market with high unsold dwelling rates in a number of locations, including upper market boroughs. It is also evidenced by a high level of discounts for bulk purchase by investors. Nevertheless, some developers report difficulties in pre-letting non-residential elements of mixed-use schemes

Some boroughs are imposing affordable housing requirements and other planning obligations that have not been properly assessed in terms of impact on development viability. There is also local resistance to higher density schemes, although this may have been particularly exacerbated in the run up to the May 2006 local elections. However, there is also some evidence of speculative permissions being sought to increase asset value with no intention to build out in short term. Finally, the impact of capital gains tax and the potential impact of planning gain supplement may already be playing a role in disturbing the market. However, it should also be recognised that a number of the unimplemented planning permissions are some of the very large schemes that have recently perceived permissions and will inevitably take some years to build out.

5.2 Public sector funding assumptions

The regional funding assumptions for housing below are those that the Government is using in the preparatory work for the 2007 Spending Review. For housing it is based on the assumption of zero real growth (i.e. 2% RPI per annum increase) on the allocation for the 2006-08 Regional Housing Pot (RHP). This is set out in table 5.1 below. The full detail of this and the rest of this section is set out in the GLA's regional funding submission submitted in February 2006, which covered housing, economic development and transport. This table also sets out the effect of a 10% increase or cut in order that this can be tested against outcomes.

Table 5.1: Projected Regional Housing Pot allocations (£m)

Year end	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
£M	1,105	1,175	1,199	1,222	1,247	1,272	1,297	1,323	1,350	1,377
10% -	995	1,058	1,079	1,100	1,122	1,145	1,167	1,191	1,215	1,239
10% +	1,216	1,293	1,319	1,344	1,372	1,399	1,427	1,455	1,485	1,515

The London Housing Strategy priorities

In London the priorities for housing investment are set out in the *London Housing Strategy* 2005-2016. This seeks to deliver the housing aims of the London Plan and is fully in line with the Government's objectives set out in the five-year housing strategy *Homes for All.* These include:

- Increasing the number of homes - by increasing new supply overall and in particular delivering more affordable housing in line with the *London Plan* targets; meeting the need for supported housing; ensuring new housing is of high quality and reducing the number of empty homes.
- Building sustainable communities – by improving the quality of existing homes to meet the decent homes targets; preventing homelessness and reducing repeat homelessness; tackling overcrowding; creating mixed communities; empowering tenants and residents and improving housing management.

London's new supply targets are based on the LHCS showing an annual capacity of 31,090 homes is feasible and the requirements study (HRS) showing a need for at least this level of new homes. The Mayor has set the objective of achieving a balanced tenure split taking into account the needs identified in the HRS with wider policy aims, including achieving sustainable and mixed communities, helping those on low to middle incomes into home ownership and addressing the employment needs of key public services. However, the targets also take into account development economics – that is the effect of overall housing mix targets on development viability. On this basis the London Plan and *London Housing Strategy* set the target that 50% of new housing developed in London should be affordable, of which 35% should be social rented housing and 15% should be intermediate housing.

Total funding requirements and scenario testing

Overall, it is estimated that the funding required to deliver the new supply in line with the London Plan target (10,882 social and 4,663 intermediate homes) would require £1.4bn a year – were the increase in new supply to be funded via the RHP to the same proportion that it currently is. In addition to this, there is the need to address other programmes within the RHP as shown in Table 5.2 below.

Table 5.2: Total funding needed to meet London Plan targets (£m)

Year end	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Funding for new supply	1,400	1,400	1,428	1,457	1,486	1,515	1,546	1,577	1,608	1,640
Funding for non-new supply	273	273	226	227	79	79	65	66	66	68
Total funding requirement	1,673	1,673	1,654	1,684	1,564	1,595	1,611	1,643	1,675	1,708

The key non-new supply programmes funded by the regional housing pot include:

- Decent Homes – As at April 2005 the total cost of making decent all council homes in London is estimated at £2.4bn. In addition as at April 2004 some 17% of London's RSL housing (approximately 53,000 homes) was non-decent. However, funding to make RSL homes decent should, from 2008, be met through RSLs' own resources. To make existing non-decent homes decent and deal with the 19,800 homes became non-decent each year, it is calculated that there will be an ongoing requirement for £15.3m per annum from the RHP, plus a requirement for an additional £15.3m per annum over 2010 to 2012 to clear the backlog.
- Private sector renewal – The intention is that the costs of this work should primarily be met through the greater use of equity release – the current equity held in London's private sector stock being around £361 billion. Private sector decent homes funding is projected only to increase in line with inflation as "seed corn" funding to facilitate equity release and other targeted funding.
- Estate renewal – It is expected that an estate/area renewal programme (currently £60m in 2006-08) will be maintained and increased in line with inflation. This will act as an intervention tool to assist in meeting the decent home standard as part of wider regeneration programmes to create mixed and sustainable communities.

However, there is a range of innovation, good practice and efficiency savings that support the underlying assumptions in the forward projections of funding/delivery. These include the good use that London boroughs made of s106 opportunities. In 2006-07 around 1,000 new social rented homes will be provided through s106 or boroughs' own resources.

London has also led the other regions in the proportion of HC funded homes built using Modern methods of Construction, easily exceeding the HC target of 25% in 2004-06 and the Corporation has a 10% efficiency target in the 2006-08 investment programme, measured in terms of average social housing grant per affordable home funded, taking into account inflation in land and build costs and standardised across size and tenure. The introduction of partnering in 2004-06 has improved supply chain management and efficiency, whilst extending Social Housing Grant to private developers has increased competition.

Projecting forward the London Regional Housing Pot

The RHP in London for 2006-08 is £2,279m. Of this £1,734m (76%) has been allocated for the supply of new homes. This programme includes new general needs housing, intermediate housing, supported housing, extensions/ deconversions, gypsy & traveller sites and temporary accommodation. Of this funding £1,331m (77%) is for social rented housing and £403m (23%) is for intermediate products. This will produce 31,938 units in total, of which 14,623 will be social rented.

The remaining £545m(24%) has been allocated for the sustainable communities programme; including local authority, RSL and private sector decent homes, estate renewal and temporary to settled schemes.

Projecting these current allocations forward on the basis of the assumptions above produces the figures in table 5.3 below. The overall allocations are as set out in table 5.1, including the plus and minus 10%. In the absence of future unit costs and output figures, the figures are either projected forward on current costs or increased by 2% per annum as appropriate. It is assumed that the non-new supply funding streams identified above are at a minimum but sustainable levels and thus the 10% plus and minus is applied entirely to new build. However, there will inevitably be room for future flexibility, not least if the projected future funding to meet the decent home requirement is overstated.

Table 5.3: Projected allocation and new supply outputs 2008-09 to 2015-6

	2009	2010	2011	2012	2013	2014	2015	2016	Total
Total RHP allocation (£m)	1,198	1,222	1,247	1,271	1,297	1,323	1,349	1,376	10,283
Non-new supply programmes	226	227	78	79	65	66	67	68	877
New units funded									
Social rent	7,294	7,460	8,759	8,939	9,238	9,424	9,615	9,810	70,539
Intermediate	3,043	3,114	3,656	3,731	3,856	3,934	4,013	4,095	29,442
Total	10,337	10,574	12,415	12,670	13,093	13,358	13,628	13,904	99,981
Units funded at 10% +									
Social rent	8,193	8,377	9,693	9,893	10,209	10,416	10,627	10,842	78,251
Intermediate	3,418	3,497	4,046	4,130	4,262	4,348	4,436	4,526	32,662
Total	11,611	11,873	13,740	14,022	14,471	14,764	15,063	15,368	110,913
Units funded at 10% -									
Social rent	6,395	6,544	7,824	7,986	8,265	8,432	8,603	8,778	62,827
Intermediate	2,668	2,732	3,266	3,333	3,450	3,520	3,591	3,664	26,224
Total	9,063	9,276	11,090	11,319	11,715	11,952	12,194	12,442	89,051

As can be seen, there is a significant shortfall in new supply to meet the *London Plan* targets for affordable homes. However, once the decent homes target is achieved, assuming the RHP continues to increase as projected, that additional s106 and other funding continues to support new supply and the other assumptions above hold, there should be sufficient funding to get close to the London Plan new supply targets. With the 10% additional funding, on the assumptions above, it would be possible to achieve the London Plan targets in full, but only by the end of the second half of the period.

6. Skills and capacity

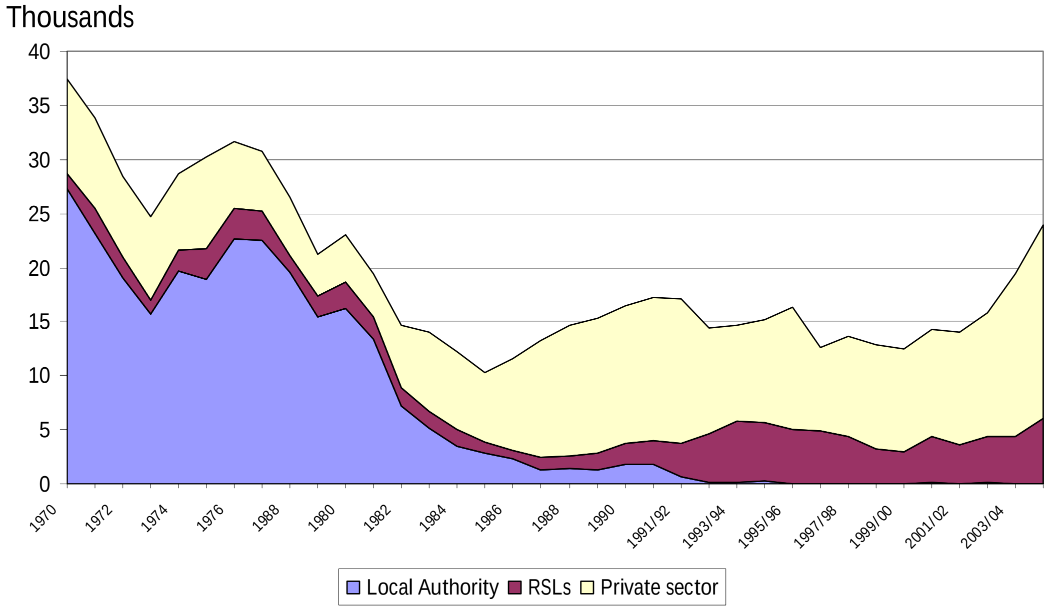
In this section the impacts of the current perceived skills shortage in the construction sector and house-builders' capacity to achieve a significant increase in housing output are considered.

6.1 Industry capacity

The provision of housing in London has been highly unresponsive to demand with rates of completion falling to bellow 15,000 per year in the 1980s. Years of under-investment in new build have been partly responsible for the increase in house prices in the mid to late 1990s. This poses the question of whether the construction industry has the capacity to deliver the new London Plan target of 31,090 homes a year.

Historically, the main driver of low housing output has been the reduction of public sector housing construction, not constraints placed on delivery by the construction industry. Public sector house building, which accounted for the majority of house building in the early 1970s, fell precipitously throughout the 1970s and 1980s, and has scarcely recovered.

Figure 6.1: New build housing completions since 1970 in London



Note: These figures are gross and do not include losses incurred through demolition
Source: ODPM Housing Statistics

The main constraint on the construction industry's capacity to deliver relates to its make-up and not to labour shortages. In 2003, around 97% of all construction enterprises had less than 10 employees. Of these around 90% were solely owned or self-employed[27]. Most enterprises in the construction sector therefore face the same barriers as other small businesses in London, namely, limited access to finance and investment, inability to take risks and difficulty accessing a broad skills base.

