

**Western Corridor & Blackwater Valley
Sub-regional Strategy**

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Western Corridor & Blackwater Valley Sub-regional Strategy

Introduction: the area in context.

1. This area, to the west of London, is the most successful and dynamic part of the South-East. It is the location of choice in Britain for many of the world's top companies. For as long as it remains successful, no Government will wish to forego the important contribution that the area makes to the national economy.
2. In any area of economic prosperity there are going to be costs and benefits to be balanced. In the Western Corridor and Blackwater Valley the growth of the economy has impacted on some aspects of quality of life, but that same prosperity is a positive factor contributing to other aspects. It is therefore important to achieve a balance in terms of managing those impacts in a way that does not prejudice the benefits that prosperity brings. For a long period, the provision of vital infrastructure in the area has failed to keep pace with the growth of housing and jobs. Since 1994, successive versions of the Government's Regional Planning Guidance has contained warnings about the area overheating and its likely consequences. The most recent version of RPG9 says **Economic development strategies for this area should build on its economic strengths, particularly the high skill levels and knowledge base, to ensure that the economy continues to grow in a sustainable way with the minimum additional pressure on limited labour or land resources. Local planning authorities, with the support of SEEDA, face the challenge of enabling continued economic prosperity in this area while discouraging new development of a type which would be unsustainable.** (RPG9: 2001: Paragraph 4.22). These concerns are as pertinent now as when that policy document was adopted. They are reflected in the central theme of our strategy, set out below, which attempts to strike a new balance between infrastructure and further investment in the area:

- **The central purpose of our strategy is to manage the pressures for investment in the area in a sustainable manner, to secure the maximum community benefit from them and to design out their disadvantages.**
- **Many of the things that make this area attractive to business are also those that provide an attractive quality of life for our residents. We must mobilise all the agencies involved in the development of the area to help achieve them. These include:**
 - **the ability to access jobs and services easily and sustainably;**
 - **the availability of enough decent, affordable housing;**
 - **low unemployment, but without excessive labour shortages;**
 - **good quality and bio-diverse countryside and open space, readily accessible to where people live;**
 - **fresh air and plentiful supplies of clean water;**
 - **good quality facilities, with adequate capacity to meet the population's leisure, health and education needs, and enough staff to deliver those services.**
- **The achievement of these aims must be planned for and investment for them made along with the planning of other**

development. Developer contributions are by themselves neither a sufficient, nor a sufficiently timely, basis for providing essential services and infrastructure. Nor do they address the shortfalls arising from extended periods of previous development. We must use our existing resources with the maximum efficiency and persuade present and future governments that they must invest further in the area if it is to remain successful. If necessary, we must find new ways of funding the infrastructure that the area needs;

The key issues:

The scale of housing growth:

2. One of the central matters for the strategy to resolve is the amount of housing growth that should be provided for. To provide a range of options for possible testing, we have calculated the number of dwellings that would be required: (a) to continue the current policies in RPG9 across the study area to 2026, which is itself a growth option; (b) to provide RPG9+20%; (c) to provide RPG9+40%:

- **RPG9** **116,275**
- **RPG9 + 20%:** **139,530**
- **RPG9 + 40%:** **162,785**

(Note: these figures relate to the 25-year period 2001 – 2026, as requested by the Regional Assembly, and to the fifteen local planning authorities, or part-authorities. Allowance has been made for those authorities that lie part-in, part-out of the study area, using a methodology agreed with officers from the study area authorities. Other figures can be calculated from them: for example, RPG9 + 10% would be 127,902 and RPG9 + 30% 151,157).

4. **Backlog of housing need:** The Regional Assembly has set itself a policy objective of meeting the backlog of housing need, which it estimates for the region at around 29,000. In the absence of consistent figures for the sub-region, we have made the assumption that our share of this backlog would be roughly pro-rata to our share of the region's population. This would give our sub-region a housing need backlog of around 5,000 dwellings, and this figure has been built into the following calculations.
5. We applied two initial tests to the range of dwelling figures:
6. **Will they meet the housing needs arising from within our existing population?** The Regional Assembly's latest household projections point to a net increase of between 108,109 and 116,861 new households in the sub-region over their projection period (2002 – 2027). With the housing need backlog added in, this would give a total of between 113,109 and 121,861 additional households, which suggests that RPG9 would just about meet this need. Pending more detailed testing of the figures, our provisional conclusion is that a building rate of somewhere near RPG9 would be likely to meet locally-generated housing need to the end of the plan period.
7. It should also be noted that these figures include migration trends (either short-term or long-term, depending on which projections you use). We have looked at internal migration (that is, excluding international movements) from

the sub-region over the past five years. They show a consistent and substantial net out-migration, averaging around 9,000 people per year. The reasons for this are not clear, but one possible explanation could be the price and availability of housing locally. Clearly, there are other possible explanations but, if this one were the case, it raises the question of whether a level of housing growth based on a substantial number of local people being forced out of the area was a desirable target as a policy. It would argue the case for a rather higher level of provision. However, the evidence needed to draw any firm conclusions either way on this is not available at present.

