

**CAPITA SYMONDS**

**Hewdon Consulting** *with Professor Janice Morphet*



Surrey Improvement Partnership

# Surrey Infrastructure Capacity Study

June 2009

Final report 1A: Demographic analysis, governance arrangements, funding outlook and the cost associated with non-delivery

TRANSPORT  
TRAFFIC  
DEVELOPMENT  
PLANNING  
URBAN DESIGN  
ECONOMICS  
MARKET RESEARCH

[colinbuchanan.com](http://colinbuchanan.com)

# Surrey Infrastructure Capacity Study

## Final report 1A: Demographic analysis, governance arrangements, funding outlook and the cost associated with non-delivery

Project No: 156891  
June 2009

10 Eastbourne Terrace,  
London,  
W2 6LG  
Telephone: 020 7053 1300  
Fax: 020 7053 1301  
Email : London@cbuchanan.co.uk

Prepared by:

Approved by:

---

E. Humphreys, Prof. J. Morphet and D. Williams

---

M. Bianconi and J. Pounder

Status: Final Report

Issue no: 1

Date: 25 June 2009

sicp final report 1a.doc

---

(C) Copyright Colin Buchanan and Partners Limited. All rights reserved.

This report has been prepared for the exclusive use of the commissioning party and unless otherwise agreed in writing by Colin Buchanan and Partners Limited, no other party may copy, reproduce, distribute, make use of, or rely on the contents of the report. No liability is accepted by Colin Buchanan and Partners Limited for any use of this report, other than for the purposes for which it was originally prepared and provided.

Opinions and information provided in this report are on the basis of Colin Buchanan and Partners Limited using due skill, care and diligence in the preparation of the same and no explicit warranty is provided as to their accuracy. It should be noted and is expressly stated that no independent verification of any of the documents or information supplied to Colin Buchanan and Partners Limited has been made

## Contents

<b>1</b>	<b>Introduction</b>	<b>1</b>
1.1	The Surrey Infrastructure Capacity Programme	1
1.2	Context for this study	1
1.3	Terms of Reference	2
1.4	Study approach	2
1.5	Deliverables	4
<b>2</b>	<b>Demographic and development drivers</b>	<b>6</b>
2.1	Population growth	6
2.2	Impact of planned development	7
2.3	Demographic change	8
2.4	Population data used by service providers	10
<b>3</b>	<b>Governance arrangements</b>	<b>12</b>
3.1	Policy Background	12
3.2	Infrastructure delivery: governance arrangements to date	14
3.3	Outcomes	20
<b>4</b>	<b>Infrastructure funding</b>	<b>22</b>
4.1	Overview	22
4.2	Local government	24
4.3	Issues in local government funding	25
4.4	Housing	27
4.5	Developer contributions	28
4.6	Community Infrastructure Levy	29
4.7	Conclusions	30
<b>5</b>	<b>Economic costs associated with the non-delivery of infrastructure</b>	<b>32</b>
5.1	Introduction	32
5.2	Methodology	32
5.3	Analysis and results	33
<b>6</b>	<b>Conclusions</b>	<b>38</b>
	Appendix 1 – population profile	
	Appendix 2 – references	

## Tables

Table 1.1:	Work Packages and Tasks	3
Table 1.2:	Strategic infrastructure included in phase one of the Infrastructure Capacity Programme in Surrey	4
Table 2.1:	Total Fertility Rate (TFR)	6
Table 2.2:	Source of information used to plan future needs	11
Table 3.1:	A snapshot of recent policy changes relevant to infrastructure planning	13
Table 3.2:	Membership of the Infrastructure Providers Stakeholders Group	18

Table 4.1:	Housing by tenure - 2006 (ONS)	28
Table 5.1:	Surrey GVA and annual earnings	34
Table 5.2:	Education provision	34
Table 6.1:	Population of Surrey districts and boroughs	42

## Figures

Figure 1.1:	Study Methodology	3
Figure 2.1:	Variance between ONS based household projections and adopted SE Plan housing targets	7
Figure 2.2:	Annualised housing targets for draft SE Plan and adopted SE Plan in comparison to annual past completions rate.	8
Figure 2.3:	Surrey population pyramid 2006	9
Figure 2.4:	Surrey population pyramid 2026	9
Figure 3.1:	Governance Diagram	15
Figure 4.1:	Distribution of capital spending by LA Service 2007/8 (ONS)	24
Figure 6.1:	Population breakdown by age (ONS, 2007)	41
Figure 6.2:	Total population increase 2001-2007 (%)	42

# 1 Introduction

## 1.1 The Surrey Infrastructure Capacity Programme

1.1.1 In 2008 Surrey Authorities began work on a three-year programme assessing infrastructure capacity in Surrey. This will examine the likely effects of the housing, employment and population growth patterns on the current public infrastructure provision. The outcomes of this work will help determine what and where investments in infrastructure will be needed to match future capacity levels.

1.1.2 The key outcomes of the Surrey Infrastructure Capacity Programme will be:

- An evidence-based analysis of strategic infrastructure capacity and conditions;
- A strategic assessment / evidence base analysis of supporting infrastructure required to manage the effects of housing, employment and population growth;
- A monitoring scheme which maintains and updates infrastructure provision (which is delivered by a wide range of bodies including local government);
- A governance and stakeholder model which empowers and engages the wide spectrum of stakeholders in Surrey;
- A dedicated set of workshops targeted at Officers and Members to increase their individual skills set when dealing with major planning applications that have a wider effect than their own constituency;
- An agreed set of strategic infrastructure schedules that are backed up with financial costs for delivering them.

1.1.3 The programme is designed to engage all eleven district and borough councils, along with other infrastructure providers, to plan the future infrastructure required. As the programme progresses, all parties will need to ensure that a collaborative approach is adopted and that the opportunities for asset rationalisation and the co-location of services are fully scoped.

## 1.2 Context for this study

1.2.1 The South East Plan sets out the broad development strategy for the region. The Secretary of State published Proposed Modifications in July 2008 and the final version was adopted in May 2009. The Plan identifies the need for Surrey to accommodate a minimum of 57,920 additional dwellings over the period 2006-2026. This equates to over a 20% increase over the numbers proposed in the original draft Plan (2006).

1.2.2 In recent years almost all development in the County has taken place in a piecemeal fashion on urban infill and windfall sites. This reflects the extensive Green Belt and environmental designations and other constraints to development which cover large parts of the County. This type of incremental small scale development places a cumulative burden on existing infrastructure which is very difficult to measure and plan for. It is also difficult to effectively capture developer contributions to mitigate the impact of such development. The result has been a time lag in the provision of many services or non-provision of others resulting in what is now commonly termed an 'infrastructure deficit'.

1.2.3 Although all districts and boroughs in the County will continue to accommodate significant levels of small scale development, the planned scale of growth is likely to necessitate strategic site releases around the regional hubs and large scale urban extensions. This presents new challenges and opportunities in terms of infrastructure delivery.

## 1.3 Terms of Reference

1.3.1 Colin Buchanan, in association with Capita Symonds, Hewdon Consulting and Professor Janice Morphet have been commissioned to undertake work in year 1 of this programme, and to begin to examine the infrastructure needs resulting from the planned additional growth in Surrey over the next 20 years.

1.3.2 The Terms of Reference for this project set out the following objectives:

- Undertake a comprehensive assessment of the quality and capacity of existing hard and soft infrastructure across Surrey;
- Create a benchmark of existing infrastructure provision which identifies how well existing needs are met;
- Create a baseline position against which future infrastructure capacity issues generated by population growth (in particular in Surrey's growth points / hubs) can be identified and assessed;
- Create a replicable model which identifies ways of assessing anticipated infrastructure needs resulting from housing, employment and population growth which could be applied outside of Surrey;
- Work with the project's steering group to establish a key Stakeholders Group including boroughs / districts, Surrey Police, Surrey PCT and other health and emergency services. As part of the dissemination / engagement exercise with a wider net of interested parties in Surrey, the research team is required to fully participate in a newly formed Surrey Infrastructure Forum.

1.3.3 The brief for the study also specified that the analysis should include a calculation of the economic losses which would result if insufficient infrastructure was provided both in relation to the County and also to that of London.

## 1.4 Study approach

1.4.1 The purpose of this study is essentially threefold:

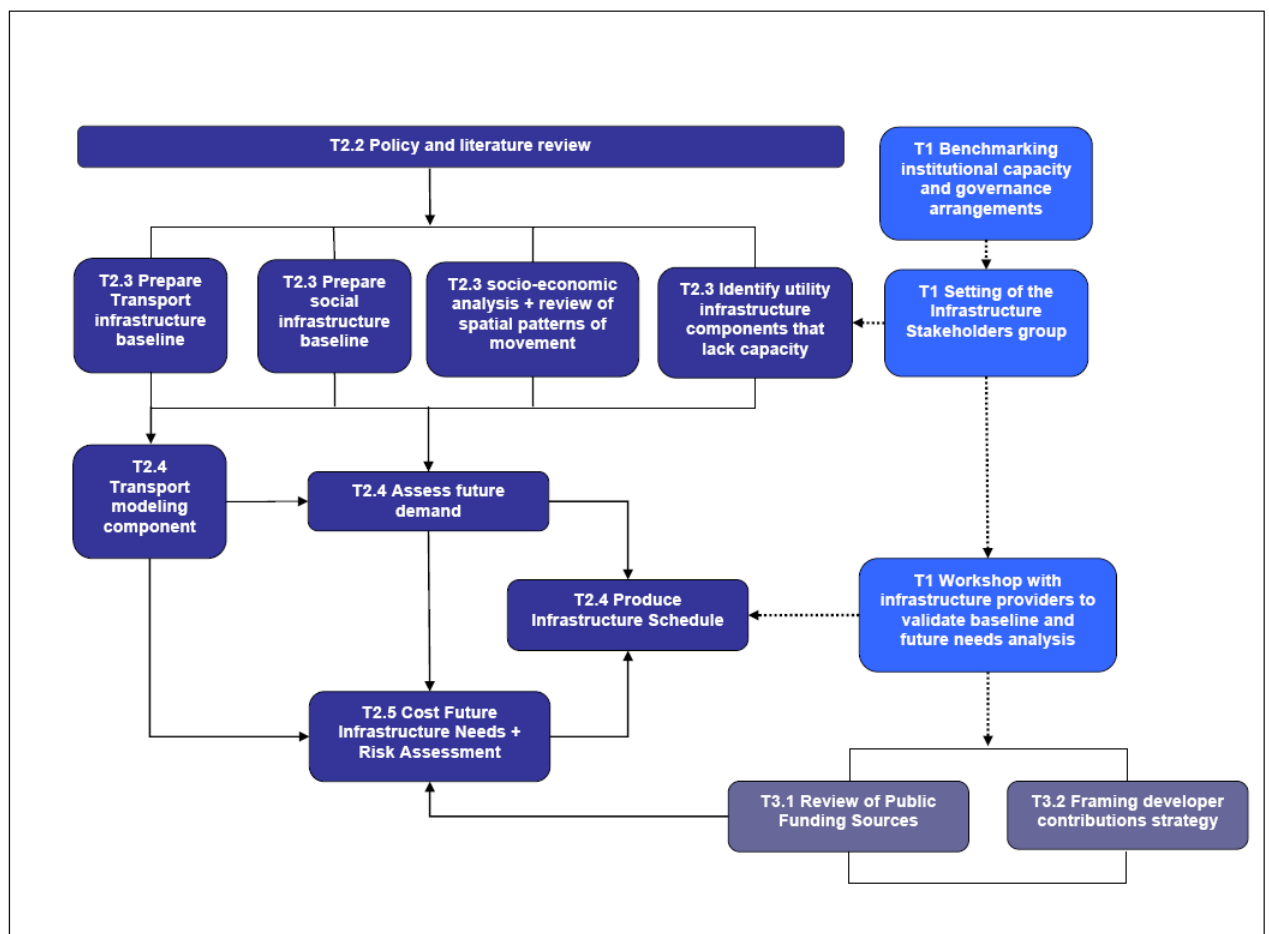
- To create a benchmark of existing strategic infrastructure provision which identifies how well existing needs are met;
- To provide a robust evidence base on the strategic infrastructure needs of the County in relation to the proposed growth identified within the RSS;
- To provide an indication of the potential costs and means of funding the required infrastructure.

1.4.2 Accordingly, the work programme has been organised around three Work Packages (WPs): two sequential Work Packages and associated tasks, alongside an additional overarching Work Package addressing governance issues at each stage of the study.

**Table 1.1: Work Packages and Tasks**

Work Packages	Associated Tasks
<b>WP 1:</b> Governance arrangements	Benchmarking capacity Establishing Stakeholders Group Other stakeholder engagement (workshops/forum)
<b>WP 2:</b> Infrastructure needs assessment	Task 2.1: Inception meeting Task 2.2: Best practice review, analysis of service standards and key planning data Task 2.3: Baseline analysis of infrastructure demand Task 2.4: Assessment of future demand Task 2.5: Cost future infrastructure needs Task 2.6: Economic impact
<b>WP 3:</b> Infrastructure funding and delivery	Task 3.1: Review of public funding sources Task 3.2: Framing a developer contributions strategy

**Figure 1.1: Study Methodology**



1.4.3 Draft Final Report 1A brings together the findings emerging from Work Packages 1 and 3 and is structured as follows:

- Section 2 provides a context for the analysis. It gives an overview of the population projections currently available, those used for the purpose of this study as well as those currently adopted by the various service providers;
- Section 3 gives details of the work undertaken as part of the governance package, the work carried out with the Key Infrastructure Service Providers Group (KISP) and the Surrey Infrastructure Forum;
- Sections 4 provides an overview of infrastructure funding sources;
- Finally, Section 5 contains an assessment of the economic costs associated with the non-provision of infrastructure.

## 1.5 Deliverables

1.5.1 Our analysis has concentrated on components of infrastructure which cut across district boundaries and have a catchment area which goes beyond that of individual districts. The following infrastructure components were selected for the analysis:

**Table 1.2: Strategic infrastructure included in phase one of the Infrastructure Capacity Programme in Surrey**

Infrastructure Type	Components
Education	Secondary, further and higher
Health	Secondary
Social Care	Adult social care
Green Infrastructure	Strategic open spaces (not local parks and gardens)
Emergency Services	Police, fire and rescue and ambulance services
Waste Disposal	Municipal waste
Utilities	Water supply and treatment, gas and electricity (provision and distribution), renewable energy
Flood alleviation and defence	
Transport	Strategic corridors for roads, rail and buses

1.5.2 Report 1A is one of five key deliverables of year 1 of the Surrey Infrastructure Capacity Programme. The other outcomes, forming part of this commission comprise the following:

- Report 1B, which provides a supply side assessment of current provision and future needs for the discrete components of infrastructure types identified above;
- A GIS 'live' database showing locations, conditions and levels of capacity (where made available by service providers) for individual components of infrastructure and/or facilities;
- An infrastructure schedule (Excel spreadsheet) detailing future capital commitments, the phasing of the various schemes, capital costs (where made available by service providers), estimated revenue expenditure and lead agencies responsible for their delivery;
- A series of 'Service Guides' written for County and District planners detailing the sequential steps, key information sources and thresholds which can be used to undertake a baseline analysis of current provision and project forward future needs for each infrastructure domain considered in the main report;
- An updated list of contacts for each service/infrastructure provider, detailing key staff in charge of the management of estates and facilities.

- 
- 1.5.3 Report 1A should be read in conjunction with the material contained in Report 1B, the GIS 'live' database and the infrastructure schedule.