[27] Small Business Service, *Small and Medium Enterprises statistics UK and regions,* (2003)

Targeting recruitment initiatives at groups that are currently under-represented in the construction workforce could increase the capacity of the sector to deliver more housing by tapping into new, additional sources of labour. Currently, only 13% of the construction workforce is from minority groups, 10% are female and 20% are born overseas. These proportions are less than the average for all other sectors in London. [28]

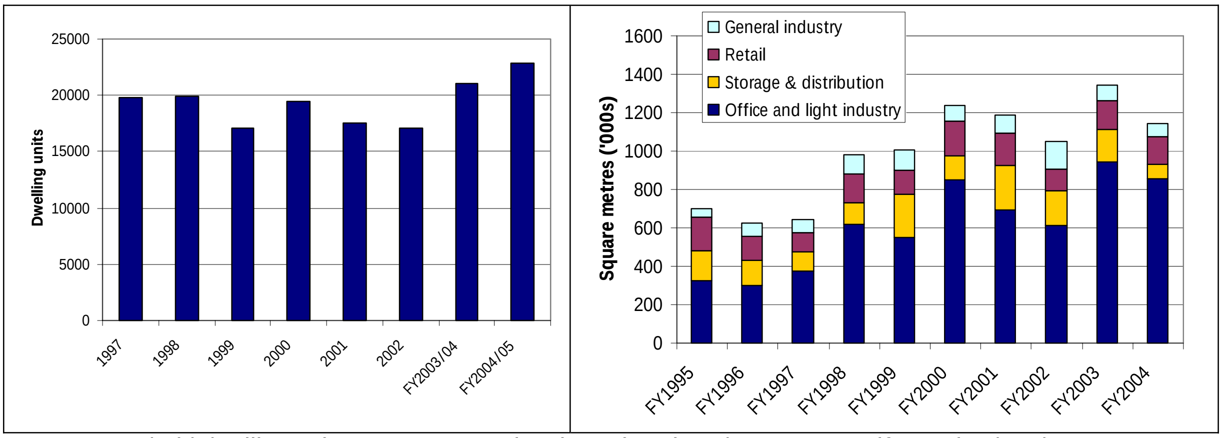
Although there are currently concerns around the construction industry's ability to deliver increased housing targets, the sector has already proven itself able to provide additional capacity for a number of major construction projects that have been taking place in London on an ongoing basis in the last decade.

Table 6.1: Major construction projects (existing/planned) for London

1995 to the present	2005 to the future
Heathrow Terminal 5	East London Line Extension
Jubilee Line Extension	DLR Extensions
Channel Tunnel Rail Link	Olympic Park
Kings Cross/St Pancras	Thames Gateway Bridge
Wembley Stadium	Crossrail 1 & Crossrail 2

These projects have taken place at the same time as substantial construction in the housing and commercial sector. The capacity for the construction sector to further increase housing output will be partly dependant on the labour requirements needed for future commercial build, particularly in the office and light industry sector, which has accounted for the most construction output in recent years. Capacity may be released for future housing construction if the trend for commercial construction falls or stabilises. Although the general trend has been for an increase in commercial construction, this appears to be stabilising.

Figure 6.2: Household and commercial construction in London



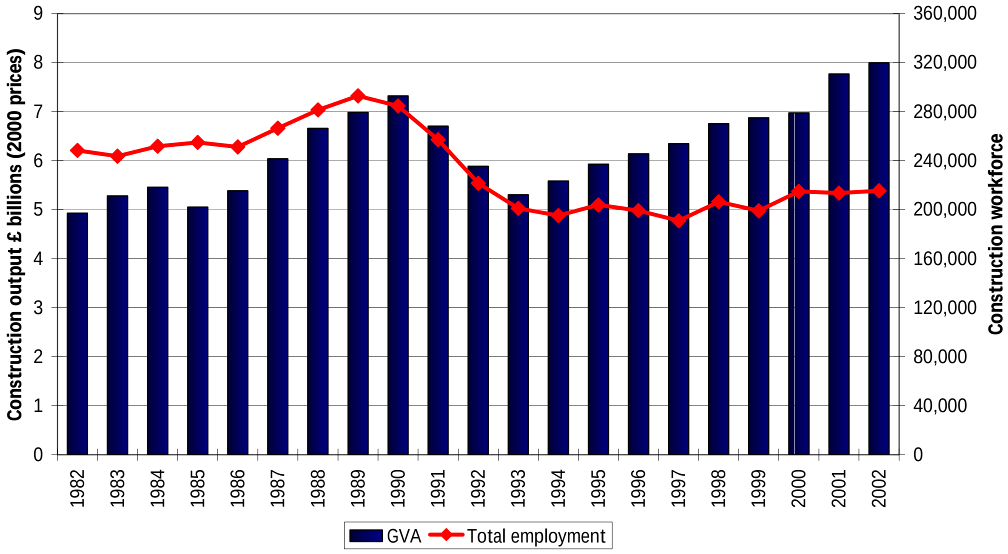
Note: Household dwelling units are net conventional supply only – data on non-self contained and vacant properties returning to use is not reliable. Data collection changed from calendar year to financial year from 2003. Source: London Development Database

[28] GLA Economics, *Market failure and the London housing market* (May 2003) p31.

Despite the sharp rise in construction output during the early 1990s, employment rates have remained steady. This can be attributed to:

- An increase in the labour productivity of the construction sector in London through modern methods of construction such as prefabrication and off-site manufacturing.
- The gradual decline in local authority housing completions and the surge in private house building; the private sector tends to be capital intensive rather than labour intensive in order to maximise profit.

Figure 6.3: Construction output and workforce in London



Source: Experian Business Strategy

Construction labour could be further released from other sectors as demand increases, depending on broader demands. Labour is increasingly becoming more mobile and is being sourced from the rest of the UK and abroad.

Recent research has shown that the labour and skills shortages identified in the Barker Review[29] are not the main barriers to the industry's ability to significantly increase its rate of house building. The study, commissioned by Construction Industry Training Board-Construction Skills and the House Builders' Federation (HBF), investigated the number of skilled jobs required to increase supply and surveyed 20 house builders, responsible for roughly 30% of annual housing output. The report identified that land shortages, planning constraints and associated delays, rather than construction capacity, were the key constraints to building more houses.

Analysis of the size of the workforce required to meet Kate Barker's two scenarios for greater output shows that

- an output level of 250,000 new homes would require 20,000 new jobs to the house-building workforce in the UK
- an output level of 300,000 new homes would require 80,000 new jobs to the housebuilding workforce in the UK.

[29] K. Barker, *Review of housing supply* (2004)

The above-mentioned labour requirements assume, contrary to established trends, that there will be no change to labour productivity over time. The report *The labour needs of extra housing output: can the house-building industry cope?* [30] identified a number of potential avenues to increase capacity and deliver more housing in London. It found that:

- If all new building was undertaken by larger firms, rather than the current figure of 50% of total output, then this would save a fifth of the extra labour required to deliver housing. This echoes the findings of the GLA Economics report *Laying the foundations*, which found that the inherent nature of the industry (i.e. large number of small businesses, high levels of self-employment, etc.) was one of the main constraints to more homes being built.
- Increases in labour productivity would further reduce labour requirements. Some productivity improvement is to be expected through innovations in production and management techniques.
- Modern methods of construction (MMC) could raise labour productivity. If greater use of MMC raised labour productivity in house building over the course of a five- year period by 2% a year, it would save over 10% of the existing workforce (that is, 35,000 workers at 250,000 dwellings a year and 42,000 at 300,000 a year).
- The land-use planning system affects production efficiency, though the extent to which this occurs is hard to quantify. However the strength of house builders' comments over this matter suggested that it could have significant impacts. The Government is already committed to improving the operation of the planning system.

Economic forecasts

Construction employment in London is projected to fall by roughly 30% from 210,000 in 2001 to 150,000 in 2026. See Annex 16 for a breakdown of these figures from 2003.

Employment projections for the construction sector in London should be treated with care. The characteristics of small business, such as contracting, subcontracting and cash payment that are inherent in the industry mean that a significant portion of work in this sector is not recorded for statistical analysis. The difficulties of identifying whether the 'workplace' for construction companies should be given as the construction site or the place of company registration greatly confuse regional statistics relating to the industry's capacity. For example, a builder can be registered in Surrey but undertake the majority of his construction projects in London.

6.2 Skills for sustainable employment

The LDA and the Learning Skills Council (LSC) are working together to provide London with a skilled workforce with the technical and managerial capacity necessary to deliver London's housing and infrastructure.[31] The key objectives for the LSC's 2005/06 Regional Skills Action Plan include increasing productivity and social inclusion by investing in London's current and future workforce.

[30] M.Ball ,*The labour needs of extra housing output: can the house-building industry cope?* (2005)
[31] LDA, *Sustaining Success: Development London's Economy - Economic Development Strategy* (2005)

Increasing inclusion

A number of current LDA funded interventions are assisting local residents to benefit from the construction training and employment opportunities provided by major capital projects in London and are increasing the capacity of the construction industry to deliver these developments. These include:

- The Kings Cross Construction Working Training & Recruitment Centre related in particular to the Kings Cross development and Emirates Stadium.
- Building One-Stop Shop (BOSS) in West London linked to major regeneration sites, such as White City and Wembley, with small and medium enterprises (SMEs) working on other west London sites.
- Building London Creating Futures project involving Workplace Co-ordinators based at major construction sites across London, such as Heathrow Terminal 5 and the Bankside development in Southwark.

The LDA is also working with its partners to develop a Local Employment And Training Framework for the Olympics. The proposed Framework includes a number of interventions to assist London's construction industries to meet the challenges of the Olympics and to ensure that local residents and businesses access the opportunities arising from the games. These interventions include:

- Construction Workforce Training Programme to increase the skills of the existing workforce and recruit and train new construction workers.
- Construction employment support to assist the key developers, contractors and sub-contractors delivering Olympics and Legacy development to maximise local recruitment and diversity in their labour.
- Olympics Job Brokerage and Employment Service to assist local residents to obtain employment in relation to the Olympics.
- Olympic Supply Chain Support Service to assist local firms, such as construction Small and Medium-sized Enterprises (SMEs) to compete for Olympic contracts.
- Olympic Employment and Contract Forecasting Unit to obtain and communicate information on immediate and future recruitment and contracting requirements.

Increasing diversity

The construction industry in London has the lowest representation of women and people from black, Asian and minority ethnic (BAME) communities of all industries, accounting for just 10% and 13% of employees respectively.[32]

The LDA and GLA, with support from other partners, are currently commissioning a research project on the construction industry in London and its diversity performance. This research will engage with construction SMEs owned by people from BAME communities, women and disabled people, focusing on both major capital projects and the repair and maintenance sector. The intention is that the project will be able to produce recommendations to improve the diversity of London's construction industry.

[32] J. Sloan, *Constraints on London's Construction: London's Construction Workforce – LDA Contribution,* LDA (2004)

The LDA is also currently funding a number of projects to assist London's construction industry to improve its diversity performance. These include:

- The 'Thames Gateway - Diversifying The Workforce' project, focusing on women and BAME communities in Lewisham and neighbouring boroughs, providing support to enter the construction industry.
- The 'Construction Language and Safety Skills' project, which provides English as a Second Language (ESOL) training to construction SME employees.
- The 'Forging The Future' project providing training and support to women to enable them to obtain construction employment.
- The 'Building Futures' project which offers a graduate apprenticeship programme for graduates from priority beneficiary groups, including black/minority ethnic communities, disabled people and women.

Increasing productivity by investing in London's current workforce

The LDA will be working with its partners in the London Construction Skills Forum to deliver the Sector Skills Agreement For Construction In Greater London in order to provide London with a world-beating, skilled workforce.[33] The LDA is funding and/or planning a number of current initiatives to improve business performance and increase skills among the existing and future construction workforce. These include:

- The 'Supply London' project, assisting London construction SMEs to improve their business performance and develop training plans.
- The 'Construction Craft Training' project providing NVQ Level 2 and 3 training in construction disciplines where there are staff and skill shortages.
- 'Training Trainers in Construction' projects that train construction staff to be NVQ trainers/assessors to deliver work-based NVQ training.
- The Pan-London Tutors In Construction Project to tackle the lack of construction training staff in London.
- The Diversity Works Programme working with employers to improve their diversity performance. Construction is a key sector for this Programme.

The LDA is also working with the LSCs, and other private and public sector partners to extend the BOSS model to other sub-regions. It is currently involved in partnerships to develop BOSSs for east and central London. Once these are established, they will provide a single point of contact in their respective sub-regions for construction employers and members of the community who wish to obtain access to construction-related employment, training and business support. It is planned that they will eventually form a London regional BOSS network and assist in the development of a pan-London construction workforce.

[33] See LSC, *Regional Skills Action Plan 2005/06*

7. Marketing and choice

This final section demonstrates the soundness of the regional approach, recognises the geographical mismatch between the location of housing capacity and demand, and deals with concerns relating to the concentration of development and social polarisation. It considers the measures needed to attract residents to these new communities, and, at same time, illustrates latent demand for increased mobility within London.

7.1 The market sector

Many of the locations identified by the LHCS as future housing sites are in locations where there is no established housing market for new development, particularly those located in the Thames Gateway where redundant employment land will be converted to residential use.