8. **How will they affect the gap between jobs and local labour supply?**
Some concerns have been raised about the employment forecasts commissioned by the Regional Assembly. We believe they may over-estimate the rate of long-term job growth in the sub-region, and there are also concerns about the economic activity rates used. However, we accept the general picture of the long-term trend that they paint, if not necessarily the scale of it. The Assembly are undertaking further work to test the sensitivity of their findings to different assumptions.
9. Changes to the age structure and household size of the population are working against us. The population is getting older and the average number of economically active people per household is shrinking. According to one set of Assembly projections, the average household in the sub-region at 2026 will contain 1.19 economically active people (compared with 1.32 in 2001). So, if the housing stock stayed the same size, the local labour supply would fall significantly. In labour force terms, a significant part of the growth in housing would therefore be cancelled out by the declining size of the labour force living in the existing housing stock. The economic activity figures provide a basis for estimating the growth in the labour force that would result from the housing options set out above (again, the calculations are explained in the technical paper):
 - **RPG9** **69,297**
 - **RPG + 20%** **96,971**
 - **RPG9 + 40%** **124,644**
10. We can then compare these with the Regional Assembly's forecasts of job growth, always bearing in mind our reservations about them. Their two latest job forecasts show a growth in jobs in the sub-region of between 165,000 and 182,000. On this basis, even to maintain the current level of imbalance between jobs and labour supply (which many already regard as unsatisfactory) would require housing growth well in excess of RPG + 40%. As we will see, for other reasons this is unlikely to be a realistic option. However, those job forecasts include both full-time and part-time employment. Their forecasts of Full-Time Equivalent employment growth show a range between 122,000 and 134,000. Even on the basis of these figures, it would take housing growth somewhere within a range from just below to just above RPG9 + 40% to maintain broadly the current level of imbalance in the local labour market, between supply and demand.
11. The sub-region is not homogeneous. The balance between jobs and labour supply differs between one part of the area and another, with employment concentrated in some areas and others being more predominantly residential in character. These local pictures are something which could be used as

considerations in looking at the distribution of housing and employment development, and different solutions may be appropriate in different parts of the sub-region. Further work is being undertaken on them.

12. These forecasts indicate that the lowest housing growth option could result in a labour shortfall of between 50,000 and 65,000 opening up in the local labour market. The consequences of this are likely to include: serious difficulty in recruiting to a wide range of jobs, increased difficulty in delivering essential public services, wage inflation and the general undermining of the competitiveness of the area's economy against its rivals in Europe. It could also impact on neighbouring labour markets, such as London and Heathrow, with which this area is closely related. Even allowing for:
 - a. the element of over-estimation we believe may be contained in these figures and;
 - b. whatever potential there may prove to be for addressing the labour gap by other means (discussed in the following section on smart growth);

on the basis of this criterion at least, a housing growth rate of no less than RPG9 + 20% is indicated.

13. However, other considerations come into play. Later sections of the report look at the transport, water supply and other infrastructure consequences of different levels of growth.
14. **Scale of housing growth - conclusions:** This is the dilemma for the Western and Blackwater Valley Corridor. On the basis of work done so far, it would appear that locally-generated housing need could be met with a growth rate continuing at around current RPG9 levels. Maintaining the current balance between workforce and labour supply would require a markedly higher rate of growth. But, as later parts of the report explain, this higher rate of growth would lead to a substantial worsening of current transport problems, even allowing for the introduction of a range of policies, including more controversial ones such as road user charging and motorway widening. However, the relationship between housing growth and transport overloading is not necessarily a straightforward one; for example, if a low housing figure led to a worsening labour shortage and to large numbers of long-distance commuters being sucked into the area, the transport consequences could be worse than with a higher housing growth strategy, one that provided a better local balance between jobs and workers.

Having carefully considered all the issues raised by the growth options, the Western Corridor and Blackwater Valley Members' Steering Group resolved as follows:

Housing levels continuing at RPG9 are preferable subject to the necessary infrastructure improvements; housing provision at RPG9 +10% is the most that could be accommodated but only if there is significant investment in infrastructure to support such a level of growth. Any housing provision above RPG9 +10% is unacceptable.

15. Whatever level of growth is eventually provided for in the South East Plan, there will be an accompanying need for additional infrastructure, both to meet the needs of the additional population and to cover existing shortfalls. No commitment should be made without establishing a clear way forward in meeting the major transport, water supply and other infrastructure challenges

that the chosen level of growth would provide. This is particularly true in relation to the economic and affordable housing arguments, where the figures point to a growth rate significantly in excess of current RPG rates, and for which the infrastructure needs would be correspondingly more challenging, as the following sections will show. To re-emphasise the point made in paragraph 2, developer contributions are by themselves neither a sufficient, nor a sufficiently timely, basis for providing essential services and infrastructure. Nor do they address the shortfalls arising from extended periods of previous development.

Distribution of housing growth:

16. One of the major tasks for the strategy was to agree some broad principles for the distribution of whatever level of housing growth was agreed. It was not our job at this stage to agree a specific set of housing allocations at district level. This will be done at a later stage in the preparation of the South-East Plan. However, the principles we agree at this stage would help to inform that distribution. The Group considered four options for the distribution of housing. These can be summarised as:

- A continuation of current policies (consisting of a mix of development within existing urban areas and some releases of Greenfield land);
- A greater emphasis on development within urban areas (which could involve higher densities and the release for housing development of land not currently allocated for that purpose);
- A distribution that gives priority to transport considerations. This would concentrate development in and around the sub-region's main transport hubs and would have given priority to transport considerations, where they came into conflict with other constraints;
- A hybrid option, combining elements of the above.

Having carefully considered all the relevant advantages and disadvantages of each of the options, **the Members' Steering Group identified the hybrid option as their preferred basis for the distribution of housing.** The Group agreed that further work needs to take place to consider the form of the hybrid option in terms of the weight to be attached to the various elements that make up the preferred option.

Appendix 3 sets out the broad principles of the hybrid option. For the avoidance of doubt, unlike the wholly transport-led option this one does not envisage strategic releases of Green Belt to achieve transport objectives.

The economy

17. **Long-term sustainable economic growth:** The brief asks us to support the long-term sustainable economic growth of the sub-region. We believe that the following pose the greatest threats to that sustainable growth:

- Congestion and delay on the area's transport systems;
- Shortages of labour with an appropriate range of skills;
- The high cost of housing in the area, which in turn increases employers' costs and threatens competitiveness;
- Pressure on essential services and infrastructure, which in turn threatens the attraction of the area to employees and employers alike.