## 2 Demographic and development drivers

### 2.1 Population growth

2.1.1 Changes in population and demography are a key determinant of demand for most forms of infrastructure (directly or indirectly) and are also a significant factor in shaping the form of service provision. Changes in population characteristics and demography can have a significant impact on future service provision independent from housing related growth in a given area. Changes to the number of births and the proportion of elderly people in the population, for example, have an obvious impact on infrastructure requirements such as healthcare and social services.

#### **Population projections used in this report**

2.1.2 For the purpose of this study, ONS population projections (based on 2006 mid-year estimates) have been used as a base for discussions with service providers and have also been used to calculate revenue costs. These sub-national projections were published in 2008 and use recent past demographic data to form assumptions about future demographic behaviour. The population is projected for each year by ageing the population from the previous year, applying local fertility and mortality rates to calculate the number of births and deaths, and then adjusting the figures to account for local area migration. It should be noted that these figures are being projected forward from a number of years of high economic growth, with increasing international in-migration and high fertility rates. They take no account of planned housing development as set out in the RSS or LDFs.

**Table 2.1: Total Fertility Rate (TFR)**

<b>Geographical Area</b>	<b>Total Fertility Rate (TFR)</b>
England (national average)	1.91
South East (regional average)	1.90
Elmbridge	1.97
Epsom and Ewell	1.95
Guildford	1.66
Mole Valley	2.06
Reigate and Banstead	1.98
Runnymede	1.47
Spelthorne	1.92
Surrey Heath	1.94
Tandridge	2.05
Waverley	2.04
Woking	2.15

Source: NCHOD<sup>1</sup> figures (2007)

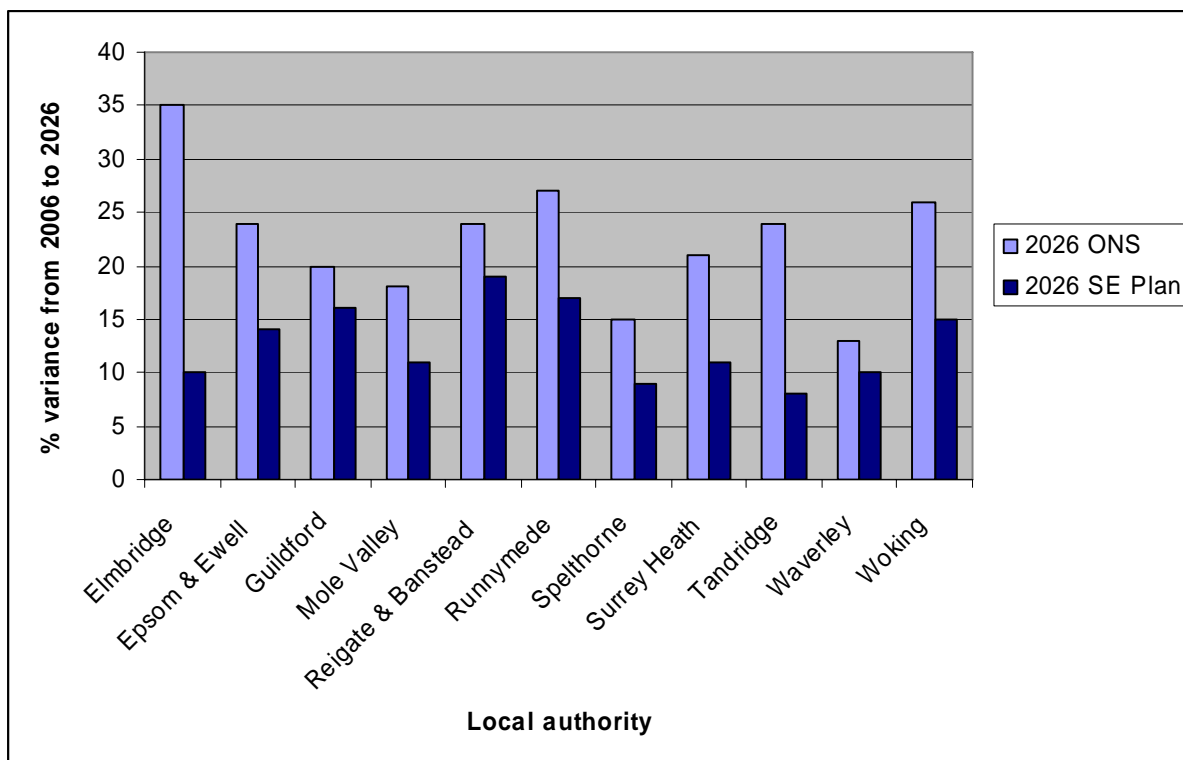
<sup>1</sup> NCHOD stands for the National Centre for Health Outcomes Development and is a national resource concerned with all aspects of health outcomes assessment. It was created in April 1998 following the outsourcing of the Department of Health's Central Health Outcomes Unit and is based jointly as the London School of Hygiene and Tropical Medicine, University of London and the Department of Public Health, University of Oxford. Its current work programme is funded by the Information Centre for Health and Social Care.

## 2.2 Impact of planned development

2.2.1 In preparing the South East Plan, the Regional Assembly (SEERA) commissioned policy-based (dwelling-led) population projections to assess the impact of the proposed level of development on demographic change across the South East. This data is not available at county or district level. It is, however, available at regional and sub-regional scales. It demonstrates that with the housing growth proposed in the draft Plan, the scale of population growth across the South East would be significantly less than trend-based projections suggest. It should be noted that the ONS projections used in this report do not take account of targets for housing growth.

2.2.2 These trends are also borne out by the 2006 Based Household Estimates and Projections for England published by CLG in March 2009. The graph below compares the CLG household projections with the allocations within the adopted South East Plan on the assumptions that one additional dwelling = one additional household. The graph illustrates the significant differences in the dwelling-based household estimates and the trend-based household projections.

**Figure 2.1: Variance between ONS based household projections and adopted SE Plan housing targets**



2.2.3 SEERA produced its dwelling-based population projections for the South East Plan Examination in Public. The figures have now been superseded with the publication of the adopted plan (May 2009). We have been advised by the South East England Councils (SEEC) that population projections based on the adopted housing allocations will be commissioned very soon. When the new figures are available, the information in this chapter should be updated by the client. Publication of this data at County level would be helpful.

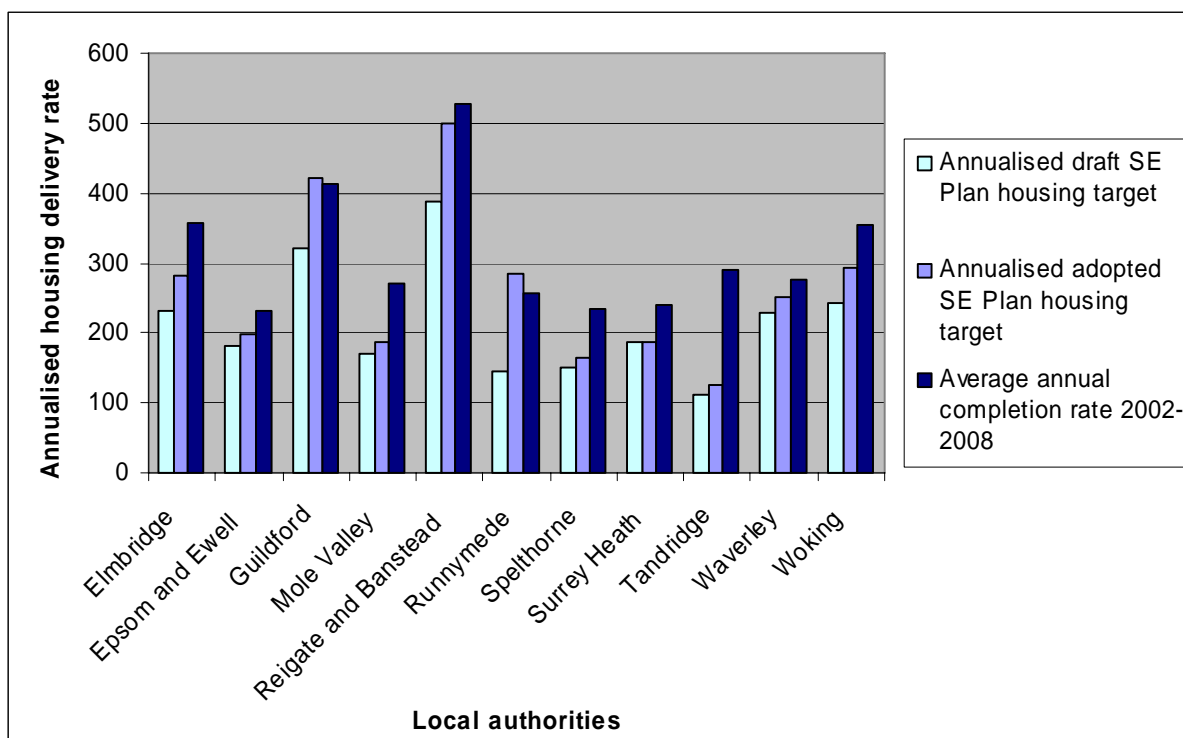
2.2.4 The partnership should work with SEEC and Surrey County Council to do further work to provide greater certainty over the issue of population and demographic change. In the

meantime, we would recommend that for the purposes of future planning, the Surrey Strategic Partnership facilitates some agreement between partners regarding an appropriate range (or scenarios) of demographic change across the County for the purposes of long term planning.

2.2.5 We suggest the ONS projections are treated as upper end projections in terms of the overall scale of growth and will need to be set against any dwelling-led projections which are commissioned by SEEC and/or Surrey County Council.

2.2.6 The South East Plan (2009) sets out the broad development strategy for the region to 2026. The Plan allocates 57,920 net additional dwellings to Surrey districts over the period. This is a significant increase on the original proposals put forward by the Regional Assembly in the draft Plan in 2006. However, targets remain lower than past average annual rates of development achieved across the County since 2002. This is illustrated in Figure 2.2.

**Figure 2.2: Annualised housing targets for draft SE Plan and adopted SE Plan in comparison to annual past completions rate.**

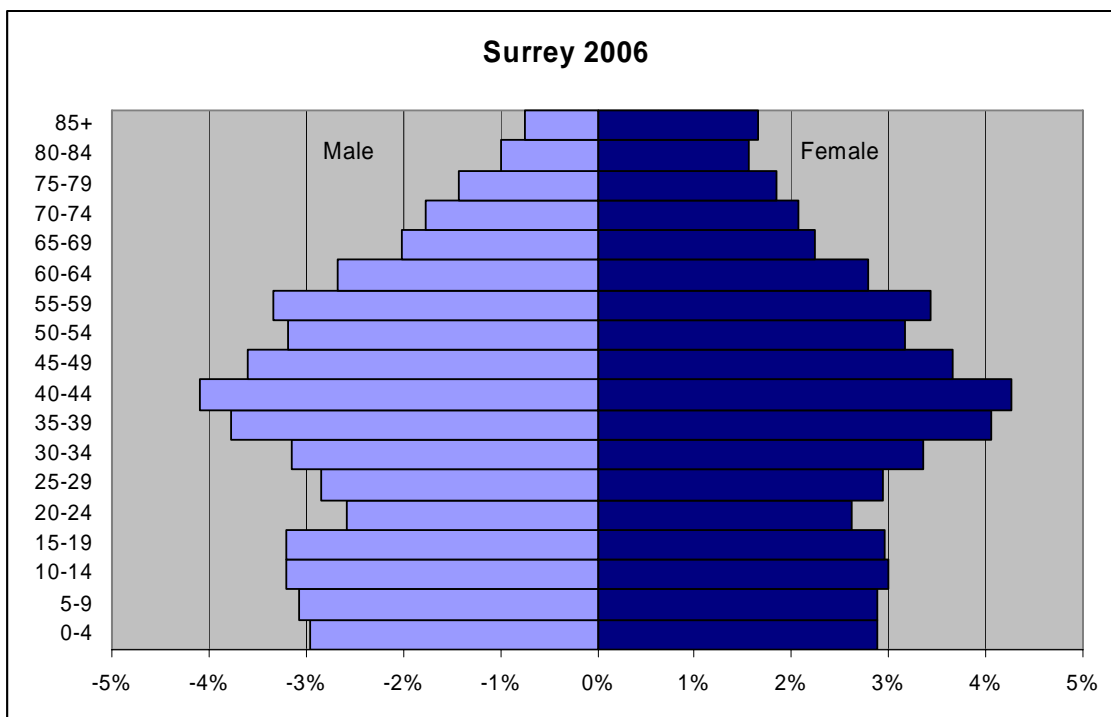


Source: draft South East Plan (2006) and Proposed Changes to the South East Plan (2008)

## 2.3 Demographic change

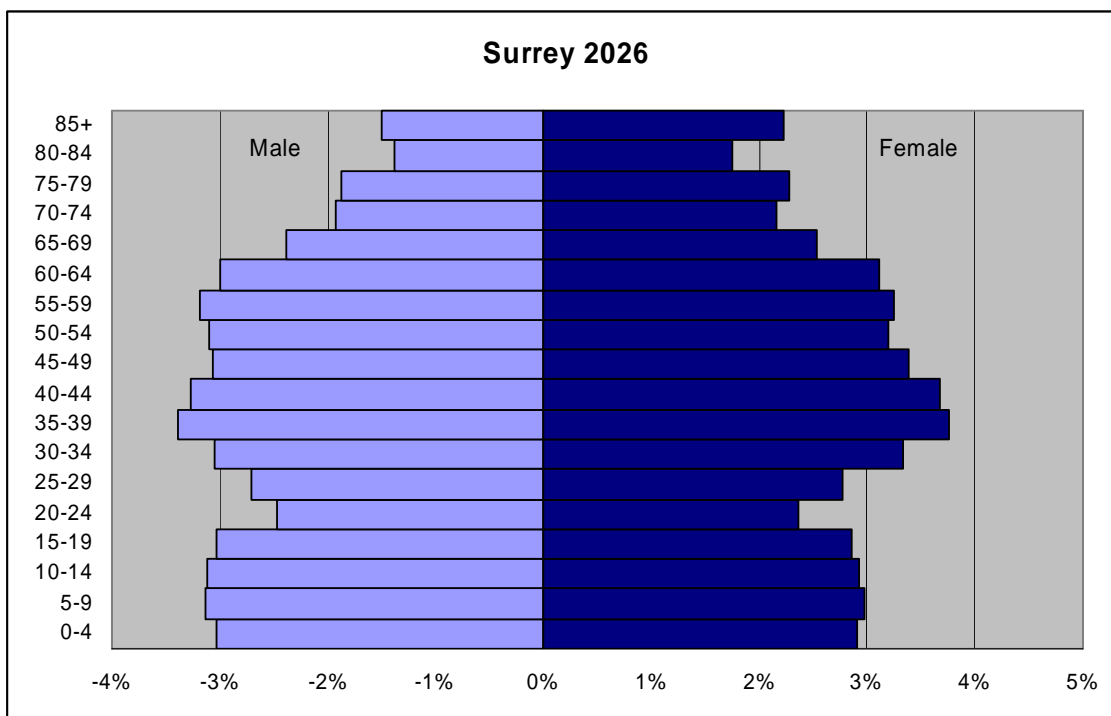
2.3.1 As noted above, for some services such as education and adult social care, the changes in specific age groups of the population have a direct impact on service provision. We have therefore used the disaggregated information for each individual district/borough by age group. Figure 2.3 and Figure 2.4 show the change in population structure in Surrey from 2006 to 2026.