Both the Home Builders Federation and London First, as representatives of the private sector, have highlighted the significant risk for a developer working in these locations, as sales prices of initial pioneering development may be relatively low, and only over time may values rise.

The marketing of housing development in these locations will be dependent on comprehensive transport and social infrastructure including good quality schools, retail and leisure facilities and an attractive environment. The measures currently being undertaken to bring brownfield land forward for development and issues relating to transport and social infrastructure have been dealt with earlier in this report.

There is evidence of a market developing in the Thames Gateway and wider east sub-region. Research has shown that house prices in the east sub-region have risen on average by 71% between 2000 and 2005, compared to 53% across London as a whole (no allowance has been made for inflation).

Table 7.1: Average house prices in east London 2000-2005

Borough	Average house price (June 2000)	Average house price (June 2005)	Change (%)
Barking and Dagenham	78,157	169,630	117
Bexley	106,533	193,518	82
City of London	228,234	340,079	49
Greenwich	126,784	221,247	75
Hackney	153,871	256,110	66
Havering	119,822	215,144	80
Lewisham	114,082	209,459	84
Newham	91,188	195,807	115
Redbridge	130,234	230,326	77
Tower Hamlets	198,851	267,797	35
Average house price	134,776	229,912	71

Source: Land Registry

However developers are still being cautious in their scheme appraisals and are not assuming significant levels of inflation in east London.

There is also a significant pipeline in east sub-region in terms of homes currently being built and those in the planning process (Table 7.2). East London accounts for more than

- 42% of all planning applications for private homes and 37% of affordable in London (by number of homes)
- 54% of all planning permissions in London for private homes and 51% of affordable (by number of homes)
- 38% of private homes in construction across London and 32% of affordable homes.

Table 7.2: Development pipeline in east London 2005

Borough	Applications at end 2005		Planning permissions at end 2005		Under construction at end 2005	
	Private	Affordable	Private	Affordable	Private	Affordable
Barking and Dagenham	7,104	3,877	154	158	707	360
Bexley	457	240	867	538	24	29
City of London	64	0	128	0	61	0
Greenwich	3,995	2,305	10,600	6,220	1,121	499
Hackney	1,210	827	2,715	2,614	540	506
Havering	1,357	486	856	178	504	138
Lewisham	781	335	3,377	1,939	518	537
Newham	1,565	832	9,414	4,308	589	555
Redbridge	1,396	404	2,111	760	541	235
Tower Hamlets	6,313	3,616	6,875	3,288	2,920	1,596
East London total	24,242	12,922	37,097	20,003	7,525	4,455
London	57,234	34,967	69,034	39,253	19,578	13,947

Source: London Residential Research, London Development Research

7.2 The social housing sector

The spatial mismatch between need and supply

The GLA's 2003 *London housing requirements study* identified a need for an additional 353,500 homes in London over the next 10 years in order to meet existing and new housing demand.

There is a serious mismatch in the levels of housing need and housing capacity among the different sub-regions. The only sub-region to show a significant surplus in capacity above that necessary to meet local needs is the east of London, where it has been estimated that there will be a surplus of 138,000 homes in relation to identified need.

The motivation for mobility

Given the mismatch between need and supply, it is essential that people have the opportunity to move to where new housing is being built. Not only will there be new homes but also significant new employment opportunities will be created in these growth areas. This section considers what incentives might be needed to encourage people currently living or aspiring to live in social housing to move across sub-regions.

There is widespread consensus that people must be able to exercise choice over where they live, given that communities will be more sustainable if the people who move or live there have chosen to do so. The government is strongly committed to providing households with housing choice and opportunity in *Sustainable communities: homes for all* (2005) as a means to driving forward its sustainable communities agenda.

Evidence shows that there is an appetite for mobility among London's households in need and that that where administrative arrangements permit cross-authority moves, levels of actual mobility and aspirations for mobility are relatively high.

This is most clearly demonstrated through analysis of lettings made by RSLs. These organisations, unlike London boroughs, usually own properties in several geographical areas. For example, during 2004/5, 27% of internal RSL transfers and 44% of lettings made through common housing registers were across London borough boundaries. [34] In contrast, only 17% of local authority nominees (who are subject to borough allocations policies that mean lettings are almost entirely restricted within their home borough area) made such moves.

The make up of a household does not appear to have a significant impact on the propensity of households to move from one borough than another. Single pensioner households are the only household type that is significantly less mobile.

The information available about mobility lettings made within London borough-owned housing shows that there are currently very few cross-borough moves. London council tenants are far less likely than those in other tenures to aspire to a future home located in another borough (12%, compared with 21% of RSL tenants, 29% of private renters and a third of owner occupiers)[35]. It is likely that council tenants' low level of anticipated mobility is shaped by knowledge and expectations of the administrative restrictions on out-of-borough moves. Some council tenants may also have an attachment to having their local council as their landlord.

All of the above evidence tends to confirm that there would be increased mobility amongst social housing tenants if allocations and lettings arrangements were configured in such a way as to facilitate choice and mobility across administrative boundaries.

[34] Core data analysis 2004/05
[35] GLA *Sub- Regional Strategy Support Studies* (2005)

Mechanisms to deliver choice and mobility

There is a firm commitment from the London Housing Board to extend choice and mobility across London. [36]

Capital Homes: the London Housing Strategy 2005-16 contains three key targets:

- Encouraging boroughs and RSLs to operate or participate in choice based lettings (CBL) schemes by March 2008.
- Proposing that regional and sub-regional allocations of appropriate new supply take place through choice based lettings and mobility (CBLM) schemes by March 2008.
- Encouraging boroughs and RSLs to offer a proportion of re-lets to applicants through a pan-London CBLM scheme by 2010.

These targets are being moved forward primarily through Capital Moves, the pan-London CBLM project. Capital Moves is a partnership initiative that has the full support of all relevant key public sector agencies, including the London boroughs and RSLs, and is being funded by the GLA, ALG, HC, London Housing Federation (LHF) and the ODPM. It is being managed by the Capital Moves Project Board, which comprises the funding organisations (apart from the ODPM) and the London Borough of Croydon (the recipient borough for the ODPM funding), and is advised by the ALG-led London CBLM Steering Group.

The Mayor is fully committed to extending choice and mobility, not only to ensure that all Londoners have the opportunity to benefit from new investment in housing but also to give people in need of affordable housing a similar level of housing choice to those accessing the private sector. Choice and mobility are also crucial to better matching housing need to supply in London.

Choice and mobility in London – the current picture

London is well advanced on choice based lettings and mobility compared with the rest of the country. There are currently three sub-regional CBLM schemes (in west, north and east London) and seven single borough CBL schemes, with at least four boroughs due to join existing schemes or set up their own in the next few months.

Most of the current schemes have so far focused on choice (rather than mobility). However, there is a high degree of support from many boroughs for the expansion of mobility. Since 2002 one of the three London sub-regional CBL schemes (Locata in West London) has had a system whereby boroughs offer a set proportion of their lettings to a common sub-regional mobility pool. Currently, the Locata boroughs each contribute 10 % of their lettings for mobility. In addition, boroughs in both the north and east London CBLM schemes have begun to make lettings available to applicants from other sub-regions.

[36] The London Housing Board is comprised of the Greater London Authority, the Government Office for London, the Housing Corporation, the London Development Agency, English Partnerships and the Association of London Government.

In relation to new supply, the HC London region bidding guidance for 2006-8 specifies that '*all allocations will be subject to sub-regional nominations*' and that '*where a borough or sub-region will receive significant funding for a number of medium to large residential site, a proportion of the homes produced should be available to all sub-regions on a pan-London basis*'. It also states that such schemes should have or be planned to have good public transport links to other sub-regions – to enable potential residents to maintain links with their former communities.

The process for operating pan-London lettings is currently being finalised. The first developments to be so designated are Greenwich Millennium Village and Greenwich Peninsula. It is anticipated that new social housing homes here will be available to people from across London during 2007.

There will need to be a clear and coherent strategy for promoting, marketing and facilitating mobility moves, particularly those over long distances. Much of the good practice developed by boroughs has been for moves from London to low demand areas, for example through the LAWN scheme, could be equally applied to moves within London. Intra-London mobility will need to be fully integrated into social landlords' housing options approaches, so that applicants are fully aware of potential trade-offs between waiting for a property in their locality and moving further afield. The provision of full information about prospective properties and new neighbourhoods will be key, including details of local facilities, schools, health care, employment and training opportunities, places to pray and transport links. Advice and support will be particularly important for people from Black, Asian and Minority Ethnic (BAME) groups, especially those considering a move to a non-traditional BAME area.

Some boroughs' out-of-London schemes include tours of new areas and reimbursement of the costs of travel to view properties. Others have successfully encouraged groups of applicants with family or community links to move en masse to a new area. Again, these are ideas that could be replicated for intra-London mobility. There may also be opportunities to offer applicants incentives to move to new areas, such as, choices about the design/decor of their property while it is still in development and, potentially, financial incentives such as expenses for travel, removal and utility connection.

7.3 The intermediate housing sector

In London the ratio of house prices to earnings for first time buyers is increasing and home ownership is now beyond the means of many Londoners. Private sector rents are higher in London in any other region of the country.[37] A recent MORI poll survey carried out by the GLA showed that affordable housing was given the top priority by Londoners to improve the city as a place to live.[38]

'Intermediate housing' is defined in both the London Plan and the *London Housing Strategy* as housing, either for rent or sale, that is affordable for households who cannot pay the full market price for these tenures, but would not be a priority for social housing. The Mayor's Supplementary Planning Guidance (November 2005) sets out that such housing should be affordable for households on annual incomes of £16,400 to £49,000.

[37] Royal Institute of Chartered Surveyors, *RICS residential letting survey Great Britain: July 2005*, (2005)
[38] Greater London Authority, *The Annual London Survey 2004* (2005)

Why promote intermediate housing?

The provision of intermediate housing can help address some of the adverse consequences of London's housing market. Intermediate housing:

- addresses the affordability issue for those households who would not be prioritised for the social rented sector but who cannot afford to purchase or rent on the open market
- combats social polarisation that occurs where low and middle income households are excluded from a local community
- is essential for the competitiveness of London's economy and the delivery of key services within the capital[39]
- provides a mobility route between social renting and home ownership, giving occupiers the opportunity to generate equity within their home.

Level of need

The GLA's 2004 Housing Requirements Study demonstrates a core need (based on household needs and affordability profiles alone) of 2,500 homes a year, sustained for ten years. But that figure is based purely on housing need. No study has yet estimated the 'demand' in London – that is, to meet the aspirations and wider social policy aims set out above, as well as meeting need. However, in the simplest terms, the fact that the various intermediate housing programmes funded by ODPM have all been fully taken up demonstrates at least some level of unmet demand.

The 2001 Starter Home Initiative (SHI) sought to address the problems of recruitment and retention of key workers and thereby support the delivery of key public services. It was aimed at workers in the following public sectors, health, teaching and the police, and those working in the most pressured housing markets.

Table 7.3: Average income & market value of London SHI/LCHO 2002-2004

	SHI (Equity Loan)	SHI (Equity Loan)	Other LCHO	Other LCHO
	2002/03	2003/04	2002/03	2003/04
Income	27,789	29,520	29,474	30,375
Market value	121,825	147,803	152,191	174,587

Source: CORE Returns for 2002-04

The average Low Cost Home Ownership (LCHO) purchase value of around £175,000 in 2003/04 compares with an average open-market price in December 2004 of £257,000 in London (ODPM price index) and the average incomes are around the middle of the *London Plan* intermediate income band.

[39] Lack of affordable housing is the most common reason for people wanting to leave London, particularly for key workers according to GLA, *Key issues for key workers: affordable housing in London* (2001)

In 2004/05 this funding stream was succeeded by the Key Worker Living (KWL) programme using a wider definition of key worker. The early evidence emerging from this shows a continuing demand within London.[40] Between April and December 2004 there were almost 12,000 enquiries about intermediate housing products. As at the end of January 2006, 399 of the 600 homes in London built through the KWL programme had been sold/let with a further 64 reserved. Of the 137 homes not occupied, 55 had been completed only within the previous three months. In the east London boroughs of Barking & Dagenham, Havering, and Waltham Forest, only 4 properties out of 101 were void. Separate monitoring data from the HC shows that in March 2005, average household incomes were around £36,000 – comfortably within the GLA's intermediate housing definition.

Given that the existing key worker definition is limited by occupation categories, it seems likely that there is untapped demand. In addition, the feedback from both of the above funding initiatives is that the majority of intermediate housing developments are usually let or sold within a reasonable period of time.