Each of these is addressed in this strategy.

18. **Surplus of jobs over labour supply:** Recent years have seen the area go from being a net exporter of labour, to one moving towards having many more jobs than there are workers available locally to fill them. As discussed above, there is general agreement that, on the basis of continuing current policies, this shortfall is likely to increase. But there is less consensus on how large it is likely to get by 2026. The scale of the problem, given different possible rates of house-building, was discussed above, but there are other ways in which it might be tackled:
19. **Importing labour from adjoining sub-regions and beyond:** Gathering authoritative evidence of forecast labour supply/demand balance in adjoining sub-regions has not proved easy. Such (mainly anecdotal) evidence as we have been able to gather from our neighbours suggests that most of these areas will be, at best, just in balance or, at worst, suffering from similar labour shortages to our own and in competition with us for our local labour supply. If this proves to be the case, we cannot rely upon importing ever-larger numbers of workers. A further significant uncertainty relates to the effects of the recent enlargement of the European Union and its effects upon the international migration of workers. It is possible that this area will see a significant influx of European workers and this raises rather different issues, about housing, rather than commuting.
20. **Implications of growth at Heathrow: Economic:** Heathrow may be a transport hub, rather than a sub-region, but its future growth will have a significant impact on the local economy, as well as in other ways. Work on this is being led by the Central Arc (or London fringes) Sub-regional Group. Their main conclusions in relation to employment are that the actual growth in airport-related employment by 1998 (102,000) had already exceeded both the forecast for 2015 (98,000) in the Government's South East Regional Airport Strategy (SERAS) and the 2016 figure used by the Inspector at the Terminal 5 Inquiry (99,000). With the airport's capacity about to increase by 50% by 2015 (after T5 opens in 2008) it seems likely that airport-related employment will continue to grow (the local authorities' forecast for airport-related employment at 2016 at the T5 inquiry was 149,500). This could potentially have a major impact upon the jobs/labour balance within the sub-region, which currently supplies around 18% of Heathrow's workforce. However, the Mayor of London's Plan indicates that there is the potential to accommodate an extra 40,000 jobs in parts of West London by 2016.
21. **Heathrow: Other impacts:** There are a number of other issues that will need to be considered in any review of policy on Heathrow. One is the inadequacy of public transport linkages between the airport and areas to the west. There are two proposals to address this - the rail link from the Reading/Basingstoke – Waterloo line (Airtrack) and the westbound link to the Great Western line out of Paddington. In the longer-term (and particularly if further expansion of the airport beyond Terminal 5 were being considered) more radical thinking about Heathrow's wider transport role would be appropriate. The airport is already a substantial hub for the coach network – could the same become true in the longer-term of rail services? Could an enhanced rail service from the airport become a more sustainable alternative to some of the short-haul flights currently operating out of the airport, freeing up capacity for those journeys for which there is no alternative to flying? Finally, there is the issue of employment land to serve the growing needs of Heathrow. Should land immediately around the airport be reserved for this purpose or, given the

evidence of substantial scope to expand employment in West London, could some of it be released for housing?

22. **Heathrow and other south-east airports: conclusions:** Whilst the timing of a decision on the third runway may work against addressing the matter in the forthcoming round of the South-East Plan, the Assembly should make it a longer-term objective to develop a more proactive and detailed policy towards Heathrow and the region's other airports, and their further development.

Smart Growth:

23. This is the term used to describe economic growth that does not require the importing of extra labour or the use of extra land. This is achieved by such means as: helping (or encouraging) more of the existing population to become economically active; increasing the skill base of the workforce; the use of technology to improve productivity, and out-sourcing jobs that do not have to be based in the area. Our initial conclusion is that, while each may be able to make some contribution to solving the labour imbalance, and should be pursued, it may be unwise to place too heavy a reliance on them, individually or collectively, as a major part of the solution. In particular, it would be unwise to commit to substantial growth, built on the hope that these measures will deliver a large amount of additional capacity. However, this is not to say that their contribution should be ignored, nor that we should not do our best to maximise it. Looking at some of the component parts of smart growth in turn:
24. **Increased economic activity:** The sub-region already has very high rates of economic activity: the south-east overall has higher rates than the national average and seven of the ten most economically active local authorities within the south-east are in our sub-region. It is thought that a relatively high proportion of the inactive may be long-term sick, or have no economic necessity to work. Against this, factors such as people living longer and staying healthier, the forecast pensions crisis and a move to more flexible working arrangements by employers as the labour market tightens, are all factors that could increase economic activity rates.
25. **Skills:** There is already evidence of skills shortages in a variety of sectors. Among those singled out by the study were the public sector (particularly health, police and education); bio-pharmaceuticals; transport and financial services. A variety of levels of skill were cited, from high-level technical and professional ones; through general entrepreneurial, management and technical skills; construction and manufacturing skills, though to basic competencies like communications and customer care. There is evidence of a growing skills gap, with the majority of training going to those who are already better qualified. With school leavers, there is a concern that a sellers' market for labour creates the temptation for young people to take "easy" jobs, rather than staying on at school or otherwise improving their qualifications.
26. **Flexible working:** There is some evidence of more flexible working practices being introduced, potentially encouraging more people to become economically active. The number of people working from home has doubled in the past ten years, more people work part-time and the incidence of flex-time has increased (one piece of evidence for which is the lengthening of the rush hours). However, flexible working can cut both ways in terms of labour supply, and may lead to people who were in full-time employment becoming part-time, where they can afford to do so.