**Figure 2.3: Surrey population pyramid 2006**



Source: ONS population projections (based on 2006 mid-year population estimates)

**Figure 2.4: Surrey population pyramid 2026**



Source: ONS population projections (based on 2006 mid-year population estimates)

- 2.3.2 A comparison of the population pyramids illustrates that the proportion of the population over the age of 40, and especially the proportion of the population over the age of 80, will increase significantly over the period.
- 2.3.3 In actual growth (as opposed to proportionate growth), there are predicted to be significant increases in the population across the county in age cohorts 0-4 and 5-9 and also in the age cohorts over 60, most notably 60-64 and 85+. This pressure at both ends of the population structure will be an important consideration, in particular for service providers involved with the provision of education, adult social care and health care.
- 2.3.4 Appendix 1 presents the population change by age bands for all 11 individual districts and boroughs. The bar charts illustrate the current variation in age structure between the constituent authorities and how this is projected to change by 2026. The most significant area of change across all districts and boroughs can be seen again in the population over 85. In Surrey Heath, Tandridge and Waverley the 85+ cohort is expected to double over the plan period. All three of these districts are also projected to have a decline in the population in the working age cohorts 40-44 (and also to a lesser extent to the 35-39 cohort). This will have the effect of increasing the dependency ratio (the ratio of people in economically active age groups in relation to those in non-economically active age groups).
- 2.3.5 As well as a projected 78% increase in the 85+ population, in Elmbridge the age cohorts 0-4, 5-9 and 10-14 are expected to increase by approximately one third. Epsom and Ewell and Reigate and Banstead are also expected to see a significant rise in the number of people under 15 years of age. In Runnymede, the 0-4 age group is expected to increase by 34%. This is in contrast to districts like Mole Valley where the increase in the under 15's is expected to be marginal.
- 2.4 Population data used by service providers
- 2.4.1 ONS population projections have been used in this report for the purpose of understanding the nature of future needs for various services and age cohorts. However, liaison with service providers has revealed that a variety of projections are being used for the purposes of service planning, and in some cases, population figures are not considered to be driving service requirements. Table 2.2 summarises the data sources employed by different infrastructure providers for the purposes of service planning. Where population data is employed, ONS and South East Plan (population projections or housing allocations) are the sources used.

**Table 2.2: Source of information used to plan future needs**

<b>Service</b>	<b>Population/Housing Figures Used</b>
Secondary healthcare	Based on demographic change rather than population growth.
Secondary education	Demographic data collected from ONS and elsewhere. Historic numbers on roll. Established patterns of demand and parental preference within the borough. Likely changes in demand identified on an objective basis by the County Council's staff.
Further education	Calculations are based on an assessment of learner numbers and demographic change.
Higher education	Planning not based on population change. Essentially market driven.
Police	ONS mid-year estimates South East Plan dwelling-based projections
Fire and Rescue	Risk drivers are not considered to be driven by population numbers but by property types and levels of social exclusion.
Ambulance	Draft South East Plan housing targets and estimated additional population.
Adult social care	Not driven by population/housing growth but by demographic change (i.e. the ageing of the population).
Green infrastructure	Refers to scale of development in the South East Plan.
Waste management	Household increase in the South East Plan.

## 3 Governance arrangements

The conventional approach to infrastructure planning is to prepare a list of infrastructure required over the plan period – usually 15 years – and to concentrate primarily on the expected infrastructure costs from population growth. This approach frequently fails to consider that infrastructure needs and funding streams will inevitably change over time. For example, evidence suggests that the Local Education Authority plan for future provision up to 2017 as it considers planning for a longer term horizon to be too unreliable (see report 1B). It is therefore essential to establish communication channels through which service providers can feed back into the process.

### 3.1 Policy Background

3.1.1 The importance of governance arrangements for infrastructure planning has been a key feature in the design of this project (see Section 2.2 of Interim Report). The drive for integrated infrastructure planning in Surrey does not arise in isolation. The table below sets out a selection of the national policy context which underpins and pushes forward infrastructure planning and delivery tasks in Surrey.

**Table 3.1: A snapshot of recent policy changes relevant to infrastructure planning**

- There is a clear objective to strengthen effective capital and revenue **resource management** by ensuring that the long term vision and priorities for local areas as set out in both Sustainable Community Strategies (SCSs) and Local Development Frameworks (LDFs) are aligned and place-specific.
- There is increasing evidence that the development of a joint evidence base, which includes consultation outcomes, is expected to underpin the infrastructure planning and delivery process. This implies a transparent and jointly used set of data including demographic projections as well as evidence on health, movement, economic skills etc. at County level, the role of the Joint Strategic Needs Assessment (**JSNA**) is emerging as a focal point for the local evidence base and its key findings will need to be taken into account as part of the infrastructure planning and delivery process.
- The development of sub-regional funding approaches can be expected to be extended further across the country in the coming period through **Multi Area Agreements** (MAAs). These sub-regions, also known as Functional Urban Areas, focus on place and necessarily include all the local authorities within them. MAAs bring the opportunity to manage considerable funding locally with other MAAs being given access to over £1bn in some cases. There is a discussion about whether or not this is additional funding but its attraction may be opportunity for local management of this funding which both allows local priorities to be delivered and the opportunity to deliver more from the funding through more efficient management.
- **LDFs** now have a specific role in infrastructure planning and delivery as set out in PPS 12 (June 2008); they also have a responsibility to deliver the SCS, the LAA and deal with public sector delivery locations to see how these can be better aligned with local and service needs.
- A growing understanding of the role of public sector **asset management** to realise benefits for local communities; and on **infrastructure planning** to support new development, including the introduction of the Community Infrastructure Levy (CIL).
- Further support for citizen empowerment, and a **statutory duty to involve** (which came into force April 2009).
- **Local Area Agreements** have been agreed for all authorities, including districts which are co-signatories of county wide LAAs. Each LAA has up to 35 targets together with local targets and these have recently been renegotiated in each area and signed off in March 2009. In some cases, such as housing targets, specific numbers for delivery will be finalised in 2010.
- **The role of LSPs** has been strengthened and whilst they remain non-statutory, named partners now have a 'duty to cooperate' with local authorities in negotiation of the Local Area Agreement (LAA) and in delivering its targets; they also have a lead role in the overview and alignment of resources, consultation, performance management and scrutiny; the role of the LSP in working with the LDF for infrastructure planning and delivery has been set out in *Planning Together*, which was published in an updated version in April 2009 by CLG. In Surrey it has already been agreed that the Area Based Grant will be allocated to the LSP Thematic Partnerships for distribution.
- **Improvement targets** for local areas are now determined through negotiation between central government and local government and enshrined in statutory LAAs; there is greater flexibility of local spend from a 'single pot' of non-ring-fenced grant (Area Based Grant) rather than a variety of separate funding streams.
- The inspectorates of local services are due to introduce the new **Comprehensive Area Assessment** (CAA) in April 2009 within which two elements are proposed: an area assessment looking at how well local public services are delivering better results for local people, and organisational assessments of individual public bodies (councils, fire and rescue authorities, primary care trusts and police authorities).
- Developing focus on **sub-regional spatial tiers** and cross boundary collaboration (e.g. through Multi Area Agreements), emphasising the economic priorities for regeneration and promoting a stronger role for local authorities through the proposed new duty for economic assessment.

Source: *Planning Together* (CLG, 2009)

- 3.1.2 The onward development of the governance arrangements for infrastructure planning and delivery is an important feature of years 2 and 3 of the Surrey Infrastructure Capacity Study. This is not only for building a sound approach based on partnership and trust but also to provide a means of advising other local authorities of the way in which they can develop this approach in order to further their skills and strengths in infrastructure planning and delivery in line with the objectives of the funding body for this work.
- 3.1.3 The box above includes a summary of the key policy initiatives which are setting the context for this more joined up approach to infrastructure planning and delivery. This approach is also supported through Public Service Agreement 20 (PSA20), which is set out in the Comprehensive Spending Review 2007. In this PSA there is a commitment from government to support a more joined up approach to investment and delivery to support both existing communities and locations where new development is taking place. PSA 20 is also supported by a Cabinet Sub-Committee and each government department is being asked to review its approach to capital investment in support of these more integrated ends.
- 3.1.4 At the same time, the implementation of the 2007 Sustainable Communities Act has now led to the publication of Local Spending Reports for each area which identifies the extent of public sector expenditure at the local level – capital and revenue. These Local Spending Reports are expected to be developed further through the initiatives announced in the 2009 Budget for ‘Total Place’ of which there will be 12 pilots to report back by the Budget in 2010.
- 3.1.5 A more integrated approach to infrastructure planning and delivery is also being developed at regional level. The new regional strategies are expected to be rolled out from 2010. Each regional strategy will be supported by a delivery plan which makes it more critical that each locality has a strong evidence based assessment of its infrastructure deficits and further requirements. Most recently, the Government invited a second round of Regional Funding Advice (RFA2) in February 2009. However, this fund only covers some 5% of the central government spending at regional level and in its next iteration it is likely that the funding available through the regional delivery plan could increase significantly.
- 3.1.6 Other organisations such as the newly formed Homes and Communities Agency (HCA) are also developing their approaches to joined-up investment through the means of ‘Single Conversations’ in each area, which they have said that they wish to base around Local Development Frameworks.
- 3.1.7 All of these approaches suggest that having a sound evidence-based approach to infrastructure planning and delivery, which is cross sectoral and owned by the partners will allow Surrey to make a strong case for investment to meet current and expected shortfalls in infrastructure based on a sound approach to using the resources already available to the partners in the most effective ways possible. The governance approach which has been developed for this project has been founded on the potential that policy initiatives will provide for Surrey to be successful in gaining the resources that it needs both now and in the future.
- 3.2 Infrastructure delivery: governance arrangements to date
- 3.2.1 The approach to the development of the governance model for infrastructure planning and delivery for Surrey has been based on a number of existing and new working arrangements. The main concern has been to ensure that there has been full and appropriate stakeholder engagement which can develop as the work progresses. The project has been careful not to establish single issue meetings but to initiate a relationship with providers and stakeholders which is consultative but also retains interest

and engagement. The approach taken has been one that has assumed a gradual build-up in the role of specific groups and the engagement of participants within them. The project has taken the longer term view on governance arrangements which will provide a more robust and sound underpinning to the process.

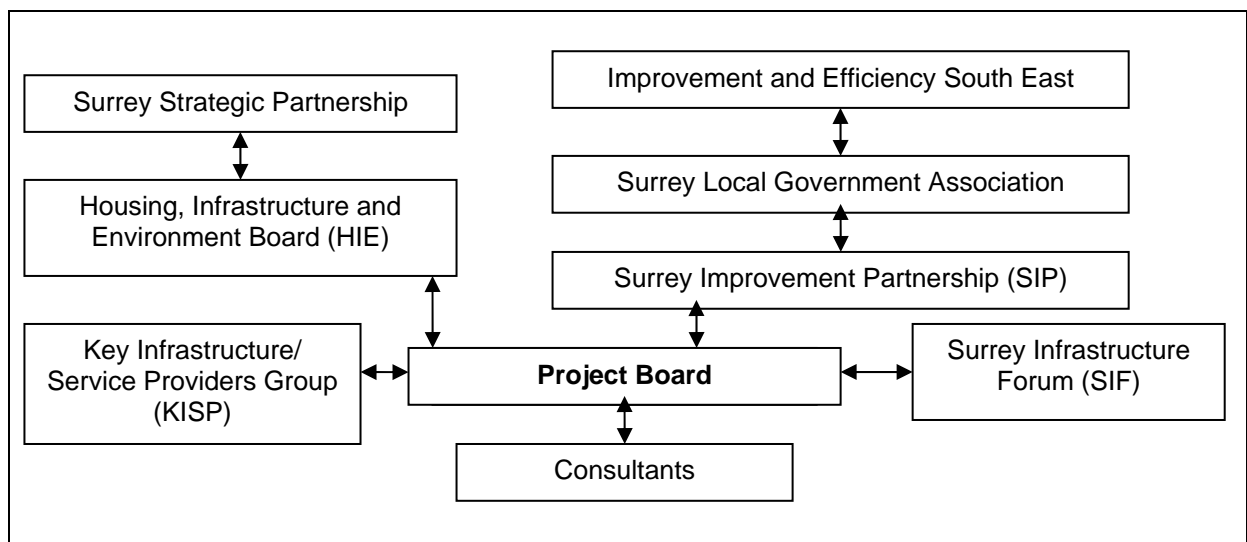
3.2.2 In year 1 of the project, the governance development has been achieved at a number of different levels and involvement will begin to change as the project moves into its second year phase. The primary objective has been to establish good working arrangements between the project stakeholders, the wider community stakeholders and the infrastructure providers. This approach has been successful and it has been possible to see the growing confidence of the project board in the approach to the development of the governance stream and the early positive outcomes it has had.

3.2.3 The research team, working in close partnership with the client group has helped to set up 3 governance structures:

- A project board which played a vital role in steering the project forward;
- A Service Providers Stakeholders Group which informed the baseline and future needs analysis; and
- A Surrey-wide Infrastructure Forum which will disseminate and discuss the findings of the programme with a wider audience including members of local communities, Officers from Surrey district authorities, elected Members and other interested parties.

3.2.4 Figure 3.1 illustrates how these 3 groups fit within the wider governance structure of Surrey.

**Figure 3.1: Governance Diagram**



3.2.5 When the governance approach was considered initially, it was based on a number of initiatives that have already been started within Surrey to respond to this agenda, particularly with the Surrey Planning Officers' Association, which has a long history of cooperative working.

3.2.6 During the course of the first year of the project, it became clear that an earlier consideration of the involvement of the district councils, particular in their role of LDF provision would benefit from being brought as far forward as possible from the second

year. This was achieved in a number of ways. Firstly, John Silvester, a consultant and former member of the Surrey Planning Officer's Association (SPOA), was able to support the relationship between the project and the SPOA, in addition to the role of the SPOA representatives on the Project Board. Two briefing meetings have been held for the SPOA to increase project engagement and create positive conditions for the successful development of year 2 of the project. It is also intended to include representatives of the SPOA in the Surrey Infrastructure Providers Group as much of the infrastructure required will need to be included in the District LDF Core Strategy infrastructure delivery plans and approach to achieving this delivery will need to be in their infrastructure delivery strategies.

- 3.2.7 In the first year's programme, only one aspect of the governance model has yet to be developed. This is the establishment of a group of major land owners which will support the understanding of the thinking of major investors in the area for the future. The establishment of such a group is suggested in PPS 12 and whilst many of the Surrey authorities will have met major land owners as part of their call for housing sites, they may not have had the opportunity to consider landowners who have an active use of their current assets such as the MoD, local authorities, Universities and private landowners. The development of this group is appropriately located in year 2 of the project when it will be possible to set out the infrastructure planning and delivery processes to the major landowners, brief them on the project and to receive their feedback. It is hoped that such a group could meet on an annual basis.