The need for effective promotion of the KWL initiatives was a valuable lesson from the early experience of the Starter Homes Initiative (SHI). As a result, the HC appointed 'Zone Managing Agents' (initially five, one per sub-region), giving a strong emphasis on effective marketing and advice for potential occupiers – user-friendly website facilities, 'open days' to promote the schemes, good advice packs, and so on. There is little doubt that this has helped the KWL in achieving its objectives, as well as providing valuable experience and expertise for any wider application of intermediate housing across London.

From 2006/07 onwards, the role of the Zone Agent is being extended to include responsibility for marketing all intermediate housing products (not just key worker) and the number of Zone Agents has been reduced to two in London – Tower Homes and Metropolitan Housing, who work closely in collaboration.

Level of provision

Until recently the provision of intermediate housing has been largely limited to HC funded shared ownership programmes and ad hoc initiatives such as the Peabody-led 'Keep London Working' pilot of 400 homes for intermediate rent. The 2002 *London Household Survey* estimated that less than 1% of London's housing stock was in shared ownership.

In 2004/5, the estimated number of intermediate new homes totalled around 2,800. In 2007/08, it is anticipated that this will increase to around 7,500 new homes – enough to offer real opportunities to start to address the wider demand described above.

How is it being used at present?

There is limited detailed evidence about the household characteristics of those living in intermediate housing, their perceptions of the tenure, turnover, etc. The evaluation of the SHI did explore the "purchaser experience" but at a national level.

[40] ODPM, *Evaluation of Key Worker Living: Early Findings*, (August 2005)

This found that around 66% of purchasers were aged 25 – 35 and had been in their jobs for more than two years. Over half of all purchasers were single people and only 15% had children. Purchasers tended to buy a property with an extra room if they were able.

ODPM are completing a research study on the KWL programme that will provide valuable evidence for, and operational experience of, the KWL programme, and which will have wider applicability; the study results are expected in Spring 2006. In addition, the GLA will:

- Commission this year an analysis of data from the various publicly-funded initiatives, to produce a profile of past activity in terms of numbers of homes, dwelling size (number of bedrooms), values, etc.
- Work with ODPM and other partners to ensure proper monitoring of the range of low-cost home ownership and other intermediate housing packages.

From April 2006 there will be only two Zone Agents in London who will coordinate the delivery, marketing and monitoring of these programmes. The GLA is working with the Key Worker Delivery Unit at ODPM to ensure that the best possible ‘evidence base’ is available to assess occupier characteristics, affordability levels, turnover, etc and to assist prioritisation and policy development.

List of tables and figures

Annexes

List of annexes

Annex 1 – Borough housing targets

Borough	New annual target	Current annual target	Change (No)	Change (%)
Camden	595	850	-255	-30%
City of Westminster	680	970	-290	-30%
Islington	1,160	900	260	29%
Kensington & Chelsea	350	540	-190	-35%
Lambeth	1,195	1,450	-255	-18%
Southwark	1,630	1,480	150	10%
Wandsworth	745	820	-75	-9%
Barking & Dagenham	1,190	510	680	133%
Bexley	345	280	65	23%
Corporation of London	170	110	60	55%
Greenwich	2,010	800	1,210	151%
Hackney	1,085	720	365	51%
Havering	535	350	185	53%
Lewisham	1,070	870	200	23%
Newham	3,510	890	2,620	294%
Redbridge	1,065	540	525	97%
Tower Hamlets	3,150	2,070	1,080	52%
Barnet	1,960	890	1,070	120%
Enfield	395	660	-265	-40%
Haringey	680	970	-290	-30%
Waltham Forest	695	460	235	51%
Bromley	485	570	-85	-15%
Croydon	1,100	850	250	29%
Kingston upon Thames	465	340	125	37%
Merton	370	430	-60	-14%
Richmond upon Thames	270	270	0	0%
Sutton	345	370	-25	-7%
Brent	1,270	680	590	87%
Ealing	915	650	265	41%
Hammersmith & Fulham	450	400	50	13%
Harrow	400	330	70	21%
Hillingdon	360	440	-80	-18%
Hounslow	445	470	-25	-5%
London Total	**31,090**	**22,930**	**8,160**	**36%**
Sub-region	**New total annual capacity**	**Current annual target**	**Change (No)**	**Change (%)**
Central	6,355	7,010	-655	-9%
East	14,130	7,140	6,990	98%
North	3,730	2,980	750	25%
South	3,035	2,830	205	7%
West	3,840	2,970	870	29%
London Total	**31,090**	**22,930**	**8,160**	**36%**

Annex 2A – Employment land reconciliation capacity reduction

Borough	**Capacity Reduction**
Barking & Dagenham	361
Barnet	237
Bexley	28
Brent	121
Bromley	90
Camden	117
Croydon	46
Ealing	62
Enfield	54
Greenwich	79
Hackney	101
Hammersmith & Fulham	78
Haringey	146
Harrow	44
Havering	24
Hillingdon	128
Hounslow	235
Islington	293
Kensington & Chelsea	84
Kingston upon Thames	26
Lambeth	288
Lewisham	47
Merton	22
Newham	420
Redbridge	38
Richmond upon Thames	24
Southwark	424
Sutton	24
Tower Hamlets	277
Waltham Forest	78
Wandsworth	145
City of Westminster	154
Corporation of London	0
London total	**4,296**

Annex 2B – Small sites component - employment land adjusted uplifts

Borough	Small Site Capacity	Adjustment	Adjusted Small Site Allowance	Small site reduction from reconciliation	Adjusted Small Site Allowance	Difference between original & final	Difference between original & final (%)
Barking & Dagenham	113	**33%**	150	35	115	2	**2%**
Barnet	296	**25%**	370	41	329	33	**11%**
Bexley	69	**50%**	104	8	96	27	**39%**
Brent	256	**25%**	321	33	288	31	**12%**
Bromley	258	**50%**	387	61	326	68	**26%**
Camden	339	**10%**	372	79	294	-45	**-13%**
City of Westminster	496	**0%**	496	107	389	-107	**-22%**
Corporation of London	165	**0%**	165	0	165	0	**0%**
Croydon	308	**33%**	410	20	390	82	**27%**
Ealing	150	**25%**	187	13	174	24	**16%**
Enfield	227	**25%**	283	36	247	21	**9%**
Greenwich	80	**33%**	107	4	103	22	**28%**
Hackney	542	**15%**	624	61	562	20	**4%**
Hammersmith & Fulham	143	**10%**	158	26	131	-12	**-8%**
Haringey	151	**10%**	166	33	133	-18	**-12%**
Harrow	115	**25%**	143	16	128	13	**11%**
Havering	124	**33%**	165	7	157	33	**27%**
Hillingdon	134	**33%**	178	51	127	-7	**-5%**
Hounslow	180	**25%**	225	79	146	-34	**-19%**
Islington	672	**10%**	739	168	570	-101	**-15%**
Kensington & Chelsea	227	**0%**	227	59	168	-59	**-26%**
Kingston upon Thames	121	**25%**	151	10	141	20	**16%**
Lambeth	467	**25%**	583	127	457	-10	**-2%**
Lewisham	266	**25%**	332	17	315	49	**19%**
Merton	165	**25%**	207	12	194	29	**18%**
Newham	321	**50%**	482	52	430	108	**34%**
Redbridge	176	**33%**	234	8	226	50	**28%**
Richmond upon Thames	162	**15%**	186	15	171	9	**6%**
Southwark	807	**25%**	1,009	280	729	-79	**-10%**
Sutton	196	**33%**	261	17	244	48	**24%**
Tower Hamlets	1,153	**10%**	1,269	107	1,162	8	**1%**
Waltham Forest	266	**33%**	354	44	310	43	**16%**
Wandsworth	383	**25%**	479	83	396	13	**3%**
Total	**9,528**	**21%**	**11,523**	**1,711**	**9,812**	**283**	**3%**

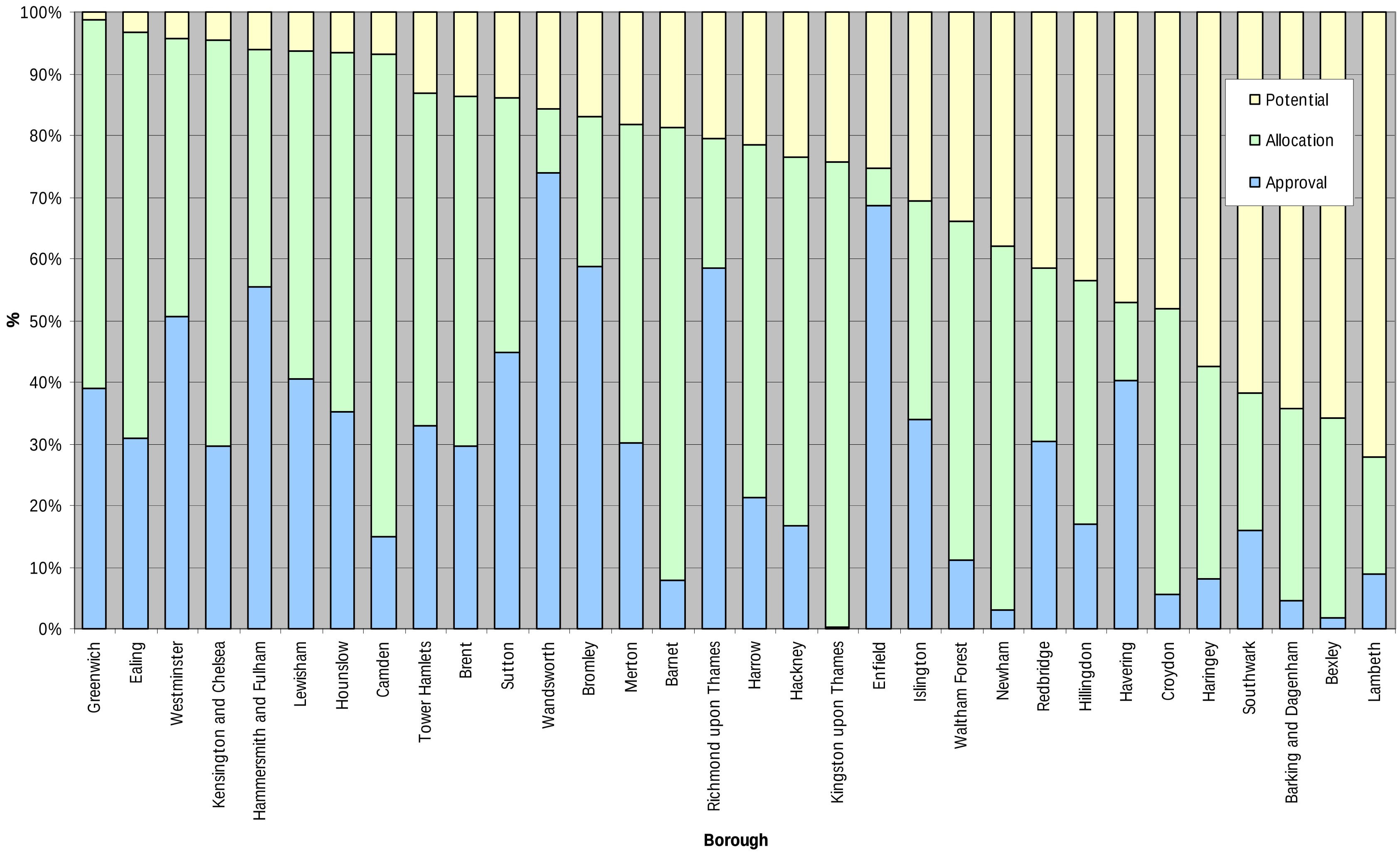
Annex 2C - Small sites component related to 2004/5 small site planning approvals