27. **Spaceless growth:** there is evidence of the potential for using existing supplies of employment land more intensively. However, the key test may be not whether it is physically possible, but whether the locations and the environments will be sufficiently attractive to the firms looking to locate in this area.
28. **Offshoring:** There is one other factor that could have a major impact on the job/labour balance. This is offshoring, the practice of firms relocating jobs, from call centres to software writing, overseas. Initial conclusions from work commissioned by the Regional Assembly estimate that the South East as a whole has been losing 3-4,000 jobs per annum since 2001. Three scenarios for the future have been drawn up and compared with the base case provided by the employment forecasts provided earlier for the Assembly. While there is still likely to be a substantial overall increase in the number of jobs in the region, the two more pessimistic scenarios would reduce the amount of employment growth by between 19 and 30%. The report concludes that areas within the Western Corridor/ Blackwater Valley are some of the parts of the region at the greatest risk from off-shoring. The Assembly should consider developing a strategy in conjunction with other agencies to address the consequences of offshoring focussing on this sub-region.
29. **Smart Growth - conclusions:** The South East Plan should include a commitment to developing a strategy to improve our understanding of smart growth and to work with SEEDA, the Government, local authorities and other agencies to promote it, particularly in areas such as this, with serious forecast labour shortages
30. **Scale and distribution of employment floorspace growth:** Whilst it has not been possible to undertake the work within the time limits set for this strategy, we believe that there is a need for a better understanding of the amounts and types of business floorspace being provided in the sub-region. Are we providing enough of the right kinds of space in the right places? Changes are taking place on a variety of levels; the mixture of businesses in the area is changing; their working practices are changing; there are pressures for currently redundant office space to be converted into housing and its consequences, among other things for the balance between jobs and labour supply; and the planning system itself is seeking to influence the nature of what is being provided – moving away from greenfield campus developments towards a greater emphasis on town centre locations, in the interests of sustainability. The net effect of these forces needs to be better understood. During the course of the South East Plan process, we hope to supplement the work on changing work practices, undertaken by the Regional Assembly with work of our own on this area.

Affordable, social and key worker housing:

31. The sub-region's high house prices pose a major problem, both for local households and for the local economy. The housing work undertaken as an earlier stage of the Western Corridor Study concluded that around two-thirds of households in the area would be unable to afford a modest 4-5 room property locally. (The conclusion was based on work by the Joseph Rowntree Foundation and used the former Western Corridor boundaries, but its conclusions are not thought to be in any way undermined by the subsequent sub-regional boundary changes). Other work quoted in the earlier discussion

paper showed that, under present rules, most developments were unlikely to be able to support a percentage of affordable housing much in excess of 30%, without the inclusion of other types of tenure, such as shared ownership, which serve rather different areas of the housing market. On the very optimistic assumption that we could achieve an overall figure of 30% of all the housing provided being affordable, the development options we are testing would give the following additions to the affordable housing stock by 2026:

RPG9: 34,882

RPG9 + 20%: 41,859

RPG9 +40%: 48,835

32. In practice, we might expect the overall yield from those levels of development to be significantly lower. Against this, the Assembly's household forecasts predict a growth in the number of households in the period 2001 – 2026 of between 108,109 and 116,861. If it were the case that, as predicted by Rowntree, about two-thirds of them needed some form of help with affordable housing, this would point towards a total need for affordable housing in excess of 70,000. It has to be said that these calculations are based on a number of heroic assumptions, and can be taken as no more than an indication of the most general trends. Insofar as any conclusions can be drawn from them, they suggest that affordable housing need in the area will significantly exceed that which could be met through the planning system (under the current rules). A number of measures were suggested in our earlier study that could be pursued as a strategy for increasing supply in areas of particular need. They included:

- a. Increasing the percentage requirement of affordable housing from development in those areas where the full potential of developer contributions was not being explored;
- b. Setting smaller site thresholds for securing affordable housing, combined with a more flexible, tapered approach to site size thresholds. This latter would avoid the tendency for developments to come in at just below the threshold;
- c. Making it easier to secure commuted payments in lieu of actual housing in appropriate cases, and allowing commuted payments to go into a properly-managed fund, less constrained by proximity to the development;
- d. Designing policies which allow some flexibility, reflecting the unique characteristics of sites;
- e. Encouraging joint initiatives between adjoining authorities, to maximise the availability of suitable land and the capital to fund schemes (for example, where one authority had the land and another the funding);
- f. Allowing local authorities to borrow against future Section 106 receipts, rather than having to wait for them coming through retrospectively, where there are reasonable guarantees of those 106 payments being made;
- g. Protecting the existing supply of affordable housing (for example by removing Right to Buy in areas of particular need);
- h. Seeking contributions to affordable housing from other forms of development, on the basis that, for example, commercial development generates the need for affordable housing to a greater degree than do residential schemes;
- i. Directing less of the funding for affordable housing into growth areas, where the need for it is arguably less than in areas such as this. At present, the funding regime can stop Registered Social Landlords

developing, even when the planning system can secure the necessary land;