### **Surrey Project Board**

- 3.2.8 Surrey has a county-wide Surrey Strategic Partnership (the upper level local strategic partnership) comprising the local authorities of Surrey, Surrey Economic Partnership, Surrey Police, the Primary Care Trust, Learning and Skills Council, and voluntary, faith, community and business organisations. The Surrey Strategic Partnership (SSP) has established five Thematic Partnerships, including one for Housing, Infrastructure and Environment. This is a forum for progressing the Housing, Infrastructure and Environment. It seeks to develop the effective protection, maintenance and improvement of Surrey's natural and built environment, with specific consideration to the role of housing, transport, climate change, waste, water efficiency and energy. The partnership, where possible, supports initiatives designed to affect attitudinal / behavioural change towards measures tackling climate change. In addition, the partnership keeps abreast of the cross cutting themes of economic development in respect of managing the physical impact of economic growth. Membership comprises the Surrey Planning Officers Association, the Surrey Wildlife Trust, Surrey Chief Executives Group, Surrey Housing Officers Association, Surrey Climate Change Partnership, Transport for Surrey, SEERA, SEEDA, Surrey Waste Officers Group, and Surrey County Council. It is chaired by the Chief Executive of Reigate and Banstead.
- 3.2.9 The Housing, Infrastructure and Environment Thematic Partnership of the SSP has been the sponsor of this project and has set up a specific Surrey Infrastructure Capacity Project Board to manage its progress. This link is important and enables the project to inform and advise the Thematic Board of its progress. The project has received the support of the Chief Constable of Surrey and who has also provided one of his officers to chair the work of the Surrey Infrastructure Providers Forum.
- 3.2.10 The role of the Project Board has been an essential feature of the development of the governance approach in year 1. The Project Board has a clear sense of the engagement that it wishes to see from stakeholders, providers, partners and local authorities and has provided strong leadership in this direction. The consultants have responded to this lead through the development of appropriate approaches which are fit for purpose, informed by experience elsewhere and have been inclusive in their approach. The Project Board

members have also taken a leading role in the roll out of the governance arrangements and this ownership has been an important factor in its success.

### **Surrey Infrastructure Stakeholders Group**

3.2.11 A key achievement of the project to date has been the establishment of the Surrey Key Infrastructure Services/Suppliers Providers Group (KISP). This follows recommended best practice and has the following benefits:

- Supporting the more efficient use of existing assets;
- Creating more joined up ways of public sector capital planning and investment;
- Anticipating the use of public sector threshold funding for additional or changed populations;
- Supporting service delivery points;
- Ensuring that public infrastructure accompanies new development in a coordinated way;
- Providing a means of identifying the local asset base through which additional resources for public infrastructure can be generated;
- Identifying infrastructure requirements for which there is no present funding and which could be the subject of bids to the HCA or other public bodies;
- Providing the private sector with some confidence on the scale of public sector investment which continues to be made;
- Identifying potential investment opportunities for the private sector;
- Supporting the development of sound LDFs; and
- Where appropriate, enabling the better targeting of any developers contributions.

3.2.12 The Group's purpose is to:

- Promote the economic, social and environmental well-being of Surrey through the planning and delivery of physical, green and social infrastructure, supporting the vision for the area, its quality of life and enhances its potential for economic growth;
- Identify the social, economic and environmental infrastructure requirements for the local area based on the area's future vision, as set out in the SCS and to be delivered through the LAA and LDF;
- Identify the land and property assets available in the public sector's ownership in the area under consideration;
- Identify a programme for infrastructure planning and delivery which will include:
  - i. Identifying where existing infrastructure needs to be renewed;
  - ii. Identifying where new infrastructure is required to meet changing population and service needs;
  - iii. Reviewing the potential for joint working, co-location and one-stop delivery points;
  - iv. Undertaking place and settlement reviews of service locations with a view to improving delivery and releasing assets for further development;
  - v. Reviewing existing land and building assets to identify any potential opportunities for remodelling;
  - vi. Considering establishing project management groups to be responsible for more direct delivery;
  - vii. Providing an evidence base for each of the districts' Local Development Frameworks;

- viii. Being part of the delivery strategies required as part of each Local Development Framework.

3.2.13 The Infrastructure Providers Group met for the first time in January 2009 and a second meeting was held in May 2009. It has the following membership:

**Table 3.2: Membership of the Infrastructure Providers Stakeholders Group**

	<b>Members of Stakeholder Group</b>
1	Head of Education, Surrey County Council
2	Head of Children's Services, Surrey County Council
3	Head of Older People's Service, Surrey County Council
4	Head of Performance Management, Surrey Police
5	Detective Chief Inspector, Surrey Police
6	Head of Fire & Rescue, Surrey Fire & Rescue Service
7	Chief Executive, South East Coast Ambulance Service
8	Estates Planning and Management, Surrey County Council
9	Surrey PCT
10	Strategic Health Authority
11	Natural England
12	Environment Agency
13	Surrey County Council for EU Peri Urban (PURPLE) Project
14	Surrey Community Action / Surrey Rural Partnership
15	Head of Environment and Regulation, Surrey County Council
16	South East England Strategy Unit
17	Head of Planning, SEEDA
18	Transport for Surrey Partnership, Surrey County Council
19	Planning Director, Home Builders Federation
20	South East Regional Manager, National Housing Federation
21	Head of Town Planning and Transportation, Sainsbury
22	Highways, Surrey County Council
23	Waste Operations Team Manager, Surrey County Council
24	Chief Executive, Surrey Economic Partnership
25	Infrastructure Planning (South), Asset Management, EDF Energy - Networks Branch
26	Advisor, Thames Valley Energy
27	Scottish and Southern Electric
28	Head of Programme Management, Three Valleys Water
29	Strategy and Regulation Director, Thames Water

3.2.14 In Years 2 and 3 of the project, the development of the Infrastructure Providers' Group will be a key feature which will:

- Support the development of a combined current infrastructure investment programme for Surrey which can be published;
- Identify key decision making processes for investment by public sector providers;
- Identify gaps in infrastructure provision which may be met by the private sector, external funding bids or local decisions about expenditure;
- Help infrastructure providers consider whether they need to review their investment budget cycles and scheme criteria in ways that would enable a more joined up approach across organisations;
- Enable infrastructure providers to have a dialogue with District Councils about the development of their LDF infrastructure planning and delivery strategies and programmes;

- Potentially allow consideration of area based studies where major new growth and/or reviews of current assets will be an important consideration.

- 3.2.15 In Year 2 of the project, the role of the Surrey Planning Officers Association will be more to the fore as the work on the strategic infrastructure requirements and the interrelationship between the infrastructure providers and forum is developed alongside local assessments of need. Detailed consideration of how this might be undertaken is still underway but in order to ensure that all authorities are engaged in the process, we would suggest that in addition to the SPOA group that consideration should be given to the establishment of a Surrey Planning Portfolio Holders' Group which could meet three times a year. The terms of reference for such a group would include keeping an oversight of the approach being taken and discussing any potential issues which emerge that would benefit from wider consideration. It is suggested that the first meeting of this group is held early in Year 2 of the project – perhaps in September, so that Portfolio holders can be briefed on the project, its direction and the likely impact on district LDF outcomes. The second and third meetings could be held in December and March and could report on progress and issues.
- 3.2.16 In year 2 there will also be a need for a number of other Surrey groups to be made aware of the work that is being undertaken in the Surrey Infrastructure Capacity Programme and it is suggested that presentations be made early on to the following groups as each will be engaged in the development of the work from year 2 onwards. It is also suggested that each district council may take on the responsibility for the relationship with each group and participate in the initial presentation and onward relationship management to develop:
- Surrey Chief Executives;
  - Surrey Chief Technical Officers;
  - Surrey LSP Officers;
  - Surrey SCS Officers;
  - Surrey Observatory/Evidence Team;
  - Surrey Housing Officers;
  - Surrey Treasurers;
  - Surrey Leisure and Recreation Officers;
  - Surrey Property Officers;
  - Surrey Secretaries and Legal Officers Groups.
- 3.2.17 There will also need to be a session between the SPOA and the LAA lead officers and possibly some of the specific target owners to enable the district councils to identify where the LAA is likely to have direct delivery implications for their individual LDF Core Strategies.

### **Surrey Infrastructure Forum**

- 3.2.18 The Surrey Infrastructure Forum has been established for the large number of stakeholders who are essentially interested in the process and outcome of the Infrastructure Capacity Project. It had its first meeting in Woking in February 2009 and is due to meet again in the second half of the year. Despite difficult weather conditions there was a good attendance at the Forum and the format of the session was interactive and inclusive. A full report of the meeting of the Forum has been produced as a separate report which is available on [www.surreyimprovement.info/sicp](http://www.surreyimprovement.info/sicp). The programme included:
- An introduction to the project by David Hill, Chief Executive of Guildford and chair of the Project Board;
  - A presentation on the approach to the project by John Pounder, Project Director from Colin Buchanan;

- Facilitated work group sessions which enabled all participants to fully discuss and record their views on infrastructure priorities which will be taken into account as the project progresses.

3.2.19 All of the presentations and material from the workshops has been included in the report of the event and this will provide a means for reporting back progress on the Infrastructure Capacity Project to the next meeting of the Forum later in 2009.

3.2.20 At a wider level, considerable progress was made during the work on producing the South East Plan on drawing key stakeholders together. For example, the Water Resources South East group comprising water companies and the Environment Agency is continuing to work on modelling the impact of the growth involved in the regional plan, and also on modelling the impact of the EU Water Framework Directive (see chapter 4 of Report 1B).

### 3.3 Outcomes

3.3.1 The success of the governance frameworks put in place in year 1 will mainly be judged by outcomes in years 2 and 3. These should ensure that infrastructure planning and delivery is embedded into the leadership role of the local authorities through their Local Strategic Partnerships, councillors and staff. Infrastructure planning and delivery is now seen as a corporate activity and the governance outcomes for Phase 2 are designed to ensure that there is development in the skills and management of this process across Surrey. Although this project is primarily geared toward the improvement and provision of physical infrastructure, it also has an important role in developing the skills of those with responsibility for democratic accountability and leadership as well as those of professional and technical staff supporting this work.

3.3.2 The ways in which the next stage can be achieved will relate to the enhanced governance arrangements that are proposed and are set out here.

- A clearer link between the County **LSPs** and infrastructure planning and delivery strand that will follow as part of Phase 2 of the project. As currently established, the work is likely to be linked through the Housing, Infrastructure and Environment Thematic Partnership of the Surrey Strategic Partnership. District and borough councils will also need to make their own arrangements for the more detailed work on infrastructure planning and delivery that is required at the local level as part of the LDF.
- A strengthened **Surrey Infrastructure Forum** which relates directly to the Surrey Strategic Partnership.
- A functioning Surrey **Key Infrastructure Service Providers** Group (KISP) which would be developing a common agenda and outcome focussed working approach. This would follow the work that has been started in this project and develop into a regular forum supported by the County Council. Both meetings of the Surrey Infrastructure Providers Forum have been positive, with strong support from a range of bodies including the Environment Agency, Fire and Rescue, Further and Higher Education and the Utilities. The next stage of this work will be the formal invitation from the LSP Housing, Infrastructure and Environment Thematic Group to join this group and set its agenda and programme for the coming year. This will need to take into account the priorities of the Infrastructure Providers as well as the local authorities and other public agencies.
- A **Surrey Major Landowners Group**. This is a requirement of PPS12 and is not associated with a call for housing sites. Its purpose is to engage those with a major interest through their land ownership in the County whether this is for

agricultural, private management, environmental management or public services purposes. A Surrey Landowners Group could meet twice a year and provide a means of two way briefing and communication. The group could comprise of the full range of landowners including CLA, MoD, Health, major private landowners and utilities companies. The County would also need to be represented to cover its own land interests.

- A **SPOA LDF project group** which can support the development of year 2 of this work (in practice this might be the main group but this would need to be discussed with SPOA).
- A **Surrey Planning Portfolio Holders Group** which is bringing oversight and leadership to the work on District LDFs and can also be the focus for member training and development programmes as needed.
- A significant move towards each authority in Surrey having an infrastructure group as part of its **Local Strategic Partnership** as set out in Planning Together (CLG, 2009) and the Steps Approach to Infrastructure Planning and Delivery (PAS, 2009). In some cases authorities may decide to combine these but if this is the case then the arrangements need to be fit for purpose and ensure that the outcome will meet the 'effectiveness' test of soundness for each authority's DPDs including Core Strategies and AAFs. To comply with PPS 12, Districts would also need to have Major Landowner's Groups which may appropriately have a different mix of landowners meeting but on the same format. Some agencies and organisations may need to attend at both levels.
- A process of briefing and working with all other key **Surrey public sector groups** of officers which will support all the public sector services in Surrey.
- A **process** for working with specific public sector groups that will be established during the course of Phase 2 that will provide a sound base for infrastructure planning and delivery.
- A process for working with specific groups that will be established during the course of Phase 2 that can be translated into **working and advice notes** that will be deliverable for the project as a whole and that can be shared more widely with other local authorities and partners.
- In addition to the main infrastructure providers' group, it is suggested that **Surrey County Council** establishes its own **internal Infrastructure Providers Group**. This will help to support and develop skills and understanding within the County Council on the new LDF process which will help to develop some approaches to working with District Council LDFs in an integrated way to support the development of the local infrastructure planning and delivery process. This is also important where some County Council projects will need to be within LDF infrastructure delivery schedules to receive funding. This group will also be able to support the District Councils' access to other infrastructure providers such as health, FE colleges etc. where this is required.

3.3.3 It is assumed that year 2 of the project would be managed by a Project Board as in year 1, although it may be extended in membership to include some wider representation from local public services as a means of ensuring engagement and ownership.

## 4 Infrastructure funding

### 4.1 Overview

4.1.1 The conventional approach to infrastructure funding is to prepare a list of infrastructure required over the plan period – usually 20 years – and attempt to ascertain how much of that infrastructure could be funded from conventional funding streams, on the assumption that those funding streams remain unaltered for the 20 year period (see chapter 3). This was the approach used in 2005 when Roger Tym and Partners published their (groundbreaking) study on infrastructure for the South East Counties.

4.1.2 However, as we have said elsewhere, government and government funding streams are in a constant state of flux. Almost everything – departments, ministers, agencies, legislation, spending allocations, formulae – has changed since the RTP report and it will change again before most of the required infrastructure in Surrey is built. Even if we were to update the RTP work to reflect the outcome of the 2008-11 Comprehensive Spending Review (CSR), it would provide limited insight into the future.

4.1.3 Moreover, we are currently in the middle of the most serious economic downturn most people have ever experienced – and it will have a major long term impact on public finances. Next year, government will plan for the next three year CSR (2011-14). This planning will take place against the background of a general election. There could hardly be a more uncertain climate for long term infrastructure planning.

4.1.4 The effect of this change in outlook has not yet been fully felt because the government has embarked on a Keynesian programme of economic stimulus through public expenditure. However, much of this stimulus has been achieved by bringing forward spend from the later years of this CSR (2009-11) rather than allocating new resources. While Budget 2009 announced some small packages of continuing stimulus, it is clear that, broadly speaking, there will be severe cutbacks in public spending from 2010 onwards.

4.1.5 So, in this section we provide an overview of existing funding arrangements and attempt to explain how they might change under different scenarios. The analysis can only be partial and un-quantified but it will be more illuminating than simply extrapolating from outdated forecasts.

4.1.6 To look at future funding sensibly, we need to consider:

- The outlook for the economy;
- The impact on demand for services;
- The impact on overall public sector finances;
- How future public spending priorities might change.

4.1.7 Clearly, the outlook for the economy is poor. Budget 2009 reported GDP growth of only 0.75% in 2008 and forecast a contraction of 3.5% in 2009 before a return to growth in 2010, albeit only 1.25%. The Treasury forecasts assumed a fairly rapid recovery thereafter; with 3.5% economic growth from April 2011 and thereafter. Other forecasters – particularly the Institute for Fiscal Studies - are less certain. It is possible that the country may take much longer to fully recover.