Borough	LHCS Small Site Component	Proposed Total Residential Units	Number of Permissions	Proposed Residential Site Area	Density (Small sites)
Barking & Dagenham	115	55	14	1	91
Barnet	329	791	130	16	49
Bexley	96	299	36	4	80
Brent	288	455	56	4	111
Bromley	326	852	160	19	45
Camden	294	698	73	3	213
Croydon	390	1,213	173	18	67
Ealing	174	765	74	5	141
City of Westminster	389	1,082	55	3	335
Corporation of London	165	67	1	0	593
Enfield	247	531	83	8	64
Greenwich	103	361	30	3	135
Hackney	562	1,119	87	4	270
Hammersmith & Fulham	131	18	4	0	120
Haringey	133	746	56	4	186
Harrow	128	399	59	6	66
Havering	157	451	82	8	58
Hillingdon	127	487	106	10	50
Hounslow	146	295	53	4	78
Islington	570	1,643	49	4	402
Kensington & Chelsea	168	218	25	1	169
Kingston upon Thames	141	522	55	5	102
Lambeth	457	578	62	3	175
Lewisham	315	542	62	4	145
Merton	194	412	71	5	86
Newham	430	1,377	66	5	257
Redbridge	226	942	76	4	218
Richmond upon Thames	171	344	89	5	70
Southwark	729	2,053	87	7	315
Sutton	244	471	71	6	73
Tower Hamlets	1,162	1,492	50	5	306
Waltham Forest	310	532	76	3	152
Wandsworth	396	1,050	111	8	138
Total	**9,812**	**22,860**	**2,282**	**186**	**123**

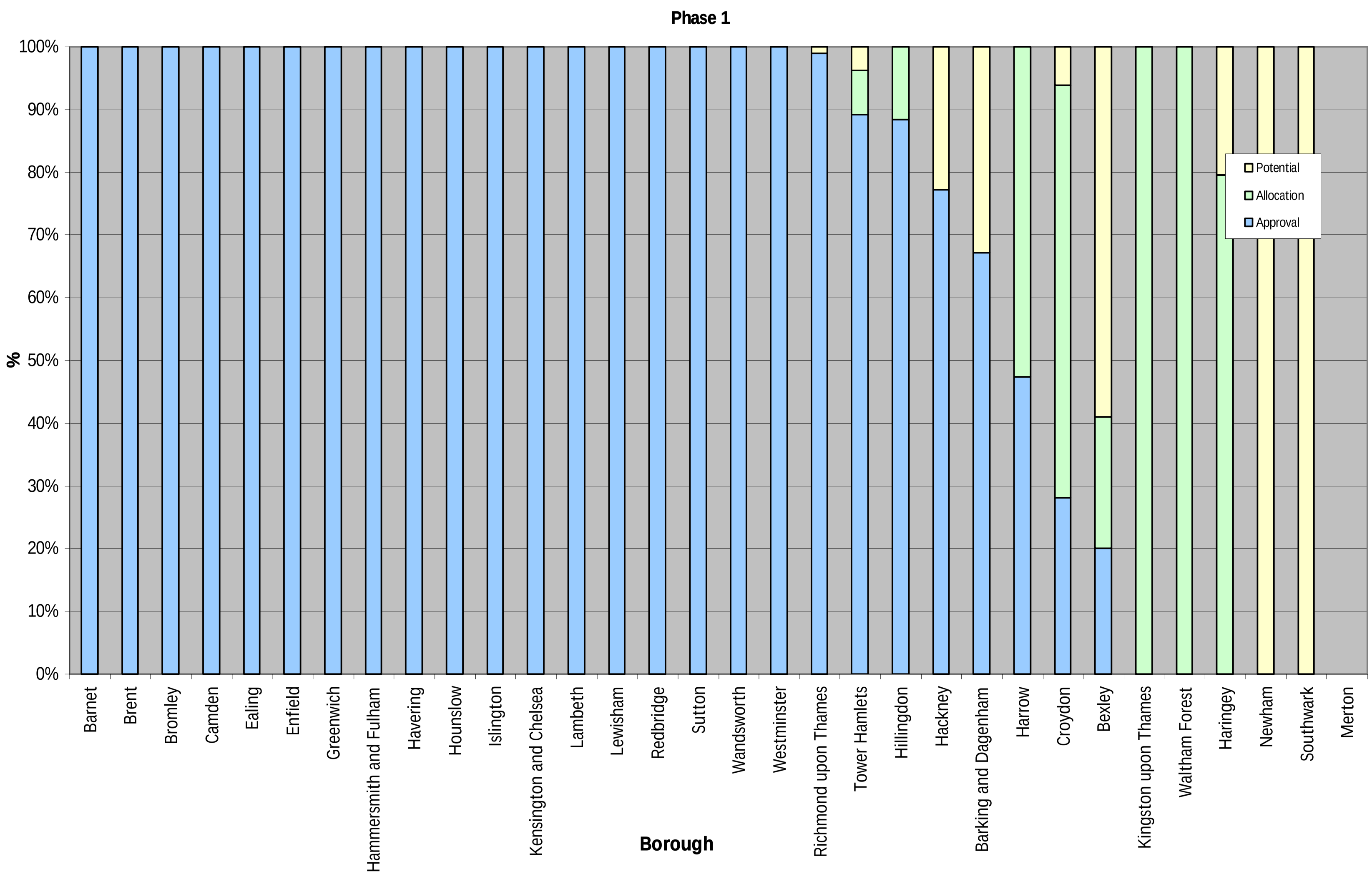
Annex 3 – Total capacity by borough by Phase

Borough	Phase 1	Phase 2	Phase 3	Phase 4	Total
Barking & Dagenham	2,162	6,712	5,197	14,360	28,430
Barnet	1,242	12,500	7,082	5,325	26,149
Bexley	926	1,292	2,138	1,874	6,231
Brent	2,653	7,555	5,121	3,460	18,789
Bromley	2,574	2,809	2,020	2,924	10,327
Camden	1,673	2,869	3,091	4,842	12,475
City of Westminster	2,411	3,581	3,201	3,824	13,016
City of London	516	860	860	1,480	3,716
Croydon	2,622	6,211	4,765	3,682	17,279
Ealing	2,727	3,437	5,699	2,957	14,820
Enfield	1,551	2,340	1,598	2,179	7,668
Greenwich	4,381	14,343	5,758	6,082	30,564
Hackney	2,606	5,732	5,119	6,827	20,284
Hammersmith & Fulham	1,043	3,449	1,045	1,441	6,979
Haringey	922	5,584	1,228	6,286	14,022
Harrow	1,518	3,036	949	1,236	6,740
Havering	716	4,014	1,341	1,344	7,414
Hillingdon	894	1,579	2,044	1,793	6,310
Hounslow	1,673	2,129	2,331	1,277	7,410
Islington	3,909	7,661	3,915	6,765	22,250
Kensington & Chelsea	963	1,898	1,619	1,926	6,405
Kingston upon Thames	843	2,519	2,124	2,428	7,913
Lambeth	2,391	6,332	5,603	8,675	23,001
Lewisham	4,275	5,479	5,245	4,101	19,100
Merton	641	2,645	1,069	1,776	6,131
Newham	1,646	20,752	14,357	4,865	41,620
Redbridge	2,506	3,717	6,920	2,588	15,732
Richmond upon Thames	1,388	1,763	925	1,490	5,567
Southwark	4,224	9,191	7,088	12,960	33,464
Sutton	1,058	2,227	1,237	2,153	6,675
Tower Hamlets	10,461	19,798	11,693	11,461	53,412
Waltham Forest	1,669	3,767	3,189	2,992	11,616
Wandsworth	4,506	5,018	2,411	4,088	16,023
London Total	**75,291**	**182,799**	**127,981**	**141,462**	**527,534**
Sub region	**Phase 1**	**Phase 2**	**Phase 3**	**Phase 4**	**Total**
Central	20,076	36,550	26,927	43,081	126,635
East	30,195	82,699	58,627	54,982	226,503
North	5,384	24,191	13,098	16,782	59,455
South	9,126	18,174	12,140	14,453	53,893
West	10,510	21,185	17,190	12,164	61,048
London Total	**75,291**	**182,799**	**127,981**	**141,462**	**527,534**

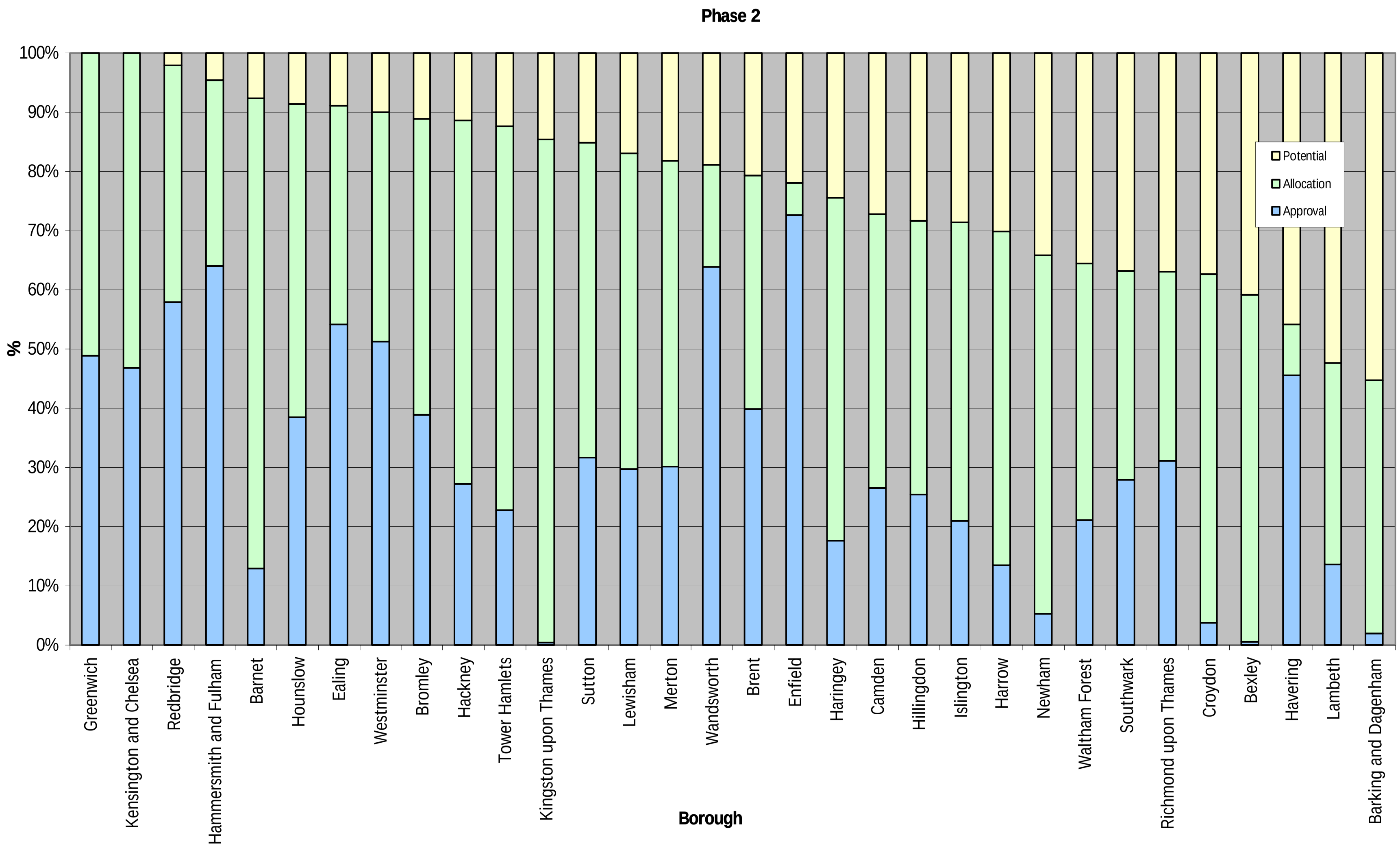
Annex 4 - Borough large site capacity by source (2007–2017)