- j. Looking to develop new forms of tenure to mobilise private sector investment outside of the planning system – in effect a 21st century equivalent of employers providing “tied” housing, but recognising the changes that have taken place in the labour and housing markets (for example, that more people now want to be homeowners, or at least have some share in the growing equity of the place in which they live, and that people no longer tend to work for one employer all their lives).
33. The above are simply examples of the kinds of measures that could be investigated. A further discussion of some of the practical issues relating to the provision of affordable housing appears in the background paper on infrastructure. We recommend that the Regional Assembly use its planning and housing powers to develop a strategy for increasing the supply of affordable housing, lobbying the Government and other agencies for changes in policy or legislation where necessary, to meet local needs, and that areas like the sub-region where the need is greatest, become the test-bed for the application of these new policies.
 34. However, as we have seen, the present rules mean that Section 106 requirements linked to a housing development can only support a relatively finite proportion of affordable housing. There is thus an unavoidable link between the total amount of affordable housing we can provide and the overall level of house-building. The extreme response to this is the Government’s Barker Report, which argued for a doubling of current private housing completions in order to achieve affordability targets. We do not support this approach, which ignores a variety of other considerations, but the linkage cannot be ignored. It should also be noted, as is mentioned several times in this strategy, that affordable housing requirements will also compete with other infrastructure needs for the relatively finite amount of investment in the public realm that can be generated from a development.
 35. ***Affordable housing: standard policy or local choice?*** How far should the South-East Plan go in specifying the scale and types of affordable housing provision in individual local authority areas? The earlier Western Corridor study indicated that even adjoining authorities can have very different types of needs for affordable housing. We therefore recommend that, rather than being overly prescriptive, the South East Plan gives local authorities discretion – within very broad guidelines - to identify the scale and nature of their need in the light of local circumstances and local knowledge.

MoD and other Government land:

36. There are large amounts of Ministry of Defence and other Government land within the sub-region, which could potentially represent an important resource for meeting the area’s development needs. However, there are three factors which caution against placing too much reliance on them: (i) Doubts about which of these sites will be available and within what timetable; (ii) the fact that their locations were chosen for military purposes rather than development ones. They may therefore be less than ideal for supporting sustainable development, and some have had this confirmed through appeal decisions; (iii) some are subject to very tight environmental constraints. In particular, large areas are proposed for Special Protection Area status. The importance and strength of these constraints should not be under-estimated; they could

prevent strategically-important developments within the sub-region from going forward. These are considered in the following paragraphs.

37. The strategy has identified the location, scale and development potential of any strategically significant Government land of which it is aware in the sub-region. The conclusions are set out in Appendix 2. There is considerable work still to be done on this; not least clarifying the Government's intentions for the land and understanding fully the impact that the proposed Special Protection Area will have. This latter is discussed further in the following section. Pending the resolution of these matters, we should not embark upon a development strategy that depends too heavily upon the release of this land. The sub-regional authorities also wish to ensure that the release of Government land is coordinated with the development of the South-East Plan, and that such land is treated as part of the overall provision in the Plan, not as a later addition to it, over and above other allocations.
38. **Special Protection Areas:** This is an issue that relates particularly to MoD land, though it is not unique to it. The proposed Thames Basin Heaths SPA, a fragmented area of heathland that spans 11 local authorities and 3 counties – Berkshire, Hampshire and Surrey (focused within the Blackwater Valley) has been proposed on the basis of its populations of three heathland species of bird – Dartford warbler, nightjar and woodlark. All three species have significant proportions of their national populations across the proposed SPA and are ground or near-to-ground nesting species. This being the case they are under threat from disturbance, primarily from recreational pressure – such as dog walking, walking, cycling and scrambling. SPAs result from the EC Birds Directive which provides for the protection, management and control of all species of naturally occurring wild birds in the Member States. It requires Member States to identify areas to be given special protection for the rare or vulnerable species listed in Annex I (Article 4.1), regularly occurring migratory species (Article 4.2) and for the protection of wetlands, especially wetlands of international importance. Proposed SPAs are afforded the same protection as if they had been officially designated.
39. The implication of this is that any proposal for development that is likely to have a significant impact on any (p)SPA, whether negative or positive, must be subject to an appropriate assessment, and should only be permitted after the planning authority has ascertained that it will not adversely affect the integrity of the site concerned. The practical implication of this has been to impact on the ability of areas in proximity to the SPA to accommodate further development – particularly housing. This has to date unresolved implications in terms of brownfield capacity, greenfield releases and has resulted in delays in delivering local plan housing allocations. English Nature has submitted to Government a strategy which they believe would enable housing development to be permitted while facilitating the betterment of the protected areas.

Strategic infrastructure

40. **Introduction:** many types of infrastructure are needed to support development, but we concentrate at this stage primarily on strategic infrastructure; that is, those items which serve a wider area than an individual local authority. Principally, these are transport, water-related infrastructure and major health facilities. Further work will be needed as a preferred scale

and distribution of development is agreed. There is a further discussion of some of the practical issues involved in providing infrastructure in Appendix 4.

Transport:

41. The economic success of the Thames Valley area is due in large part to its strong strategic transport links and proximity to London. The area is well served by the M4, M3 and M25 motorways, good rail links, including the Great Western Main Line and Heathrow. However, the sub-region suffers from complex polycentric journey patterns and the needs of local journeys are frequently in conflict with strategic travel patterns.
42. Congestion is a key issue for the sub-region, with 30% of journeys at peak time spent in queues, where 65 people die in road accidents each year and where air pollution is dangerously high, with authorities having declared Air Quality Management Areas along sections of the M25, M40, M4, M3, A329, A4 and A315. Rail journeys are overloaded in the peak periods and there is a particular strategic need to increase track and station capacity at Reading. In addition, congestion is affecting business efficiency, which impacts on their ability to maximise Gross Domestic Product. These are all issues which also impact on people's quality of life, which is perceived by many to be getting worse.
43. We have commissioned some new runs of the transport model used for the Government's Thames Valley Multi-Modal Study (TVMMS), which covered a similar study area to our own. Because of the lead-in time involved in doing so, the results of these runs are not yet available. However, some tentative conclusions may be drawn from the original study itself. The main modelling work for TVMMS only ran to 2016, and considered a range of land use outcomes. The final recommendations of TVMMS assumed a scenario controlled to RPG9 predictions for the region, with growth distributed within the region to support a sustainable transport land use strategy. Several of these recommendations were endorsed by the Secretary of State for Transport and their implementation is likely to be required regardless of the level or distribution of growth in the sub-region.
44. An alternative land use scenario, considered under TVMMS and based on TEMPRO, assumed around 53,000 additional houses, with additional employment, in that part of the model covering our study area. This represents something like ten years' growth at current RPG9 rates. The picture painted by the TVMMS alternative land use scenario for 2016 may therefore be not dissimilar to the picture currently being considered for 2026, assuming continuing RPG9 rates of growth.
45. Their growth scenario anticipates a 34% increase in person trips by car and a 33% increase in vehicle mileage. This would result in a 66% increase in total vehicle hours and an increase of 122% in the total hours of vehicle delay (all compared to the 2001 situation). They went on to test a number of possible policy options for addressing this growth in congestion, covering public transport improvements, travel demand management, road user charging and motorway widening. It concluded that, even with all of these measures in place, there would still be some worsening in the amount of delay, compared with the 2001 situation. The conclusion from this (which our modelling work should test further) is that even a continuation of current RPG9 building rates