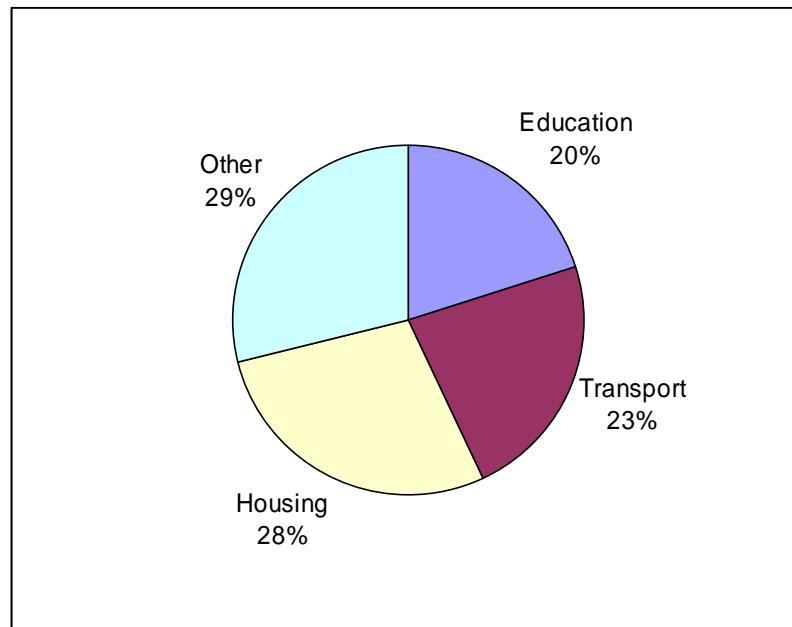
4.1.8 The effect of the economic slowdown on demand for services and infrastructure will be uneven. Some demand is pro-cyclical and will decrease in a downturn. Demand for travel, especially rail travel, is expected to decline sharply and demand for housing for

sale has collapsed – although it is not clear how much this is due to the lack of mortgage lending and how much due to falling prices.

- 4.1.9 There is at least some reason to expect this to have a wider impact on Surrey, in terms of commuting and employment patterns, and population churn. Migration from overseas is slowing. The Annual Population Survey showed 4.1 million foreign nationals resident in the UK in the year to June 2008, compared with 3.8 million in the year to June 2007. But the number of short-term migrants entering England and Wales for employment or study purposes for stays of between one and 12 months fell to 374,000 in the year to mid-2007, a 13% decrease from the mid-2006 estimate.
- 4.1.10 In the boom years, younger people tend to commute longer distances into London and also to move into the capital, whereas in a downturn they are more likely to live and work locally. Meanwhile, the exodus from London of affluent families will also ease off. According to the Joint Strategic Needs Assessment Surrey had an average annual net in-migration of 1,673 people in the period 2002-7. This aggregates out-migration of 1,866 p.a. in the 15-19 age group (going to work or to university), with in-migration of 3,777 people p.a. aged 20-44 (bringing 1,029 children with them). The balance is largely made up of older people leaving the County to retire.
- 4.1.11 Pressure on local services will also build as people trade down from private sector provision – most obviously in education but also in housing, leisure and health.
- 4.1.12 The impact on the public finances will also be a severe constraint. As the economy shrinks, so do tax revenues. Meanwhile net public sector debt has ballooned, partly because much of the cost of bailing out banks has been borne by government.
- 4.1.13 Government's short term stimulus to the economy by way of VAT cuts and increased capital expenditure is also contributing.
- 4.1.14 At the same time, the cost of Annual Management Expenditure - the expenditure government cannot readily control – is set to rise sharply. In particular, Social Security and Tax Credits currently make up 27% of total expenditure but will rise sharply as unemployment grows. Debt interest payments will also increase.
- 4.1.15 Budget 2009 assumes Net Public Sector Borrowing will increase from 2.4% of GDP in 2007-8 to a peak of 12.4% in 2009-10. Public sector debt will more than double from 2007-8 to its peak in 2013-14 and will not return to normal levels until 2017-18.
- 4.1.16 The result is that Treasury is forecasting a decline in net public sector investment from a peak of 3.1 % this year to 1.3% in 2013-14. Alongside these cuts, government will hope to find efficiency savings to increase taxes and to unwind some of its exposure to the banking sector – but it is a delicate balancing act between rebuilding the public finances and encouraging the economy to return to growth.

## 4.2 Local government

**Figure 4.1: Distribution of capital spending by LA Service 2007/8 (ONS)**



- 4.2.1 Local authority funding debates usually concentrate on revenue spending rather than capital spending. Capital spend is overwhelmingly concentrated on three main areas, as Figure 4.1 shows. However, the funding comes from a variety of sources, including general revenue. So we start by looking at this.
- 4.2.2 Local authority funding amounts to around 25% of all public sector funding in a locality, although the percentage varies significantly from place to place. Government distributes funding to local authorities in three main blocks, covering capital expenditure, housing revenue expenditure (dealt with below) and general revenue expenditure.
- 4.2.3 Grant is now calculated on a 4 Block Formula system. The most important thing to understand is that the Chancellor determines the total size of the cake available for funding at the Comprehensive Spending Review. The cake is funded from business rates (£17.5bn 2006-7) and a top up from central taxation (£3.4bn). The formula determines how that cake is cut up between authorities.
- 4.2.4 The first block in the formula is the Relative Needs Block, which determines the notional cost to each authority of providing certain services:
- Children's services
  - Adults Personal Social Services
  - Police, Fire and Highways Maintenance
  - Environmental Protective and Cultural Services
  - Debt Charges
- 4.2.5 According to the CLG guidance *"The formula for each specific service area is built on a basic amount per client, plus additional top ups to reflect local circumstances. The top ups take account of a number of local factors which affect service costs, but the biggest factors are deprivation and area costs."*

- 4.2.6 The Relative Resources Block is based on the authority's council tax base and is offset against the Relative Needs Block.
- 4.2.7 The third block is a division of the rest of the cake on a per capita basis. Authorities are grouped according to the functions they deliver and each group receives a different amount per capita.
- 4.2.8 The fourth block is a floor damping system, which makes sure that every local authority receives a minimum annual increase. Grant to other authorities above this floor is scaled back to provide the funding for the floor.
- 4.2.9 The 4 Block Formula is thus broadly redistributive in impact. It puts more emphasis on needs – dealing with deprivation and so on – than it does on population. Measurement of population changes is retrospective, penalising authorities with growth (even assuming increases in immigration are recorded accurately). Grant is reduced in proportion to potential council tax income, favouring authorities in low value areas.
- 4.2.10 Moreover, the client authorities are all subject to the funding floor. As the Lyons Inquiry put it: *“In practice, floor damping has a significant effect for many authorities, eclipsing large changes in grant that would otherwise result from applying the first three blocks..... This means that, for many local authorities, the indicators used in the relative needs and resources calculations (such as sparsity, or numbers of student exemptions from council tax) do not strongly influence the amount of Formula Grant that the authority receives in practice. This may not be fully understood by all the local authorities which put time and energy into lobbying for particular needs indicators to be added, altered or removed.”*
- 4.2.11 Government as a whole are committed to ensuring new burdens falling on local authorities are fully funded. This commitment is called the New Burdens Doctrine.”
- 4.2.12 For 2007/8, revenue expenditure payments amounted to £26bn (not including housing or the £28bn ring fenced Dedicated Schools Grant). The other £11bn was a mix of ring-fenced grant for items such as mental health and un-ring-fenced grants. The main components were targeted education funding (£3.6bn) and social services (£2.8bn).

## 4.3 Issues in local government funding

### ***The 4 Block Formula***

- 4.3.1 The local authority funding system has been subject to persistent criticism from all sides. Much of it was rehearsed by the Lyons Inquiry and government has responded to some points. However, there seems little appetite for more radical change. Here we deal with the issues that are particularly relevant to the Surrey authorities.
- 4.3.2 First, government supports capital investment by local authorities in three ways. It can provide direct capital grants; it can provide PFI credits or it can provide revenue support to pay for the cost of borrowing. Actually, the calculation of revenue support for borrowing is extremely complex, taking into account historic arrangements, and can produce unexpected results.
- 4.3.3 The Surrey authorities are all “on the floor”, receiving the minimum uplift in revenue support. The county receives the minimum funding increase of 2% pa in the current CSR. The districts receive only 1% increase. This means that although their need to cover interest payments is taken into account it does not result in a real increase in funding. This point has been the subject of much correspondence between the South East England Regional Assembly (SEERA) and government and was highlighted by the county in a statement from the leader of Surrey in December 2008.

- 4.3.4 The second criticism is that the 4 Block formula is heavily population based and government methodology undercounts immigration from abroad. While government based the 2007-11 funding allocations on historic methodology, it has put some effort into improving accuracy for the next spending round. As Surrey tends to have relatively low levels of immigration from overseas (and these should decline with the economic slowdown) we do not expect this to be a major issue.
- 4.3.5 In the longer term, the formula should reflect changes in population growth and changes in demographic profile that lead to greater need. It must also be a reasonable assumption that future governments will review the formula to make sure it is working correctly and change it where necessary.
- 4.3.6 A wider criticism is that the formula is intended to create “equalisation” - in other words to transfer resources from affluent areas to areas with greater needs. Surrey and the South East lose resources from this equalisation and the South East has argued (for instance in its CSR submissions) that it needs to retain more resources to invest in order to create the wealth which is then redistributed to more needy areas.
- 4.3.7 There is obviously a policy issue here and the Conservative Party policy paper “Control Shift – Returning Power to Local Communities” (published February 2009) promised a review of the 4 Block system to reduce equalisation and increase transparency of operation.
- 4.3.8 However, given the economic outlook, it is unlikely that the overall envelope of local authority funding will increase. The 2007-11 settlement was heralded as the toughest in a decade and the 2011-14 settlement is likely to be even tougher. It is also likely that the downturn will increase pressure disproportionately on services in less affluent areas, limiting the ability of any government to reallocate resources away from them.
- 4.3.9 So, whatever the policy balance between equalisation and investment in growth, it would be prudent for the Surrey authorities to assume a tough funding settlement for the foreseeable future.

### ***Growth incentives***

- 4.3.10 The English local government funding system is one of the most centralised in the world. Business rates, although notionally local, are actually pooled nationally. Council tax is the only locally levied and retained tax and it only accounts for 25% of local authority funding (or around 15% of local authority funding once charges and fees is taken into account<sup>2</sup>). Moreover, the ability to levy council tax at an average rate is taken into account in calculating the 4 Block Formula, so that Council Tax is not as locally controlled as it looks.
- 4.3.11 Government has been keen to offer local authorities some other kind of incentive to promote growth in general. Unfortunately, the initial pilot of the Local Authority Business Growth Incentive (LABGI) scheme was the subject of much criticism from various parties and is to be succeeded (after a year’s moratorium) with a much smaller scheme worth only £50m pa in England, initially. The precise form of this is still subject to consultation.
- 4.3.12 The Conservatives have also promised to incentivise local authorities to promote housing growth by allowing them to retain any increase in Council Tax base for 6 years, with central government match funding. Assuming that Surrey met its annual average housing target in the draft Regional Spatial Strategy of 2,833 dwellings it could levy on 6 years worth of provision at any one time – 16,998 dwellings. Assuming average council tax of £1,500 per dwelling (broadly in line with Band D levels in Guildford and Tandridge)

<sup>2</sup> According to the Institute of Fiscal Studies – Review of UK Local Government Finance. (2007)

this would raise about £25.5m pa. This would be significant extra revenue but it does depend on a range of contingent assumptions that may be optimistic in the foreseeable future.

- 4.3.13 All these proposals depend on a redistribution of existing tax revenues. Government is also introducing the Business Rates Supplement which would enable upper tier authorities to levy up to 2p in the pound extra from business rates (from premises over £50,000 RV) to spend on economic development. The 2007 White Paper estimated this could raise £97.4m pa in the South East, which would imply about £14m pa in Surrey. There are obvious political sensitivities in introducing such a levy in a recession and most of the business lobbying groups (CBI, IOD and FSB) are broadly opposed to it.

#### ***Future trends in prioritisation***

The other main issue for local authority funding is the extent to which it will have to be adjusted to cater for future needs that are currently under-funded. Within the scope of the local authority funding system there is a traditional hierarchy of priorities. At the top are statutory duties with ring fenced funding, with education being the largest. Next come statutory duties that do not receive ring fenced funding –such as libraries and lower in the pecking order come discretionary activities, some of which can be funded from user charges, like car parks and leisure centres. Then, there is the accounting distinction between capital and revenue funding.

- 4.3.14 Over the next few years these distinctions will continue to influence priorities, but to a lessening extent. This is partly because of the growing importance of Local Area Agreements, which allow some pooling of funding streams towards common objectives. It is partly because the commissioning model of service provision blurs the distinction between capital and revenue by wrapping both into a single payment – and this is particularly true of PFI. Moreover, local priorities may not always be the shared by central government.

## 4.4 Housing

- 4.4.1 There is also a strong body of opinion – across political parties and housing professionals - there should be a comprehensive overhaul of the way affordable housing is funded, procured and allocated. The debate was originally sparked off by the Hills Report into Social Housing (2007) and was meant to lead to a Green Paper in 2008-9. The recession has delayed this but there seems to be an appetite for reform on all sides that will eventually have practical effect<sup>3</sup>. This would also impact on arrangements for developer contributions.

- 4.4.2 Over the last 10-15 years, housing policy has encouraged local authorities to transfer their housing stock to housing associations, or special purpose vehicles. As an incentive, local authorities have only been allowed to keep 25% of receipts from Right to Buy Sales. Additional capital for major housing regeneration has been scarce (apart from PFI) and no attempt was made to reform the existing Housing Revenue Account (HRA) system. A series of ballots rejecting stock transfers has led government to a re-think and it is now looking at reform of the HRA.

- 4.4.3 The HRA operates as a pooling or cross subsidy scheme similar in concept to the 4 Block Formula. In the same way, authorities in the South East contribute far more than they receive. The South East Regional Housing Board estimates that the region contributes £185m pa as subsidy. Any reform that retained this subsidy in the region would benefit Surrey authorities. However, this is not likely to be “free” money. Government is looking

<sup>3</sup> E.g. “Principles for Social Housing Reform” – Greenhalgh and Moss 2009

at options, including a scheme where local authorities would pay or receive a capital sum in order to remove themselves from the subsidy scheme. HRA reform is of less interest to the five Surrey authorities who have already transferred their stock (see Table 4.1 below).

- 4.4.4 Alongside this, a Housing Green paper is promised that should consider the future of social housing in general and may propose more emphasis on providing housing at market or near market rents instead of at the current level of social rent which is heavily discounted.
- 4.4.5 Meanwhile, the new Homes and Communities Agency is working on the assumption that little or no social rented housing will be provided through developer contributions for the foreseeable future and is looking at subsidising direct investment by RSLs, joint ventures with developers and the development of new housing tenures at near market rents.