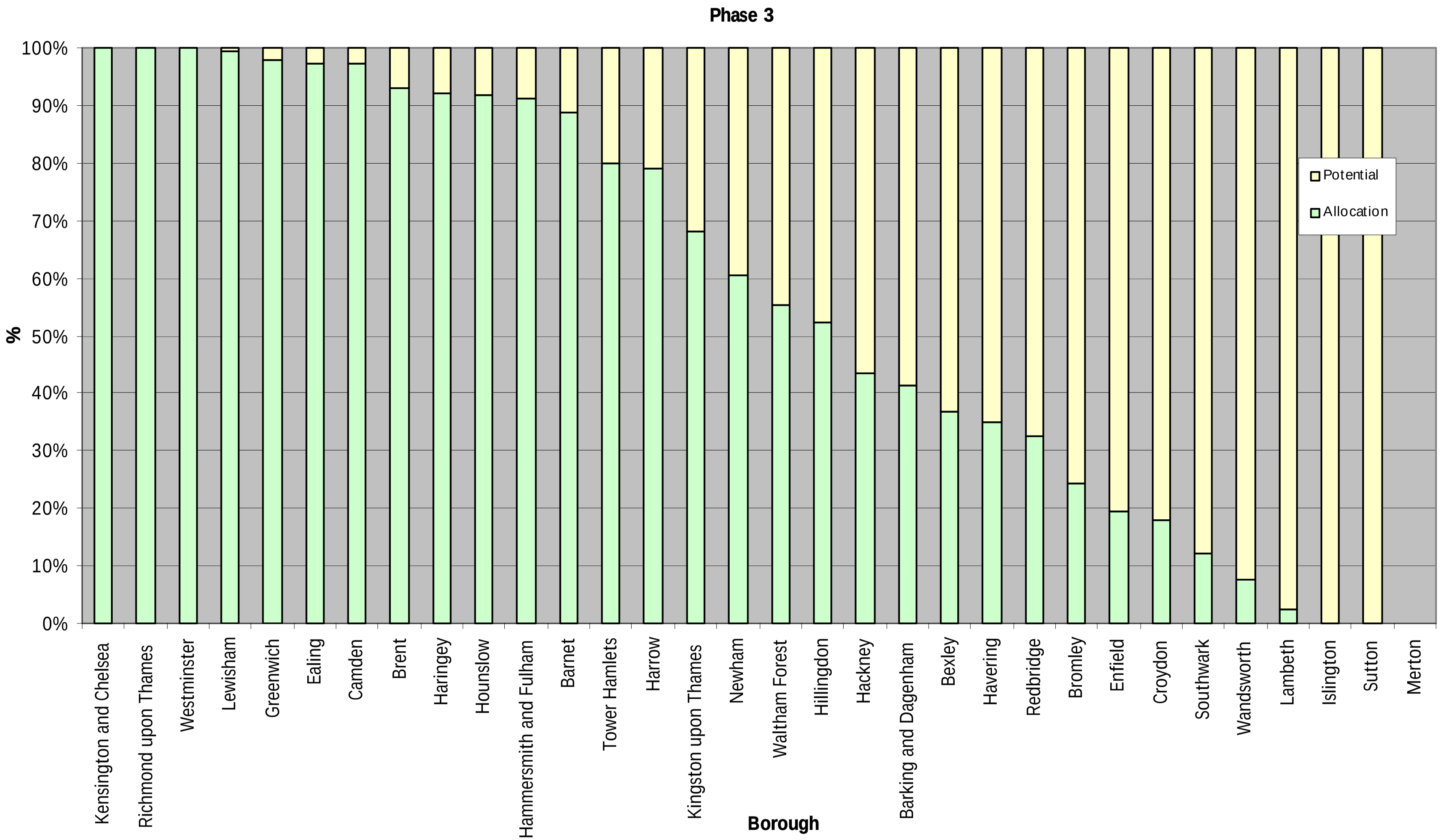
Annex 5 - Borough large site capacity by source (2004-2007): Phase 1



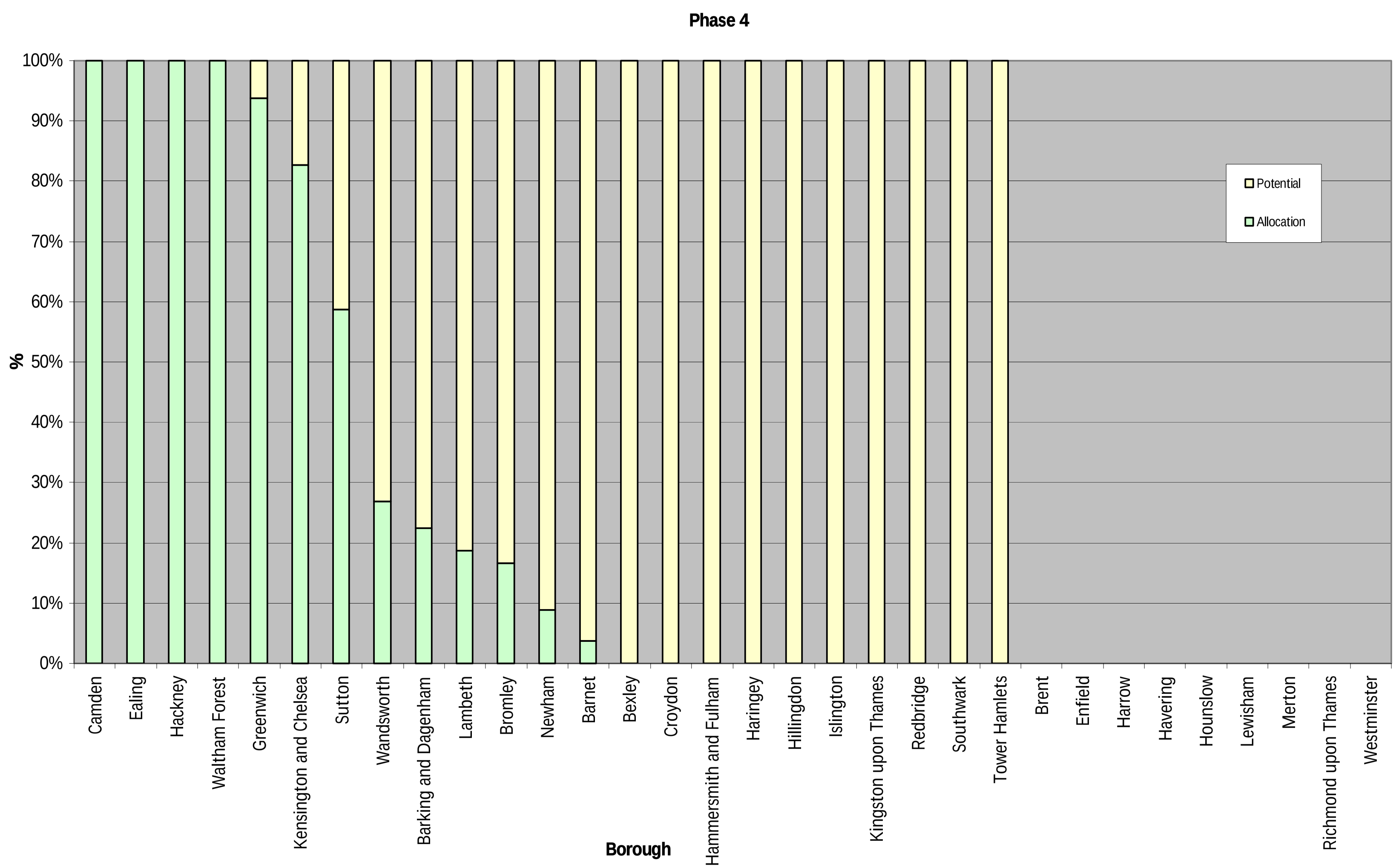
Annex 6 - Borough large site capacity by source (2007-20012): Phase 2.



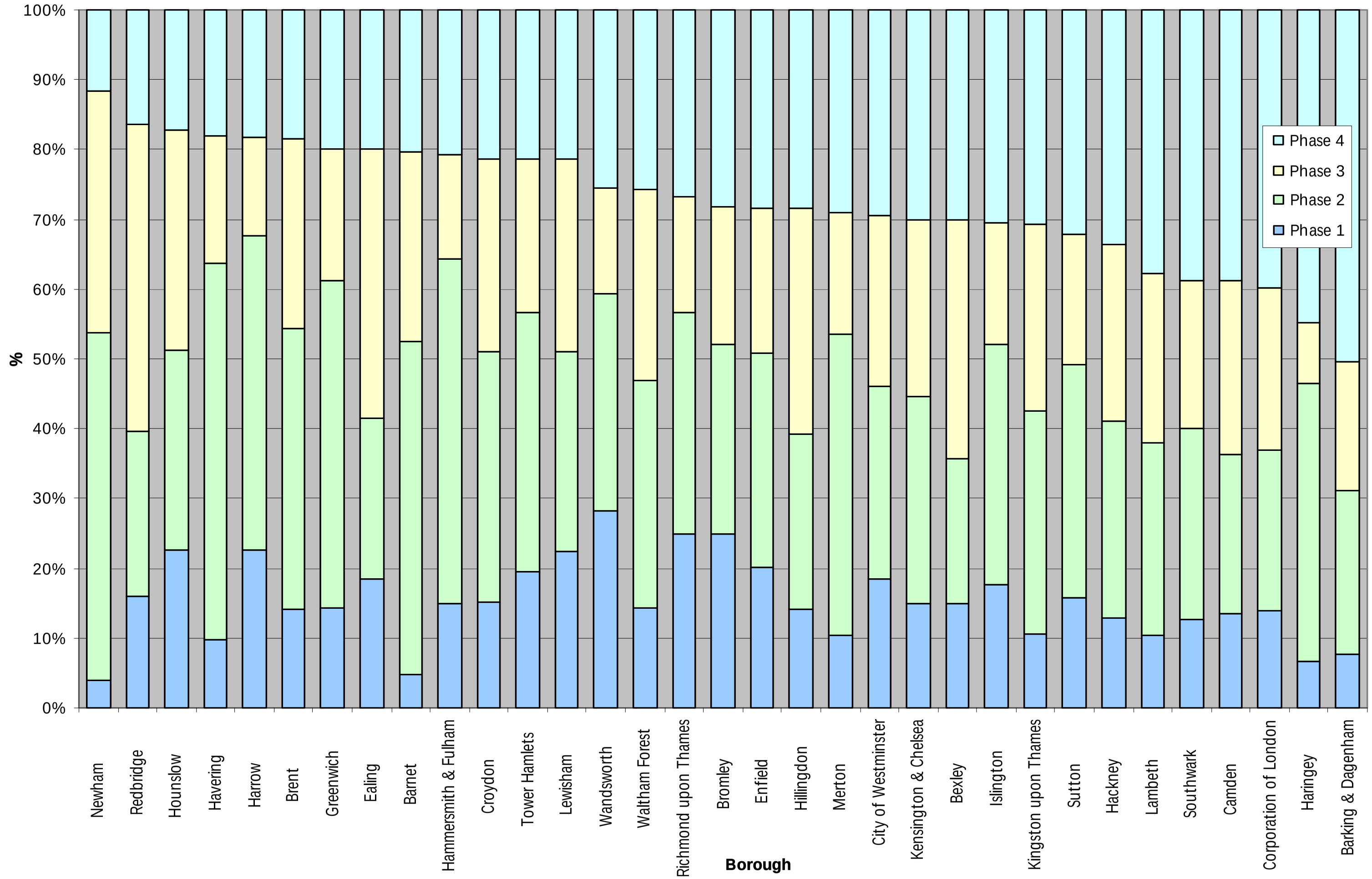
Annex 7 - Borough large site capacity by source (2012–2017): Phase 3



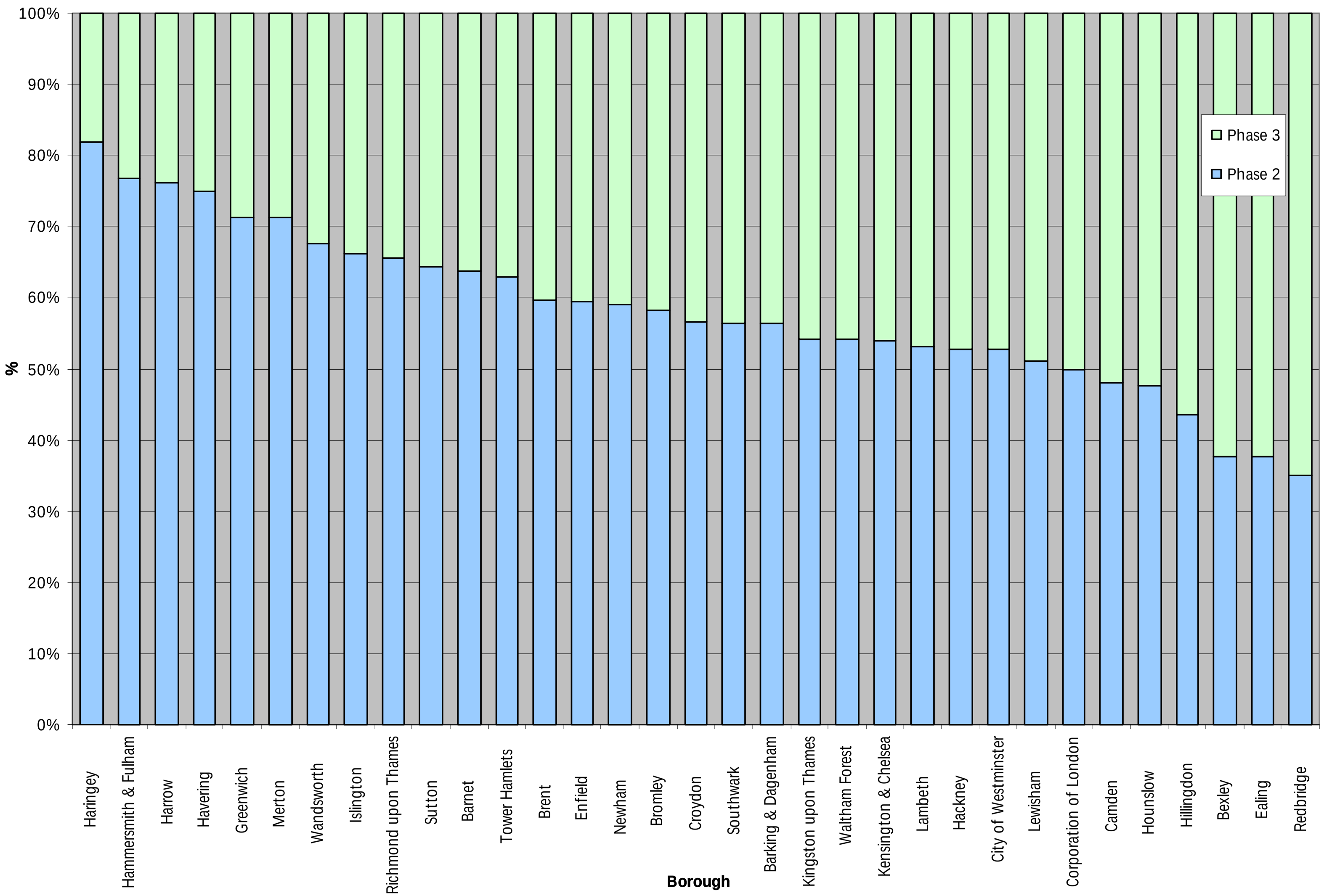
Annex 8 - Borough large site capacity by source (2017-2027): Phase 4