to 2026 will require a radical rethinking of how we address the travel needs of the area, over and above schemes already in the planning process.

46. There are other emerging pieces of work that may assist our thinking about the area's transport needs. One of these is the Highways Agency's Route Management Strategies for the major roads in the area. These are relatively short-term strategies, concerned more with the detailed management of routes rather than with strategic transport issues. They do, however, include guidance for planning. The one for the M3 is expected in draft in October, that for the M40 is expected at the end of this year, while that for the M4 should be available in its final form early in 2005. Another is being prepared for the A404 corridor. The draft version of the M4 study gives the following planning guidance, in relation to the entire length of the M4 within the study area: ***It is likely that flows entering the M4 will need to be reduced below their current levels in order to bring demand within the peak capacity of the M4, taking into account the continued growth in through traffic.*** Similar problems with capacity are anticipated on lengths of the M3 and M40.
47. Local rail trips are of ever-increasing importance within the study area. There is am and pm peak hour overcrowding on both Intercity and local services between Reading and Paddington. There is growing demand for freight movement by rail, particularly on that part of the local network between Reading and Oxford. The rail line between Basingstoke and Waterloo is also at capacity during the morning and evening peaks. In Hampshire a trend is emerging which suggests that more local journeys are being made by rail. Longer distance journeys by rail offer the highest rate of return to rail operators and this may conflict with providing services that serve local need. This needs to be addressed in the Strategic Rail Authority's Route Utilisation Strategy, (RUS), which is currently in preparation. The RUS will look at possible policy options for addressing these issues, which are likely to include revised timetabling (due in December 2004), lengthening trains, altering the mix of seating and standing and abolishing first class accommodation. The Crossrail proposals, linking the rail networks to the east and west of London, are likely to be one of the biggest rail investments to take place during the plan period, although current proposals only take the project as far as Maidenhead within the sub-region. The timetable for taking much of the railway-related work forward is unclear, due to the current uncertainty within the rail industry.
48. Finally, there are a variety of measures contained in the Regional Transport Strategy, many of which are likely to be carried out through the next round of Local Transport Plans. Whilst these in themselves represent a challenging programme to complete by 2016, they were only ever intended as a response to growing travel needs up to that time, based on current growth rates. Fresh thinking would be needed to take account of the impact of continued growth beyond then, or of higher rates of growth in the shorter term. The issue is not just about capital schemes. For many of the local bus services, (which are strategically significant, if for no other reason than that local trips compete with strategic ones for the same road space), a major problem is in providing revenue support for non-commercial services. A similar problem exists for the express bus and coach network, recommended by TVMMS to provide linkages not served by the rail network

Transport: Conclusions:

49. The current transport problems of the area require immediate investment in infrastructure to address infrastructure deficits. The future transport strategy of the area should tackle the conflicts between local and strategic travel. Significant additional infrastructure would be required to support higher levels of growth. In addition to infrastructure improvements a package of land use and other interventions should be considered.

Water-related issues:

50. **Introduction:** The sub-region sits within an area that is both heavily populated and relatively short of water. The Thames Water area, which covers most of the study area and substantial areas beyond it, including much of London, has an area of less than a tenth of England and Wales, but a population in excess of 12 millions. The area is also one of the driest in Britain, with an annual average rainfall of 690mm, compared to a national average of 897mm. The water companies serving the Western and Blackwater Valley Corridor and the Environment Agency have carried out preliminary studies of the consequences of alternative rates of growth in the sub-region to 2026. Their initial work was limited to RPG9 and at RPG9 + 30% or 50% growth rates, but other options are being investigated. Full details of this work are set out in Appendix 4, but the main points are summarised below.
51. **Water resources:** Substantial parts of the sub-region are already in a slight deficit, in water supply terms. The consequences of a deficit are likely to include low water pressure, low flows in water courses and low ground water levels, hosepipe bans, applications for drought orders/permits and, in more severe cases, standpipes and rota cuts. Without improvements to supply, a continuation of current build rates to 2026 would mean that virtually the entire sub-region will be in deficit by 2015. By 2025, this deficit would, in some parts of the area, be severe.
52. Improvements can come from two sources, commonly referred to by the water companies and Environment Agency as 'Twin Tracking'. One is improved efficiency of water use in the new-build housing stock. Two standards of efficiency saving on all new development are being modelled:
- 8% will be achieved by changes to the Building Regulations in 2005, and is relatively assured;
 - a 25% saving would involve in addition more radical changes in housing design, not yet enshrined in legislation, along with changes in public attitudes towards the saving of water. This is seen more as an aspirational target.
53. The results of these studies should be with the Regional Assembly by the end of September. Early indications are that, even at the higher efficiency standard, improved efficiency in the new housing stock will not provide even a medium-term solution to the problem. Under this scenario, a continuation of current build rates would result in a situation at 2015 and 2025 little better than the do-nothing option described above.
54. The other solution is investment in new water resources. Their study indicated that, with a series of new water resource developments, along with the efficiency improvements described above, almost the entire study area would

be in water supply surplus at 2025, given a continuation of current RPG rates of development. At RPG + 30%, the same package of measures shows parts of the area being in surplus, with others in an approximate balance or a mild deficit – not dissimilar to the current picture. The measures involved would depend to some degree upon where and when any new development takes place, but could include new abstraction from the area's rivers, new ground water abstraction, small reservoirs associated with the Loddon and Blackwater, and a new major resource such as a reservoir at Abingdon, serving this and other areas. Most of the individual water supply catchments would appear to need upgrading to various degrees to serve RPG9 + 50% (details in Appendix 4).