**Table 4.1: Housing by tenure - 2006 (ONS)**

Authority	LA	RSL	Total
Elmbridge	0.0	10.1	10.1
Epsom	0.0	7.2	7.2
Guildford	10.0	3.7	13.7
Mole Valley	10.0	2.1	12.1
Reigate & Banstead	0.0	11.8	11.8
Runnymede	9.7	3	12.7
Spelthorne	0.0	12.9	12.9
Surrey Heath	0.0	9.4	9.4
Tandridge	8.2	2.3	10.5
Waverley	10.1	2.6	12.7
Woking	8.7	3.1	11.8
SOUTH EAST	5.6	8.1	13.7
ENGLAND	9.4	8.7	18.1

- 4.5 Developer contributions
  - 4.5.1 For many years, local planning authorities have been able to ask developers for contributions to infrastructure required to mitigate the impact of development. The rules governing developer contributions are currently set out in section 106 of the Planning Act 1990 (as amended) and Circular 05/2005 from the Office of the Deputy Prime Minister. The 2004 Planning and Land Compensation Act introduced a new system of statutory planning under which counties are no longer statutory planning authorities and Local Planning Authorities have to produce new-style Local Development Frameworks – a suite of documents of which the Core Strategy is the most important. So, ultimately, a Developer Contributions strategy will be justified by reference to an adopted Core Strategy and then set out in a Supplementary Planning Document which has been the subject of a formal consultation and a sustainability appraisal.
  - 4.5.2 Government through PPS12 has placed a much stronger emphasis on having Core Strategies underpinned by robust infrastructure planning. The need for good infrastructure planning also fits with the much wider agenda for joined up government at local and sub-regional agenda. Prioritising infrastructure and setting an appropriate rate

or rates is normally something for individual planning authorities, which will need to balance demands for local and for strategic infrastructure. However, PPS12 paragraph 6.3 also specifies that:

*“Supplementary guidance to assist the delivery of development may be prepared by a government agency, Regional Planning Body or a County Council or other body (e.g. AONB committee) where this would provide economies in production and the avoidance of duplication e.g. Where the information in it would apply to areas greater than single districts. Such guidance would not be a supplementary planning document. However, if the same disciplines of consultation and sustainability appraisal (where necessary) are applied, such information might, subject to the circumstances of a particular case, be afforded a weight commensurate with that of SPDs in decision making. This may be more likely if the district/borough/city councils to which it is intended to apply endorse the guidance, or if the document is an amplification of RSS policy and it has been prepared by an RPB.”*

- 4.5.3 As they emerge, individual Core Strategies will identify the infrastructure for which developer contributions are sought (either as individual strategic items or generic classes of infrastructure). They will also need to balance the need for affordable housing provision against other kinds of infrastructure covered by developer contribution. Items which are not identified either in the Regional Spatial Strategy or LDF Core Strategies are unlikely to be accepted as valid subjects for developer contributions. To comply with government policy set out in ODPM Circular 05/05, Core Strategies and related SPDs will have to show that contribution rates will vary to reflect the specific different impacts from development.
- 4.5.4 Currently, only three Surrey authorities have an adopted Core Strategy in place and the Surrey Structure Plan, which provided the original policy basis for a Surrey tariff, is no longer in force. However, it has been superseded by the South East Plan which contains a specific policy for the London Fringe, including most of Surrey. Policy LF10, Small Scale Site Tariff specifies that:
- Local planning authorities will work jointly with infrastructure and service providers and developers to establish a programme for the provision of infrastructure within the sub-region which takes into account the cumulative impact of small scale development. Contributions from new development, based on a co-ordinated and consistent approach, will be secured to support delivery of the infrastructure and services required to mitigate the impact of cumulative development and to maintain quality of life in the area.*
- 4.5.5 This could provide a policy basis for a developer contributions strategy, either collectively in accordance with PPS12 Para 6.3 or ideally through the adoption of individual Supplementary Planning Documents (SPD) in advance of a Core Strategy.
- 4.5.6 Epsom and Ewell has an adopted Core Strategy and a Developer Contributions SPD based on the existing Surrey tariff. Some other Surrey districts - Reigate and Banstead, Elmbridge, Guildford, and Waverley - have already adopted tariff based SPDs in advance of an adopted Core Strategy. Mole Valley and Surrey Heath have interim guidance in place which they are turning into an adopted SPD.
- 4.6 Community Infrastructure Levy
- 4.6.1 After the Barker Report (2003), government set out to introduce the Planning Gain Supplement (PGS), which would have been a tax on the value of land with planning consent. After a long drawn-out struggle with the development industry over its practicality, government shelved PGS and announced it would introduce the Community

Infrastructure Levy (CIL) instead – which is an indeterminate hybrid between a tax and a beefed up planning obligations system.

4.6.2 The enabling legislation for CIL was included in the Planning Act 2008 and was subject to numerous changes as it passed through parliament. Partly as a result, the legislation poses some problems in interpretation. It would give the Secretary of State power to issue regulations for CIL and this power is so widely drawn it could encompass anything - from a minor tweak to existing approaches, to PGS in all but name. Moreover, most of the detailed issues that need to be overcome – like defining the split between s106 and CIL payments – were left to be sorted out in the regulations.

4.6.3 There are some things that can be said about CIL with a degree of certainty:

- It will be optional – not all authorities will use it;
- Although not theoretically part of a Local Development Framework, in practice introduction of CIL will be dependent on a sound Core Strategy and therefore different authorities would implement it over a period of years;
- It would be easier to retrofit a sub-regional CIL without needing to co-ordinate Core Strategies than it is to apply a s106 tariff;
- CIL breaks the link between the impact of a particular development and the general need for infrastructure – thus overcoming some of the problems Surrey has encountered with its tariff;
- CIL would avoid the need for individual s106 agreements and make it cost effective to collect contributions from small developments;
- CIL would build on the infrastructure planning work already being undertaken and therefore will not involve the client authorities in the risk of abortive work at this stage.

4.6.4 Government issued a consultation on the CIL regulations in summer 2008 which gave some more insight into its thinking, but left many questions unanswered. Then in the 2009 Budget, it announced that the introduction of CIL would be put back until April 2010 (perilously close to the probable date of a general election). There must therefore be some doubt as to how much appetite there will be to implement it.

## 4.7 Conclusions

4.7.1 Previous infrastructure studies have been very effective in highlighting the need for additional investment from government, for changes to the utility companies' regulatory regime and for a workable planning tariff system. To a great extent they have done their job.

4.7.2 However, as a methodology for local authorities to plan and manage infrastructure spending, current approaches have serious drawbacks. In particular, to take current funding regimes and assume they will continue unchanged for 20 years is unrealistic. As we have demonstrated above, funding regimes change very rapidly.

4.7.3 The outlook for public sector funding is poor because of the downturn in the general economy, but this should be proportionate to the slowdown in housing development in part. However, demand for some services will be disproportionately affected. Social services and unemployment support will be under more pressure; transport and utilities are likely to have falling demand.

4.7.4 Over the longer term, most formula based funding streams (education and health in particular) will respond to changes in population and housing numbers. Where the formula itself is not responsive, government will (eventually) change the formula. We have identified above several areas where government has changed or is changing mainstream funding arrangements to respond to the needs of growth.

- 
- 4.7.5 This does not mean that the client bodies should be complacent about long term funding. Government often only changes arrangements because local authorities have complained long and hard about their inadequacy. However, these long term strategic funding issues are not peculiar to Surrey and the best way to deal with them is to make common cause with other local authorities in general and especially those in growth areas facing similar challenges.
- 4.7.6 Moreover, although government can make provision in principle for mainstream funding to facilitate growth, the onus is on local authorities to ensure that growth is incorporated in service plans in practice.

## 5 Economic costs associated with the non-delivery of infrastructure

### 5.1 Introduction

- 5.1.1 This stage of our analysis has assessed the economic costs resulting from the non-delivery of certain infrastructure required to meet the needs of the anticipated population growth.
- 5.1.2 The costs to Surrey, and essentially the national economy as a whole, have been determined both qualitatively and quantitatively in terms of output, education, health and flood defences. These findings are set out in the remainder of this section.

### 5.2 Methodology

- 5.2.1 In order to establish the economic costs associated with the non-delivery of infrastructure, it was first necessary to establish a baseline of socio-economic indicators to benchmark current service provision in Surrey and thus summarise much of our preceding analysis. This baseline was formed largely on the statistics published by the ONS and DCSF, and compared with corresponding data for the South East and England as a whole.
- 5.2.2 The following indicators were included in our socio-economic baseline:
- Population estimates (including by age);
  - Employment status (including adjustments for outward commuting);
  - Total GVA and GVA per head of population;
  - Average annual earnings;
  - Average class size (including primary and secondary);
  - Pupil to teacher ratio (including primary and secondary);
  - Average occupancy and availability of hospital beds (secondary health care provision).
- 5.2.3 The most current data sources were consulted, which in most cases corresponded with the years 2007/2008, with the only significant exception being data collected from the 2001 Census.
- 5.2.4 It should be noted however, that some indicators required for our baseline were not instantly available using current data sources alone, in which case estimates of these were calculated by applying 2001 Census trends. For example, given that travel to work data is not published annually, trends in outward commuting from 2001 were applied to current employment statistics.
- 5.2.5 This baseline analysis was then used to inform how the non-delivery of infrastructure will result in economic losses to the Surrey economy combined with existing economic and academic research. The resulting costs were estimated within the context of the following:
- Output;
  - Education;
  - Health;
  - Flood Defences.
- 5.2.6 This was determined through a partially qualitative and partially quantitative assessment. Our quantitative analysis relates to the associated loss of output that would otherwise arise if infrastructure was not delivered. In addition, it has also been possible to estimate

monetary losses to the Surrey economy in terms of health and education based on the application of academic research to our baseline indicators.

- 5.2.7 In order to estimate the population growth associated with the Plan's additional target, ONS population data<sup>4</sup> by age and economic activity were used to profile the current population against the current number of dwellings in Surrey<sup>5</sup>. The corresponding ratios were then applied to the Plan's additional dwelling target of 57,920 by 2026.
- 5.2.8 It is important to note that this analysis is underpinned by two simplistic assumptions. The first is that there is no current service provision available within Surrey to meet the population growth, and secondly that these people could not be accommodated elsewhere in the South East.

### 5.3 Analysis and results

#### ***Output and annual earnings***

- 5.3.1 There are both public and private losses that can be quantified in our assessment, both in terms of the loss in output to the local and national economy and the loss in earnings to the individual.
- 5.3.2 The loss in output can be measured in terms of the loss of output per person who, given insufficient infrastructure provision, would not be accommodated in the County. Our indicator for this analysis is therefore the loss in Gross Value Added (GVA), calculated by applying Surrey GVA per capita to the total population growth associated with the planned dwelling target.
- 5.3.3 The private loss is measured by applying the same number of people associated with the population growth that would have otherwise been employed to the average annual earnings of Surrey residents.
- 5.3.4 The employed population growth associated with the dwelling target was estimated based on the current relationship between the number of residents employed in Surrey and the number of dwellings that exist.
- 5.3.5 When estimating the losses in GVA and earnings, it was not necessary to factor inward and outward commuting patterns into our calculations, given our underlying assumption that the population growth could not be accommodated elsewhere in the South East. Table 5.1 below shows GVA and annual earnings data for Surrey compared with regional and national levels.

<sup>4</sup> Mid-year population estimates (2007).

<sup>5</sup> Recorded by the Government Office for the South East.

**Table 5.1: Surrey GVA and annual earnings**

Output/ Income	Surrey	South East	England	UK
GVA per capita	£23,135	£19,434	£18,267	£18,205
Total GVA	£24,877,000,000	£159,062,000,000	£921,842,000,000	£1,096,629,000,000
Average annual earnings	£31,594	£26,666	£24,500	

*Source: Office for National Statistics; Regional GVA Publication 2007 (2005 prices) and Annual Survey of Hours and Earnings Resident Analysis 2007*

- 5.3.6 Based on this data and our estimates of the growth in Surrey's total and employed population up to 2026, the non-delivery of infrastructure results in a total loss of almost £3.3bn in GVA. Relative to current total GVA this equates to a loss of 13% to Surrey's economy, a loss of 2.1% in GVA for the South East, and 0.3% for the UK. The private loss in terms of annual earnings is also substantial, at just under £2.1bn.
- 5.3.7 The economic costs here are particularly amplified by the strength of Surrey's economy, in that the county has levels of GVA per capita and annual earnings much higher than that of the South East or England.

### **Education**

- 5.3.8 There are both private and public returns to education that will not be captured by Surrey as long as there is insufficient infrastructure provision. Public investment in education increases the level of productivity and economic growth in an economy through raising the stock of 'human capital'. Human capital consists of three main components; ability, qualifications and knowledge gained through formal education, and skills acquired through workplace training<sup>6</sup>. Educated workers will therefore achieve a wage premium; causing their average earnings to increase and raising output in the economy as a whole.

**Table 5.2: Education provision**

Indicator	Surrey	South East	England
Primary average class size	26.6	26.6	26.2
Primary pupil:teacher ratio	21.9	21.5	21.6
Secondary average class size	22.3	21.4	21.2
Secondary pupil:teacher ratio	17.1	16.5	16.1

*Source: DCSF 2007/08*

- 5.3.9 There are both private and public returns to education that will not be captured by Surrey as long as there is insufficient infrastructure provision. Public investment in education increases the level of productivity and economic growth in an economy through raising the stock of 'human capital'. Human capital consists of three main components; ability, qualifications and knowledge gained through formal education, and skills acquired through workplace training. Educated workers will therefore achieve a wage premium; causing their average earnings to increase and raising output in the economy as a whole.

<sup>6</sup> Sianesi et al, 1999, 'Human Capital Investment: The Returns from Education and Training to the Individual, the Firm', Institute of Fiscal Studies, vol 20, no 1, pg 1-23

- 5.3.10 Table 5.2 indicates that the county is not currently facing any significant strain on service provision, although the average class size compared with England and the South East and pupil to teacher ratio at secondary level in Surrey are both slightly higher than the regional and national average (see Report 1B).
- 5.3.11 Pupils in the county are also relatively high achievers, with just under 70% of school leavers achieving more than five A\*-C GCSEs<sup>7</sup>, which measures up to 3% higher than school leavers in the South East and England.
- 5.3.12 Failing to invest in education for the planned population growth will therefore have adverse effects on both the pupil population and economy. Recent evidence using the 2001 Labour Force Survey has concluded that through certain levels of education, an individual can achieve a significant wage premium<sup>8</sup>. It was estimated that a school leaver gaining five or more good GCSEs (A\*-C) can expect to earn a wage premium of up to 28%, compared with someone who does not receive this education<sup>9</sup>.
- 5.3.13 Given that annual wages in Surrey are already higher than average, the potential economic losses here are substantial. The wage premium that would otherwise be captured is around £8,000 in average annual earnings per person. Consequently, if the 2026 population growth (under sixteen years of age) is not accommodated, the total loss in average earnings will amount to just over £214m<sup>10</sup>.
- 5.3.14 This is a rather conservative estimate given our assumption that the population growth would only be educated to GCSE level. In reality, a sizeable proportion would continue on to post-16 and higher education and thus the total monetary loss would be much greater.
- 5.3.15 The established relationship between education and economic growth also implies that as a result of this non-provision, there would be an adverse multiplier effect on the local and national economy as growth and output become depressed.
- 5.3.16 An alternative to the above scenario would be to assume that a proportion of the anticipated population growth is accommodated to some extent by current service provision.
- 5.3.17 However, additional research for the UK has shown that relying on this infrastructure would still attribute economic costs once again through the loss in future earnings. Evidence suggests that larger class sizes reduce future earnings through discouraging pupils from prolonging school attendance, which would otherwise produce a benefit of around £2,930 per pupil<sup>11</sup>. This evidence could strongly apply to the case of Surrey in which class sizes are already at capacity, or even slightly burdened, compared with regional and national conditions.

### **Health**

- 5.3.18 Failing to provide health care would have severely adverse effects on the physical and social well being of the relevant population which ultimately cannot be quantified.