Annex 9 - Borough total capacity by all phases



Annex 10 - Borough capacity between Phases 2 and 3



Annex 11 – Density of residential development by borough

	ODPM completions			GLA planning permissions
Borough Name	**Average Density 1995-1998**	**Average Density 1999-2002**	**Average Density 2001-4**	**Average Density 2004-5**
Barking and Dagenham	47	245	70	82
Barnet	40	43	54	70
Bexley	34	43	32	75
Brent	53	30	71	107
Bromley	26	47	31	69
Camden	66	28	77	169
Corporation of London	80	92	960	586
Croydon	30	41	47	85
Ealing	54	68	63	100
Enfield	47	41	48	85
Greenwich	41	43	48	120
Hackney	66	88	103	200
Hammersmith and Fulham	75	68	68	175
Haringey	55	72	84	139
Harrow	26	30	53	93
Havering	35	39	46	73
Hillingdon	34	37	46	60
Hounslow	51	53	69	82
Islington	83	99	93	194
Kensington and Chelsea	85	93	120	138
Kingston upon Thames	40	39	54	88
Lambeth	71	82	102	152
Lewisham	66	55	81	127
Merton	50	51	65	100
Newham	51	64	97	173
Redbridge	45	30	60	129
Richmond upon Thames	45	48	58	99
Southwark	65	88	102	225
Sutton	40	43	49	83
Tower Hamlets	88	113	138	299
Waltham Forest	49	38	44	129
Wandsworth	57	65	93	128
Westminster	98	116	144	202
London Average	**54**	**59**	**64**	**125**

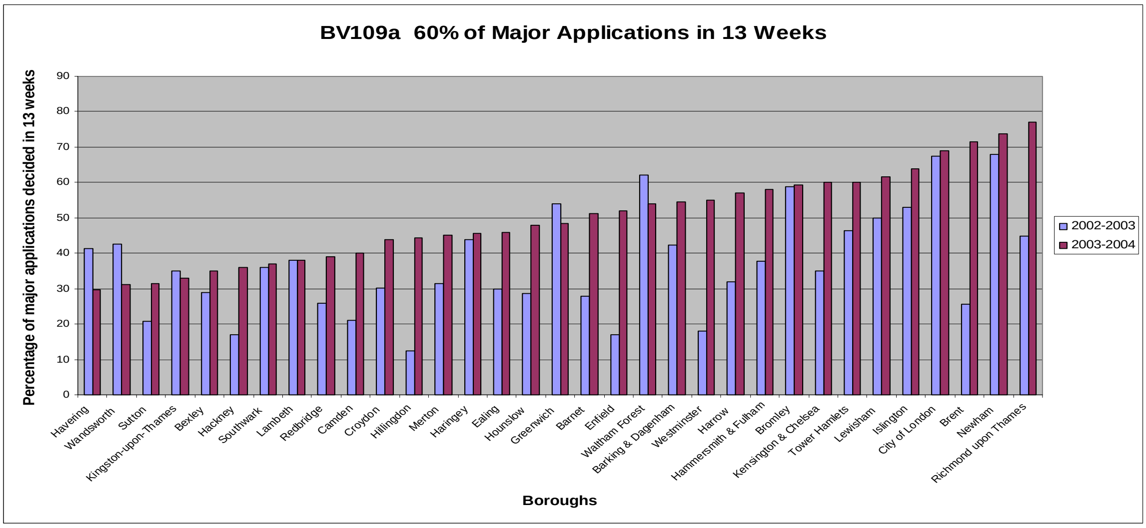
Sourced from ODPM data and the GLA London Development Database.

Annex 12 – Major transport schemes by sub-region

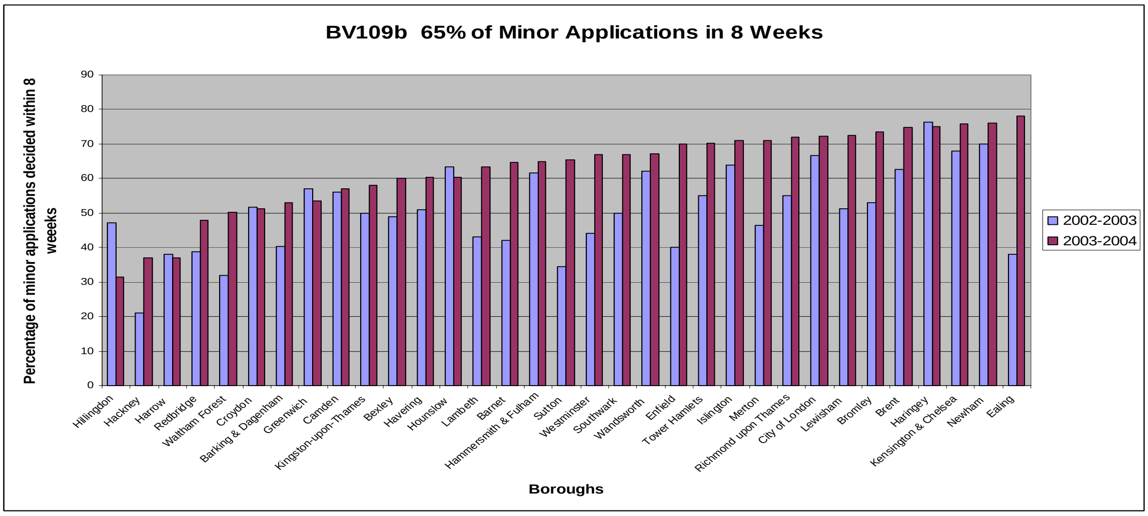
Scheme	Central	East	West	North	South
National Rail Improvements	✓	✓	✓	✓	✓
Underground PPP	✓	✓	✓	✓	✓
Bus capacity increases	✓	✓	✓	✓	✓
Channel Tunnel Rail Link	✓	✓			
East London Line		✓			
DLR Woolwich extension		✓			
DLR Bank Lewisham capacity enhancement	✓	✓			
DLR Stratford International		✓			
Greenwich Waterfront Transit		✓			
East London Transit		✓			
Thames Gateway Bridge (TGB)		✓			
Crossrail 1	✓	✓	✓		
Thameslink 2000 upgrade	✓	✓		✓	
West London Tram	✓		✓		
Tramlink Extension					✓
Cross River Tram	✓				
DLR Dagenham Dock		✓			
Silvertown Link		✓			
Crossrail 2	✓			✓	✓
Measures to maximise available capacity from existing network	✓	✓	✓	✓	✓

Source: GLA / TfL 2006

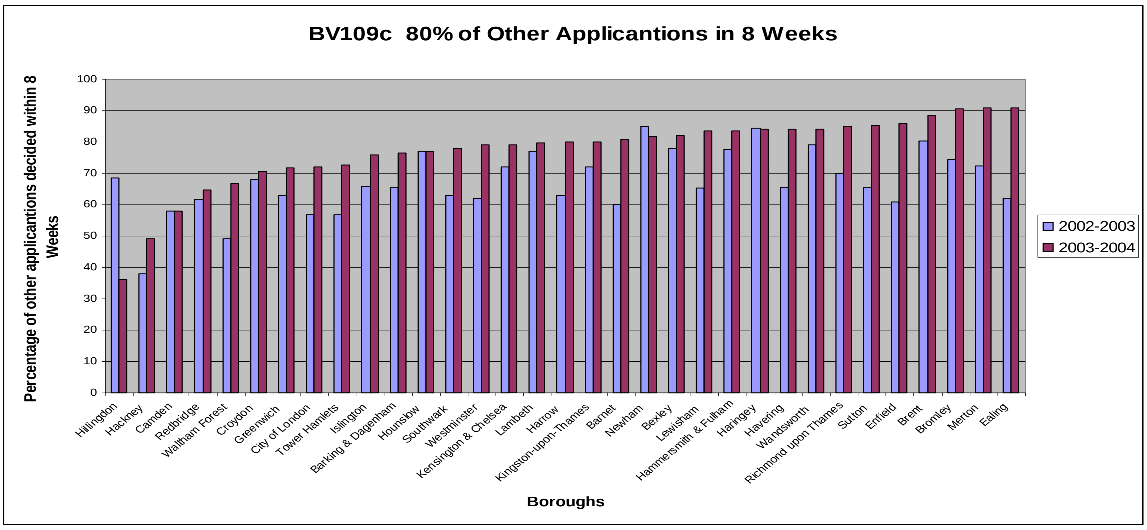
Annex 13 – London borough planning performance – BVPI109