55. However, there are some important caveats to this picture:

- The development of something like a reservoir is a long, controversial and uncertain process, which can take in excess of ten years. Work on some of these developments should be starting now, if water supply is not to be a major barrier to the South East Plan's objectives later in the plan period.
- In some cases, a major input is required from the Environment Agency at the initial stages of project planning. It is not at present clear that they are resourced to deliver this input in a timely manner. This reflects not simply a lack of funding, but also the general shortage of suitably qualified staff available to do the work;
- Reductions in existing abstraction licences could be imposed by the Environment Agency. These occur as a result of investigations which show the abstraction in question is having an unsatisfactory impact on designated sites of environmental importance, such as designated Habitats Directive sites or on particular streams or rivers. Such reductions in abstraction licences for environmental reasons are referred to as sustainability reductions;
- The water companies do not have a free hand, in terms of the costs they can incur and pass on to the consumer. This is subject to the scrutiny of their regulatory body, OFWAT.

56. The water companies are concerned that the draft determination from OFWAT is seriously unrealistic, both in terms of the activities required and the cost of these, in meeting projected growth. The water companies have made this clear to OFWAT, and there is to be a series of meetings between the parties, but OFWAT will make the final decision in December.

57. **Waste water:** This is a much more uncertain and potentially problematic part of the equation. It requires a much more detailed approach – in most cases, at below local authority level – to understand the potential problems and their possible solutions. As mentioned above, the Environment Agency issues consents which govern the purity standards of waste water discharged from sewage works. The simple equation is that more development means more sewage throughput, which in turn means that any waste water must be subject to a more stringent purity standard, in order to maintain a given standard of water quality in the water course receiving the discharge. This in turn often means more investment. The Agency has identified 52 sewage works within Thames Water region alone, where waste water quality standards are already marginal, and where an increased throughput could cause them to fall below acceptable standards (standards which are

themselves increasing, as a result of new legislation). Of these 52, 21 are within the Western Corridor and Blackwater Valley.

58. Again, the upgrading of these works can be a long and controversial process. Relatively minor works can take up to three years, and major new processes may take 5-10 years (the new Reading works took seven years, and was considered relatively straightforward). New environmental impact regulations have added around 18 months to the timetable and have brought many more schemes within planning control. There are also some sustainability issues relating to the new processing techniques that might be needed to achieve the necessary high standards, some of which are highly energy-intensive.
59. Area-specific matters are considered in Appendix 4. But without pre-judging the local assessment that would be required, it would appear that RPG9 + 50% would require upgrading of the sewage works, or the mains serving it, or both, in virtually every drainage catchment area within the sub-region.
60. **Conclusions: water:** If water resources and waste water treatment are not to become a major problem within the sub-region, the Regional Assembly should:
- encourage dialogue and early investment by the agencies concerned, to ensure that the necessary facilities are planned and developed in a timely and coordinated manner. This might include encouraging the funding of the testing of new waste water treatment technologies, where these will be needed to meet more stringent emission standards;
 - consider the possibility of a general policy in the South East Plan which would help individual local planning authorities, in appropriate cases, to phase development in relation to the completion of the upgrading of water and sewerage infrastructure in their LDFs;
 - satisfy itself that OFWAT is fully engaged in the debate about the planning of the region and appreciates the full implications of their decisions.
61. **Flooding:** Flooding is a further water-related consideration. The Environment Agency issued new flood zones, in accordance with PPG25, during October. There has not been an opportunity in the time available to study their consequences for the sub-region, but it is clear that these are likely to be an additional new constraint for some of the authorities at the eastern end of the sub-region, in particular.
62. **Water: Inter-regional considerations:** The sub-region does not function as a self-contained catchment. The proposed reservoir at Abingdon would primarily benefit growth in London and the upper Thames region including Swindon and Oxford. The Western Corridor would benefit indirectly, by virtue of some of the pressures on water sources within the study area being eased. The proposed growth area at Aylesbury will draw its water supply almost entirely from that part of the Thames within the Western Corridor. A scheme for abstraction in the Taplow area, related to this, is planned for completion in 2008.
63. **Health-related issues:** The health services across the area are currently undergoing their own comprehensive review, the timetable for which does not coincide with that of the Regional Assembly. They have, however, undertaken

to respond within our timetable to our preferred strategy, once we present it to them. In the meantime, Appendix 4 discusses the nature of the changes taking place within the Health Service and what these might mean for planning, cost and service delivery, and looks at some of the funding problems affecting the health authorities serving the sub-region.