<sup>7</sup>DCSF, GCSE and equivalent results - percentage of pupils gaining 5+ A\*-C, 2008

<sup>8</sup>Barbara Sianesi, Returns to Education: A Non-Technical Summary of CEE Work and Policy Discussion, Institute for Fiscal Studies and Centre for the Economics of Education, June 2003.

<sup>9</sup>Thus holding all other educational achievements and control variables constant.

<sup>10</sup>Broad estimate based on the return to 5+ A\*-C GCSEs to the average student, thus will not fully allow for gender gap, variations in ability and so on. Refers to anticipated population growth under 16 years of age, accounting for current trends in GCSE grade achievements.

<sup>11</sup>Christian Dustmann et al, Class Size, Education and Wages, Centre for Economic Policy Research, May 2002.

However in purely economic terms, it is possible to attribute a monetary loss to non-provision due to the causal relationship between health and income<sup>12</sup>.

- 5.3.19 This relationship is based through several mechanisms; firstly in that health will impact on labour productivity, and secondly that a person's health will affect their educational attainment. Poor health will either cause a worker to be out of work or be less productive when employed, and similarly ill health will reduce a student's ability to learn or prevent them from learning entirely.
- 5.3.20 There is also an additional effect on savings, whereby a longer prospective lifespan can increase the incentive to invest and save for retirement, thus generating increases in future income and wealth. The economic costs of non-delivery to both the individual and the national economy will therefore be considerably large.
- 5.3.21 It is possible to place a monetary value on part of the economic losses owing to the non-delivery of health care. The loss to the economy can be measured by the value of an additional year of life lost attributed to ill health, which is taken as considerably more than the extra market income that would be earned in a year.
- 5.3.22 Evidence from recent research defines the value of a 'year of life lost' as three times the average annual earnings<sup>13</sup>. The total loss is therefore calculated as the summation of the earnings associated with each year of life lost. Since the national provision of health care by the NHS, life expectancy in the UK has been extended by an average of 10 years.
- 5.3.23 The cost of failing to provide health infrastructure for the total anticipated population growth therefore measures just under £950,000 per person<sup>14</sup>, and amounts to a total economic loss of almost £135bn.
- 5.3.24 Whilst the value of a human life lost may appear at first appear exaggerated, this is still much lower than the equivalent value recommended by the Department for Transport (DfT) in the appraisal of safety impacts of transport schemes. The DfT's 'Design Manual for Roads and Bridges' guidance gives a value of over £1.7m for the value of a life lost<sup>15</sup>.

### ***Flood defences***

- 5.3.25 Failure to provide flood defence where necessary would in any case be perilous due to the severe economic costs associated with the physical damage caused to residential property, the strain on emergency services, disruption to road and rail travel and many other social and economic factors.
- 5.3.26 Growing research has looked to accurately quantify these economic costs. Work under the Foresight Future Flooding Study<sup>16</sup> has been instrumental in examining existing and future flood risks in the UK and as a result, identifying the annual monetary losses attributed to property damage and infrastructure provision.
- 5.3.27 The study encompasses two types of flooding; river and coastal flooding and intra-urban flooding. The latter relates to the inability of sewerage/drainage systems to cope with heavy rain downpours and only affects around 80,000 dwellings in the UK.

<sup>12</sup> D. E. Bloom and D. Canning, Economic Implications of Population Health, Harvard School of Public Health, 2007.

<sup>13</sup> J. Sachs, Macroeconomics and Health: investing in Health for Economic Development, World Health Organisation, 2001.

Calculated as the summation of three times £31,594 (average annual earnings in Surrey), over the course of ten years.

<sup>15</sup> 2009 prices and values (adjusted for values of time growth and RPI growth).

<sup>16</sup> E.P. Evans et al, Foresight Future Flooding Report, Department of Trade and Industry (DTI), April 2004.

- 5.3.28 In terms of river and coastal flooding, the cost per home built on the floodplains along rivers, estuaries and coasts is around £600 a year in terms of the physical damage caused to the property. In addition it is estimated that the monetary cost of maintaining existing flood defences alone is around £250 a year for every home at risk. These costs are based on the 'present day' scenario and thus apply to existing dwellings built on a flood plain in the UK.
- 5.3.29 How this cost will increase over time is very much dependent on climate change scenarios given that drivers such as precipitation and temperature will impact on the probability of flood risk. A 'do nothing' scenario suggests the annual monetary cost could be 15 times higher by 2080, but even the most optimistic scenario still suggests a doubling of costs.
- 5.3.30 A conservative approach would therefore be that for every dwelling in Surrey constructed on the flood plain in the future, the monetary cost would amount to £850 a year increasing in real terms by 1.5% per annum.
- 5.3.31 The Foresight Flooding study has now been updated in order to consider more recent evidence available; including the substantial flooding that took place during the summer of 2007<sup>17</sup>.
- 5.3.32 This review did not update the quantified annual costs associated with flooding, however the drivers of flood risk were reassessed qualitatively by updating the 2004 climate change scenarios. Using new climate change evidence found that in all future flood risk scenarios, predicted rainfall and temperatures increased, causing a rise in flood risk compared with 2004 estimates.
- 5.3.33 It was estimated that the probability of a home on a river floodplain getting flooded would rise from around 1 in 100 in any year to 1 in 12.5. Similarly for homes on a coastal floodplain, the chance of experiencing a coastal flood that is currently 1 in 100 would rise to 1 in 5.
- 5.3.34 While the quantitative analysis has not been updated, the changes in the drivers of flood risk indicate that the monetary costs associated with every dwelling built on the flood plain is likely to be higher than previously estimated in 2004.
- 5.3.35 In considering the economic costs of flood risk and defence, the frequency and scale of the flooding in 2007 should be acknowledged, given that physical damages alone created a total cost in the region of £3bn.
- 5.3.36 It was estimated by the Association of British Insurers that this was equal to an average cost per home of around £20,000; dramatically higher than the estimated costs of property damage by the 2004 Foresight study<sup>18</sup>. A repeat occurrence of flooding on such a scale would thus heighten the costs of non-provision dramatically.
- 5.3.37 The 2007 update does however, allow for these recent events, yet maintains that a repeat episode of such flooding, even under the new Foresight future scenarios, would still be regarded as extremely rare. It is suggested that assessing the probability of this scale of flooding in the future, and thus the likely economic costs, requires further detailed analysis.

<sup>17</sup> E.P. Evans et al, An update of the Foresight Future Flooding 2004: qualitative risk analysis, Cabinet Office, 2007.

<sup>18</sup> Summer Floods 2007: Learning the Lessons, Association of British Insurers, November 2007.

## 6 Conclusions

- 6.1.1 Draft Final Report 1A began by providing a context for the analysis in the form of an overview of the population projections currently available, those used for the purpose of this study as well as those currently adopted by the various service providers. It then moved on to describe the work undertaken as part of the governance package and provided an overview of infrastructure funding sources. The report ended with an assessment of the economic costs associated with the non-provision of infrastructure. Key messages emerging from each work stream are summarised below.

### ***The context for growth***

- 6.1.2 The focus of this study on strategic infrastructure (i.e. services planned or delivered at county wide or sub-regional level) should hopefully facilitate ongoing dialogue with service providers at this strategic level, thereby avoiding similar conversations being held with individual districts.
- 6.1.3 As noted in Section 2, for some services such as education and adult social care, the changes in specific age groups of the population have a direct impact on service provision. ONS population projections have been used in this report for the purpose of understanding the nature of future needs for various services and age cohorts.
- 6.1.4 The demographic projections based on ONS data are considered to be at the upper end of estimates. There would be value in the County Council taking a lead role in the preparation and analysis of demographic projections, and ensuring these take full account of planned levels of development.
- 6.1.5 Liaison with service providers has revealed that a variety of projections are being used for the purposes of service planning, and in some cases, population figures are not considered to be driving service requirements. Section 2 summarises the data sources employed by different infrastructure providers for the purposes of service planning. Where population data is employed, ONS and South East Plan (population projections or housing allocations) are the sources used. All service providers and local planning authorities would benefit from a consistent, up to date and agreed range of data sets to inform service planning.

### ***Governance arrangements: co-ordination of infrastructure planning***

- 6.1.6 The conventional approach to infrastructure planning is to prepare a list of infrastructure required over the plan period – usually 15 years – and to concentrate primarily on the expected infrastructure costs from population growth. This approach frequently fails to consider that infrastructure needs and funding streams will inevitably change over time. It is therefore essential to establish communication channels through which service providers can feed back into the process.
- 6.1.7 The GIS outputs and supporting infrastructure schedules provide the basis for ongoing monitoring of delivery. The client group will need to give consideration to the responsibility for ongoing management and update of this database, and its dissemination to individual organisations such as local planning authorities and LSPs.
- 6.1.8 Initiating a strategic inter-disciplinary approach to infrastructure planning across the County is a long term process. At its most basic level, simply finding the key individuals in the relevant departments is a time consuming process, where there is currently little operational contact between the client group and the infrastructure provider on strategic policy (as opposed to implementation or regulatory matters such as development control).

- 6.1.9 Some service providers also, understandably, need to be convinced of the value of engaging in the process - the “what’s in it for us” question must be capable of being answered in a convincing way. Even where this case has been made, issues of commercial confidentiality may inhibit the level of public engagement in the process. In these circumstances however, providers will usually be willing to have confidential discussions with local authorities or other public sector partners. LSPs and LPAs will need to find ways to accommodate this within a public policy context which is subject to increasing expectations and requirements for public engagement.
- 6.1.10 The scope to influence longer term service planning by individual providers is variable and often unclear. The Surrey Strategic Partnership will have an important role to play here in facilitating inter-organisational dialogue about the flexible use of public funding to meet strategic objectives. The Comprehensive Area Assessment process will provide a framework for this dialogue, which in many cases should go beyond individual local authority boundaries to reflect the service planning areas of infrastructure providers.

### ***Infrastructure funding***

- 6.1.11 In order to scope future funding, we have considered: the outlook for the economy, the impact on demand for services, the impact on overall public sector finance and how future public spending priorities might change.
- 6.1.12 The outlook for public sector funding is poor because of the downturn in the general economy, but this should be proportionate to the slowdown in housing development in part. However, demand for some services will be disproportionately affected. Social services and unemployment support will be under more pressure; transport and utilities are likely to have falling demand.
- 6.1.13 Over the longer term, most formula based funding streams (education and health in particular) will respond to changes in population and housing numbers. Where the formula itself is not responsive, government will (eventually) change the formula. We have identified above several areas where government has changed or is changing mainstream funding arrangements to respond to the needs of growth.
- 6.1.14 This does not mean that the client bodies should be complacent about long term funding. Government often only changes arrangements because local authorities have complained long and hard about their inadequacy. However, these long term strategic funding issues are not peculiar to Surrey and the best way to deal with them is to make common cause with other local authorities in general and especially those in growth areas facing similar challenges.

### ***Costs associated with the non-delivery of infrastructure***

- 6.1.15 The final stage of our analysis has assessed the economic costs resulting from the non-delivery of certain infrastructure required to meet the needs of the anticipated population growth. The resulting costs were estimated within the context of the following:
- Economic output;
  - Education;
  - Health;
  - Flood Defences.
- 6.1.16 There are both public and private losses that can be quantified in our assessment, both in terms of the loss in output to the local and national economy and the loss in earnings to the individual. Based on this data and our estimates of the growth in Surrey’s total and employed population up to 2026, the non-delivery of infrastructure results in a total loss of

almost £3.3bn in GVA. Relative to current total GVA this equates to a loss of 13% to Surrey's economy, a loss of 2.1% in GVA for the South East, and 0.3% for the UK. The private loss in terms of annual earnings is also substantial, at just under £2.1bn.

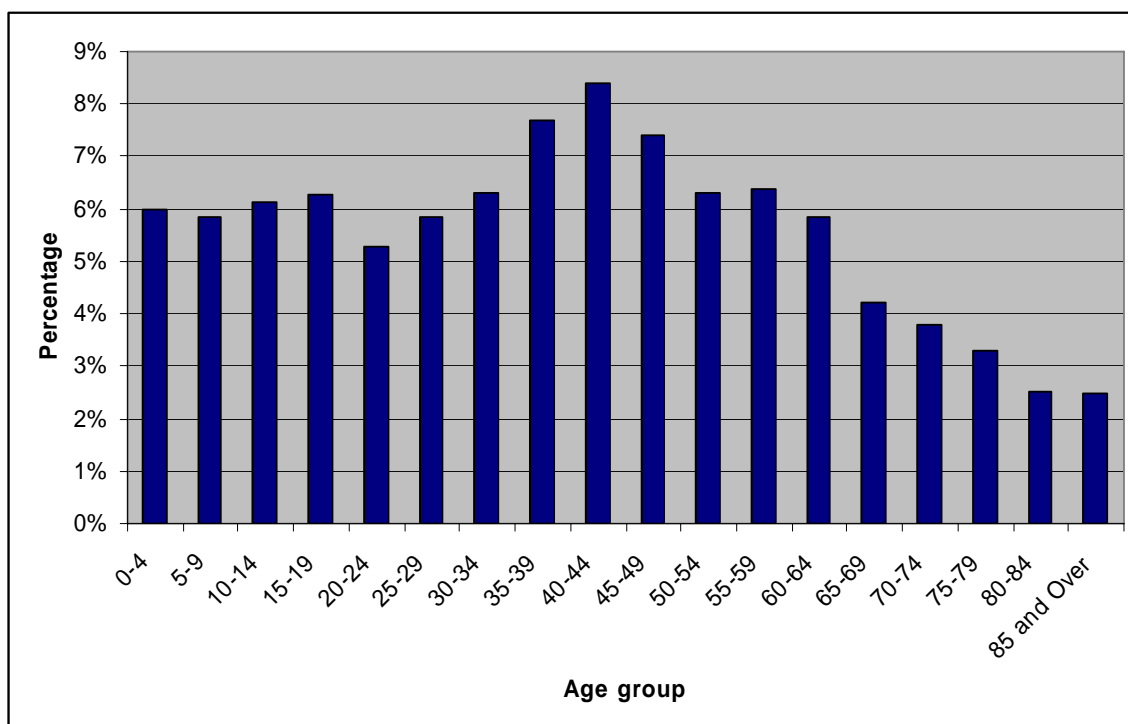
- 6.1.17 Failing to invest in education for the planned population growth will have adverse effects on both the pupil population and economy. Given that annual wages in Surrey are already higher than average, the potential economic losses here are substantial. The wage premium that would otherwise be captured is around £8,000 in average annual earnings per person. Consequently, if the population growth (under sixteen years of age projected for 2026) is not accommodated, the total loss in average earnings will amount to just over £214m.
- 6.1.18 Failing to provide health care would have severe adverse effects on the physical and social well being of the relevant population which ultimately cannot be quantified. However in purely economic terms, it is possible to attribute a monetary loss to non-provision due to the causal relationship between health and income.
- 6.1.19 The cost of failing to provide health infrastructure for the total anticipated increase in population equates to just under £950,000 per person, and amounts to a total economic loss of almost £135bn.
- 6.1.20 Growing research has looked to accurately quantify the economic costs related to the failure to provide flood defence. Evidence suggests that in terms of river and coastal flooding, the cost per home built on the floodplains along rivers, estuaries and coasts is around £600 a year in terms of the physical damage caused to the property. In addition it is estimated that the monetary cost of maintaining existing flood defences alone is around £250 a year for every home at risk. These costs are based on the 'present day' scenario and thus apply to existing dwellings built on a flood plain in the UK.
- 6.1.21 A conservative approach would therefore be that for every dwelling in Surrey constructed on the flood plain in the future, the monetary cost would amount to £850 a year increasing in real terms by 1.5% per annum.