Data sourced from www.bvpi.gov.uk



Data sourced from www.bvpi.gov.uk



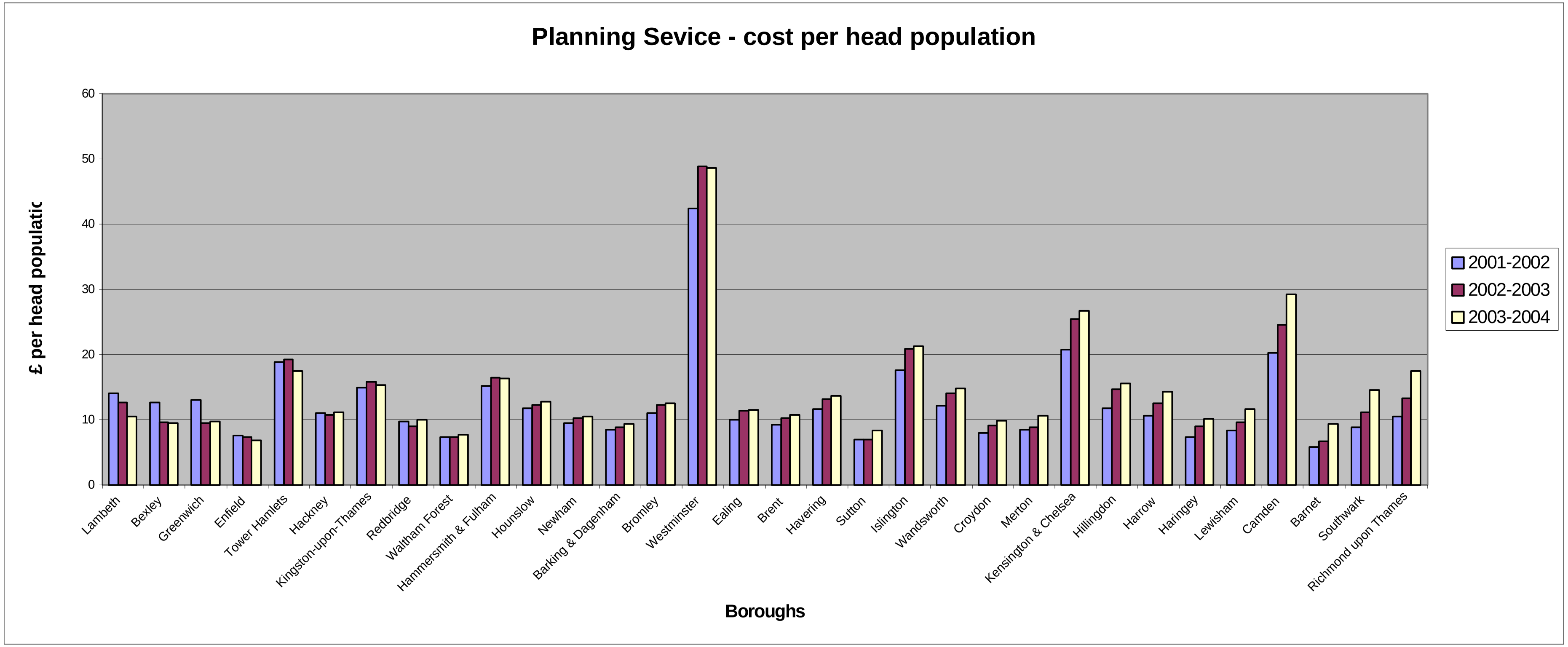
Data sourced from www.bvpi.gov.uk

Annex 14 – Permissions and completions 1987-2005

Year	Net Planning Permissions	Net Conventional Completions*	Ratio
2004/5	51477	22885	2.25
2003/4	41439	22191	1.87
2003	30468	20012	1.52
2002	33585	17062	1.97
2001	25883	17507	1.48
2000	29357	19498	1.51
1999	23971	17131	1.40
1998	23903	19924	1.20
1997	29081	19843	1.47
1996	28560	20787	1.37
1995	18134	20568	0.88
1994	23539	22931	1.03
1993	26625	20064	1.33
1992	26119	18157	1.44
1991	20041	18525	1.08
1990	23053	19189	1.20
1989	30933	22968	1.35
1988	36420	27400	1.33
1987	32756	25310	1.29

* Conventional completions exclude non self-contained bedspaces and long-term vacants returning to use.

Annex 15 - Local authority planning costs



Annex 16 – London sectoral employment 2001-3 and 2004-26

London sectoral employment: History 2001-2003; Projections 2004-2026, assuming output growth of 2.5% per annum

GVA Growth = 2.5% pa (000s)	Primary and utilities	Manufacturing	Construction	Wholesale	Retail	Hotels & restaurants	Transport & comms	Financial services	Business services	Public administration	Health & Education	Other services	Total
2003	17	267	232	239	396	309	351	338	1,075	233	661	361	4,480
2004	16	259	228	241	399	317	349	340	1,107	229	664	371	4,521
2005	16	251	224	242	402	325	347	343	1,137	225	668	381	4,562
2006	15	244	220	243	406	334	346	345	1,168	221	671	391	4,603
2007	15	237	215	245	409	342	344	348	1,197	217	674	402	4,645
2008	15	230	211	246	412	351	342	350	1,226	213	678	413	4,687
2009	15	223	207	247	416	360	340	353	1,255	209	681	424	4,730
2010	14	217	204	248	419	369	338	355	1,283	206	684	435	4,773
2011	14	210	200	250	422	379	336	358	1,310	202	688	447	4,816
2012	14	204	196	251	426	389	335	360	1,337	198	691	459	4,860
2013	13	198	192	252	429	398	333	363	1,363	195	695	471	4,904
2014	13	192	189	254	433	409	331	366	1,389	191	698	484	4,948
2015	13	187	185	255	436	419	329	368	1,414	188	702	497	4,993
2016	13	181	182	256	440	430	327	371	1,438	185	705	511	5,039
2017	12	176	178	257	443	440	325	373	1,460	181	708	524	5,078
2018	12	171	175	258	446	451	323	375	1,482	178	710	537	5,118
2019	12	165	171	260	449	462	321	378	1,503	174	713	551	5,159
2020	11	160	168	261	452	474	319	380	1,523	171	716	565	5,199
2021	11	155	165	262	455	485	317	382	1,542	168	718	580	5,240
2022	11	151	161	263	458	497	315	384	1,561	165	721	595	5,281
2023	11	146	158	264	461	509	313	387	1,579	162	724	610	5,323
2024	10	142	155	265	464	522	311	389	1,596	159	726	626	5,365
2025	10	137	152	266	467	534	309	391	1,613	156	729	642	5,407
2026	10	133	149	267	471	547	307	394	1,629	153	732	659	5,450

Source: http://www.london.gov.uk/mayor/economic_unit/docs/wp14_working_future.pdf

Annex 17- Demographic Projections

The GLA published its 2005 Population projections in October 2005. These incorporated the demographic implications of the housing provision targets proposed in the draft alterations to the London Plan – redistributing between boroughs the population increase to approximately 8.1m as set out in the London Plan. (DMAG Briefing 2005/40)

Population increase by London sub region in thousands

Sub-region	2001	2004	2011	2016	2021	2026	2031
Central	1,549	1,591	1,653	1,695	1,731	1,774	1,821
East	1,988	2,026	2,230	2,356	2,419	2,479	2,544
West	1,418	1,426	1,477	1,504	1,514	1,526	1,541
North	1,040	1,052	1,090	1,114	1,128	1,145	1,165
South	1,327	1,338	1,866	1,381	1,389	1,403	1,420
London	7,322	7,432	7,816	8,050	8,180	8,328	8,489

These projections give household forecasts by sub-region as below.

Household increase by London sub region in thousands

Sub-region	2001	2004	2011	2016	2021	2026	2031
Central	700	717	766	795	818	839	861
East	804	829	925	988	1,022	1,050	1,077
West	554	565	593	611	619	625	631
North	420	428	452	468	477	486	494
South	559	568	591	605	613	620	627
London	3,037	3,106	3,328	3,467	3,549	3,620	3,690

It should be noted that the Office of the Deputy Prime Minister (ODPM) published an alternative London household forecast projection on 14th March 2006. This projection uses different assumptions from those used in the GLA projection. The ODPM projection is:

- 3,374,000 households at 2011;
- 3,567,000 households at 2016;
- 3,756,000 households at 2021 and
- 3,926,000 households at 2026.

Annex 18- Housing Completions 1997-2005

1. Overall housing completions (net)

Year	Net housing completions from conventional* sources	Total net housing completions
1997	19,843	N/A
1998	19,924	N/A
1999	17,131	N/A
2000	19,498	N/A
2001	17,507	N/A
2002	17,056	21,531
2003	19,538	24,431
2003/4	21,045	25,906
2004/5	22,885	27,364

*conventional supply excludes non-self contained and vacant homes returning to use
N/A data not reliable for these years

2. New build completions (gross)

Year	New build completions
2001/2	14,068
2002/3	15,764
2003/4	18,919
2004/5 *	23,866

*provisional estimate
Source: ODPM

3. Affordable housing completions*

Source	1997/ 1998	1998/ 1999	1999/ 2000	2000/ 2001	2001/ 2002	2002/ 2003	2003/ 2004	2004/ 2005
Housing Corporation funded completions	6,321	6,547	5,154	5,604	5,862	4,687	5,328	5,176
Starter Homes Initiative (excluding Homebuy)	0	0	0	0	0	0	250	25
Challenge Fund	0	0	0	0	0	0	312	767
Key Worker Living	0	0	0	0	0	0	0	228
Homelessness	0	0	0	0	0	0	0	195
Safer communities	0	0	0	0	0	0	0	80
Local Authority funded completions	1,310	953	1,109	1,342	1,100	961	711	585
Non grant funded	N/k	N/k	N/k	782	540	373	572	293**
Sub Total	7,631	7,500	6,263	7,728	7,502	6,021	7173	7,349
Short-life funding: HC	1329	569	497	439	376	388	393	363
Short-life funding: LA	26	54	167	57	70	75	43	0
Short-life funding: total	1,355	623	694	496	446	463	436	363
Total	**8,986**	**8,123**	**6,957**	**8,224**	**7,948**	**6,484**	**7609**	**7,712**

*These figures do not include those in Table 3.1 below.
**provisional estimate

3.1 Affordable housing completion figures excluded from table 3

Year	Homebuy	Starter Homes Initiative	Key Worker Living
2001/02	466	19	0
2002/3	426	1,459	0
2003/4	1,360	2,389	0
2004/5	776	0	1,457

These figures are excluded from table 3 above. Although they are counted by the Housing Corporation as completions, they are payments to households to buy existing market homes and do not add to the total affordable housing stock.

Affordable housing as a proportion of total output

4. Total net supply

Year	Affordable provision*	New build completions (net)	Percentage affordable (%)
2002	6,021	21,531	30
2003	7,609	24,431	31

*These figures are estimates as total provision figures are provided as calendar years, affordable provision figures as financial years.

Year	Affordable provision*	New build completions (net)*	Percentage affordable (%)
2003/4	7,609	25,906	29
2004/5	7,712	27,364	28

*Total provision and affordable provision figures both for the financial year.

5. Conventional supply only

Year	Affordable provision*	New build completions (net)	Percentage affordable (%)
1997	7,631	19,843	38
1998	7,500	19,924	38
1999	6,263	17,131	37
2000	7,728	19,498	40
2001	7,502	17,507	43
2002	6,021	17,056	35
2003	7,173	19,538	37
2003/4	7,173	21,045	34
2004/5	7,349	22,885	32

*affordable figures do not include shortlife provision

6. Households accessing affordable housing

(including voluntary purchase grant, tenants incentive scheme, do it yourself home ownership and homebuy grants to assist households into owner occupation HC and LA funded)

Year	Households
1997/8	10,993
1998/9	9,603
1999/2000	7,581
2000/1	8,798
2001/2	8,497
2002/3	8,369
2003/4	11,358
2004/5	9,945

Sources: Total completions : GLA annual housing provision survey; Affordable Housing Completions: Housing Corporation completions data; Annual LA returns to ODPM on completions funded through planning obligations (Housing Strategy Statement Statistical Appendix)

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Hindi

यदि आप इस दस्तावेज की प्रति अपनी
भाषा में चाहते हैं, तो कृपया निम्नलिखित
नंबर पर फोन करें अथवा नीचे दिये गये
पते पर संपर्क करें

Vietnamese

Nếu bạn muốn có văn bản tài liệu
này bằng ngôn ngữ của mình, hãy
liên hệ theo số điện thoại hoặc địa
chỉ dưới đây.

Bengali

আপনি যদি আপনার ভাষায় এই দলিলের প্রতিলিপি
(কপি) চান, তা হলে নীচের ফোন নম্বরে
বা ঠিকানায় অনুগ্রহ করে যোগাযোগ করুন।

Greek

Αν θέλετε να αποκτήσετε αντίγραφο του παρόντος
εγγράφου στη δική σας γλώσσα, παρακαλείστε να
επικοινωνήσετε τηλεφωνικά στον αριθμό αυτό ή ταχυ-
δρομικά στην παρακάτω διεύθυνση.

Urdu

اگر آپ اِس دستاویز کی نقل اپنی زبان میں
چاہتے ہیں، تو براہ کرم نیچے دئے گئے نمبر
پر فون کریں یا دیئے گئے پتے پر رابطہ کریں

Turkish

Bu belgenin kendi dilinizde
hazırlanmış bir nüshasını
edinmek için, lütfen aşağıdaki
telefon numarasını arayınız
veya adrese başvurunuz.

Arabic

إذا أردت نسخة من هذه الوثيقة بلغتك، يرجى
الاتصال برقم الهاتف أو مراسلة العنوان
أدناه

Punjabi

ਜੇ ਤੁਹਾਨੂੰ ਇਸ ਦਸਤਾਵੇਜ਼ ਦੀ ਕਾਪੀ ਤੁਹਾਡੀ ਆਪਣੀ ਭਾਸ਼ਾ
ਵਿਚ ਚਾਹੀਦੀ ਹੈ, ਤਾਂ ਹੇਠ ਲਿਖੇ ਨੰਬਰ 'ਤੇ ਫ਼ੋਨ ਕਰੋ ਜਾਂ ਹੇਠ
ਲਿਖੇ ਪਤੇ 'ਤੇ ਰਾਬਤਾ ਕਰੋ:

Gujarati

જો તમને આ દસ્તાવેજની નકલ તમારી ભાષામાં
જોઈતી હોય તો, કૃપા કરી આપેલ નંબર ઉપર
ફોન કરો અથવા નીચેના સરનામે સંપર્ક સાધો.

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