Minerals and waste implications:

64. It takes between 50 and 60 tons of aggregates to build an average house. The difference between the highest and lowest levels of housebuilding being tested could therefore mean that up to an additional 2.3 to 2.8 million tons of aggregates is required over the plan period. We will need to ensure that the emerging regional minerals strategy, and local policy derived from it, makes the appropriate level of provision. The upper figure is equivalent to almost two years' aggregates production from Berkshire, under the currently proposed regional apportionment.
65. The average household generates between 1.0 and 1.5 tons of waste per year. Again, comparing the highest and lowest development options, this could mean a difference of up to almost 70,000 tons of waste alone per year for the sub-region's local authorities to process.
66. An illustration of one of the unexpected costs of growth is DEFRA's Landfill Allowance Trading Scheme, introduced in summer 2004. These are the equivalent of targets for the maximum amounts of household waste allowed to go into landfill. They cover the period up to 2020. The allowances are based upon 2001 waste arisings and come with penalties, if exceeded. For areas facing a large population increase but with fixed allowances, there is the prospect of significant additional costs arising from these penalties, unless the Government makes an appropriate allowance for planned growth.

Implementation and delivery of infrastructure:

67. Appendix 4 to this report represents the first steps in a major piece of work to identify the infrastructure needs arising from growth, their cost and the means of providing them. For the reasons explained in that appendix, it is not possible to do more than take tentative first steps at this stage, but it is nonetheless vital that a clear programme for the delivery of that infrastructure is developed alongside the emerging regional strategy. We need to achieve as much certainty as is possible with a long-term strategy that the infrastructure will be delivered in sufficient quantities and in a timely manner. Once a preferred scale and distribution has been arrived at, we will assess in more detail its implications for the delivery of more local services. It is not possible to consider these in any but the most general of terms beforehand. All of this further work will draw upon examples of best practice from the more established sub-regions and elsewhere. It will also be informed by the work being commissioned by the South East County Councils on the cost of infrastructure, the first phase of which should be available shortly.

Inter-regional linkages:

68. The main inter-regional issues that need to be addressed are:
 - **Transport:** The sub-region has a role as a key transport conduit, linking our neighbouring regions (and much traffic from further afield) with

destinations like London, Heathrow and the Channel Tunnel. Forecasts of the available capacity along the sub-region's main transport corridors (principally the M3, M4, M40, M25, A34 and, where applicable, their associated rail corridors) need to have regard to the growth aspirations of our neighbours. There are also issues concerning the relative priority that is given to long-distance and more local movements along the sub-region's main transport corridors. If undue priority is given to long-distance movement, it could further restrict the available capacity for local movement, with serious consequences for the sub-region's economic efficiency and quality of life. In addition, there are questions about the adequacy of some of the key inter-regional transport linkages; in particular those between the Milton Keynes/Aylesbury growth area and the Thames Valley/Heathrow;

- **Economy:** The balance between labour supply and demand in neighbouring sub-regions will determine the extent to which they are able to contribute to the labour needs of the Western Corridor, or will be competing with us for local labour supplies. Many of our adjoining areas do not appear to have systematic forecasts of their future labour supply/demand balance, but the anecdotal evidence gathered so far suggests that many of them expect to experience, to varying degrees, similar labour shortages to those forecast for the Western Corridor/Blackwater Valley.

Sub-regional policy:

69. This report identifies the following areas to be addressed through sub-regional policy:

- the preferred scale and distribution of housing growth, leading eventually to district-level housing allocations;
- establishing a sub-regional figure for unmet housing need;
- a strategy for the promotion of smart growth, to help address the labour supply needs of the sub-region;
- a strategy for affordable housing which (a) sets a regional context; (b) explores new ways of achieving higher levels of affordable housing; (c) gives due recognition the particular needs of this sub-region and others like it and (d) within those broad guidelines, allows local discretion in identifying the scale and nature of need in the light of local knowledge;
- a sub-regional strategy for the release and re-use of MoD land as an integral part of the overall land supply: either (a) for development or (b) as protected open space, for amenity and the preservation of fauna and flora;
- a transport strategy that addresses the needs arising from both current levels of travel and from the scale and distribution of additional growth;
- a timetabled and costed sub-regional programme for the provision of water-related and other infrastructure needed to address existing shortfalls and support further growth.

70. **Sustainability appraisal:** The preferred strategy will undergo a sustainability appraisal, following the procedure laid down at a regional level.

Further work required:

71. The time and other constraints on this study inevitably mean that there are still many gaps in our understanding to be filled. The following are taken from earlier sections of this report:

- Refine our estimate of unmet housing need for the sub-region;
- Carry out some more refined testing of the forecasts of housing need;
- Improve our understanding of the factors underlying sub-regional patterns of migration – why is there a net flow of people out of the area?
- Improved testing of the forecasts of labour demand, including testing their sensitivity to differing assumptions and looking at the balance at a more local level and what this might mean for future commuting patterns;
- Improved understanding of the working of neighbouring sub-regional economies and how they impact upon our own;
- Improved understanding of the component parts of smart growth, their potentials and limitations, and the development of a strategy to promote it;
- Working with the Assembly and others to develop an affordable housing strategy that is geared to the needs of this sub-region and areas like it;
- Clarify the likely timing of the release of any major MoD sites in the sub-region, their potential and their constraints;
- Refine our view of the transport needs associated with each of the growth options;
- Obtain fully costed and timetabled proposals for investment in water infrastructure, designed to meet the needs of the preferred scale and distribution of growth;
- Understand better what the combined impact of housing growth and of the changes taking place within the Health Service itself will be for the sub-region, and their planning and cost implications;
- Quantify more accurately the minerals and waste implications of the preferred strategy and ensure that they are accommodated within emerging regional and local policy;
- Develop an understanding of the role that spatial, as distinct from land-use, policy will have in the south-east plan, and what the sub-regional dimensions of this are. One specific example, referred to in the brief, is the development of a learning and skills strategy, to ensure that the local labour force has the appropriate mix of skills;
- Consider the economic growth rates that the housing levels referred to in paragraph 14 (RPG9 and RPG9 + 10%) would equate to and how these would be likely to be divided between the different components of growth - e.g. productivity, higher activity rates, workers resident outside the sub-region.