## Appendix 1 – population profile

### Population

According to the 2007 estimates of population produced by the Office of National Statistics (ONS), the total population of the 11 districts and boroughs in Surrey totals 1,098,300 people. The age profile of this is as follows:

**Figure 6.1: Population breakdown by age (ONS, 2007)**



Source: ONS trend data (2007)

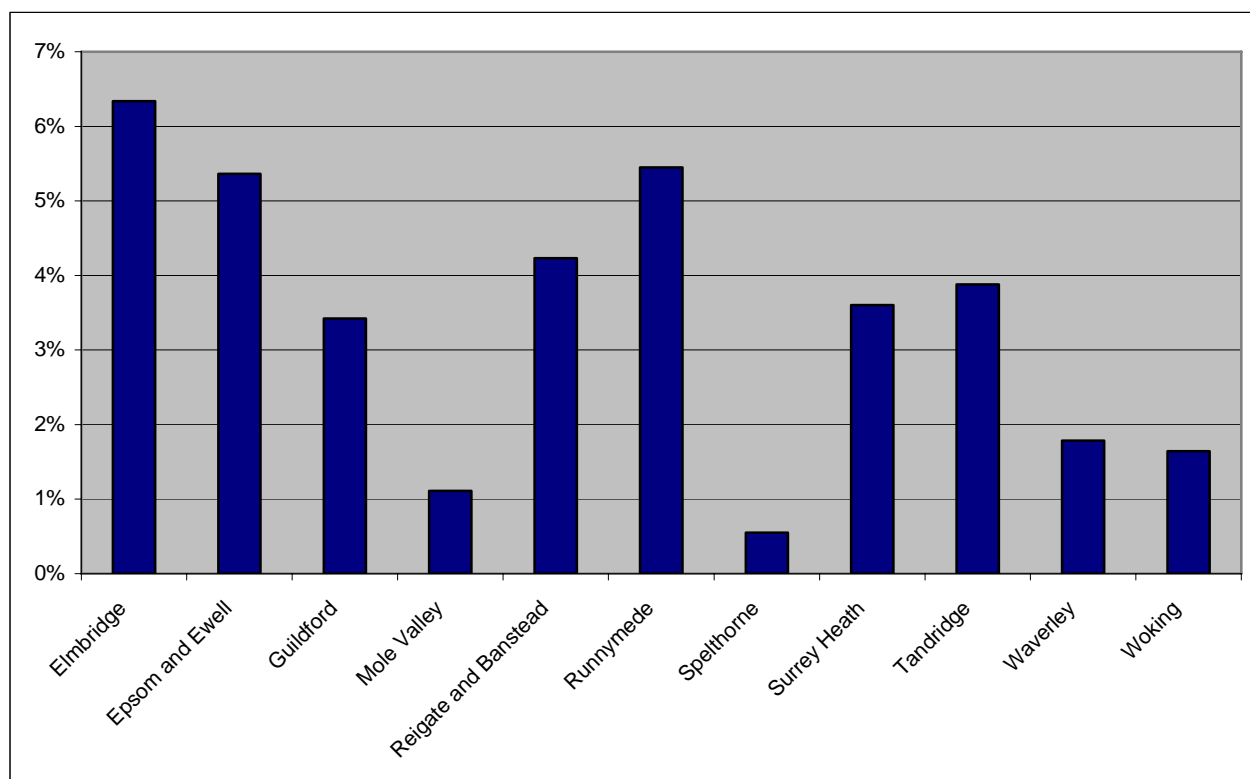
The population is not divided uniformly across the districts and boroughs. Table 6.1 shows the variation in the number of people residing in each of the constituent authorities. The most populous boroughs are Guildford, Reigate and Banstead, Elmbridge and Waverley.

**Table 6.1: Population of Surrey districts and boroughs**

Local Authority	2007 Population
Elmbridge	131,000
Epsom and Ewell	70,900
Guildford	134,400
Mole Valley	81,200
Reigate and Banstead	132,300
Runnymede	82,600
Spelthorne	90,900
Surrey Heath	83,300
Tandridge	82,500
Waverley	117,800
Woking	91,400
TOTAL	1,098,300

Source: ONS trend data (2007)

All districts and boroughs in Surrey have experienced an upward trend in population between 2001 and 2007. However, there are distinct variations between authorities with some areas having experienced more significant growth than others. Elmbridge, Epsom and Ewell and Runnymede have all seen an increase in population of over 5% whereas in Spelthorne population has remained relatively stable over recent years and has only seen a rise of 0.5% since 2001. The total population increase (%) across the individual districts and boroughs is shown in Figure 6.2.

**Figure 6.2: Total population increase 2001-2007 (%)**

Source: ONS trend data (2007)

## Population projections by district

**Figure A 1: Elmbridge**

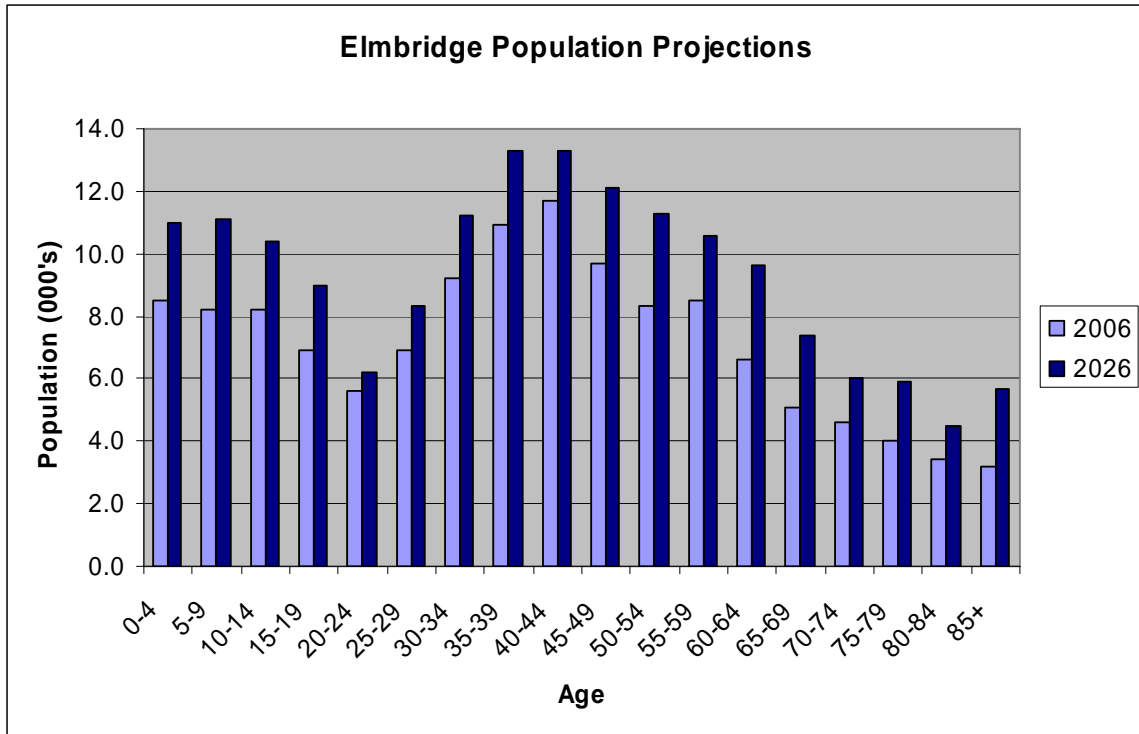


Figure A 2: Epsom and Ewell

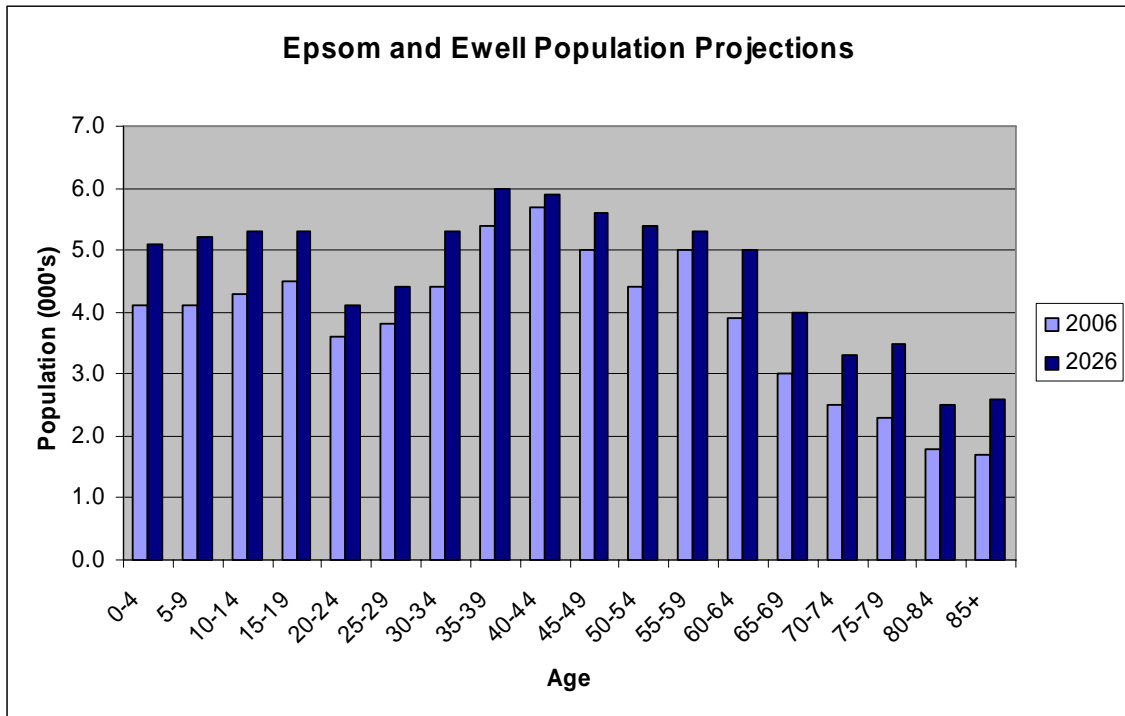
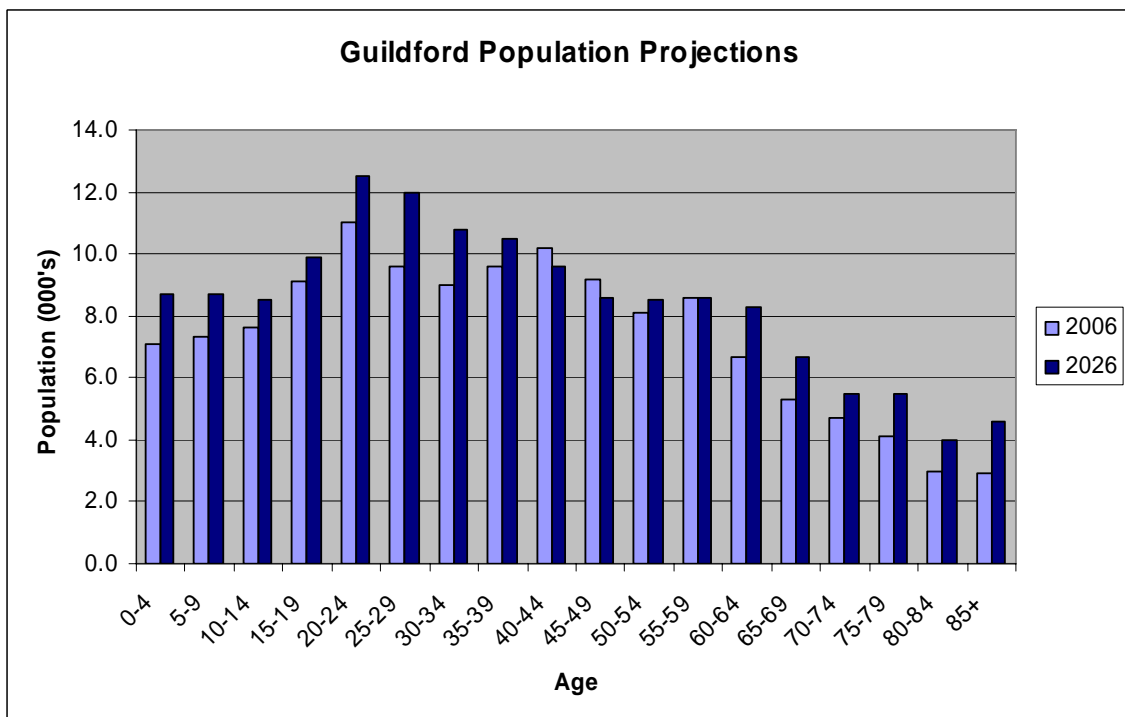
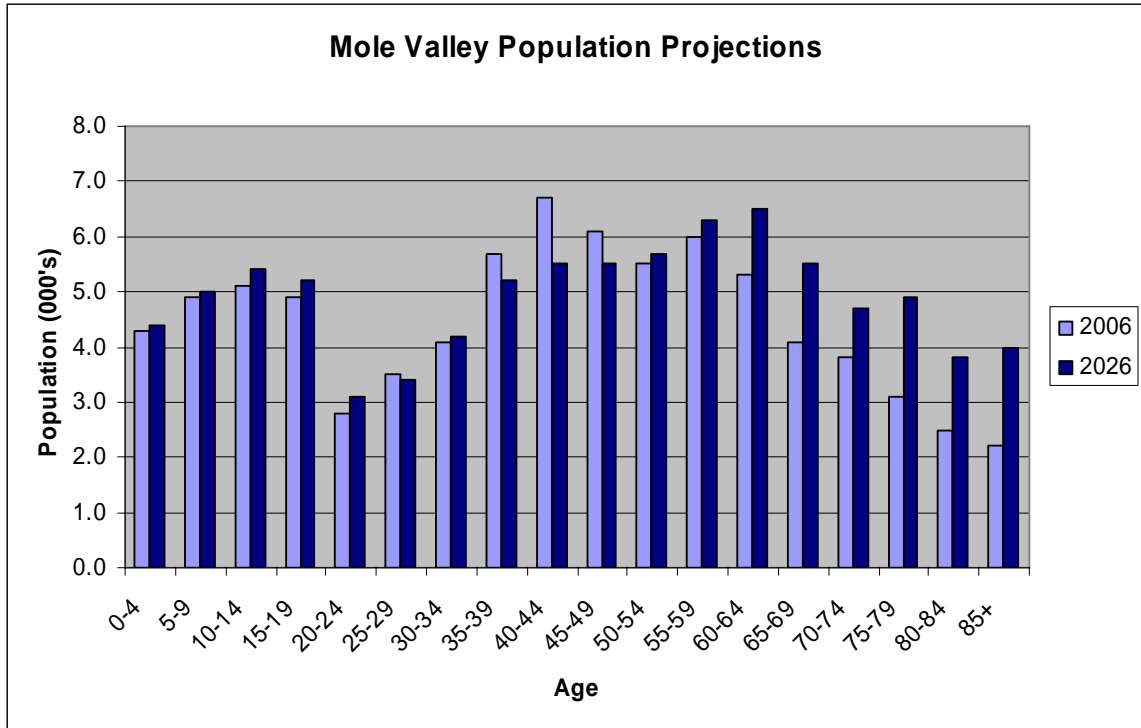


Figure A 3: Guildford



**Figure A 4: Mole Valley**



**Figure A 5: Reigate and Banstead**

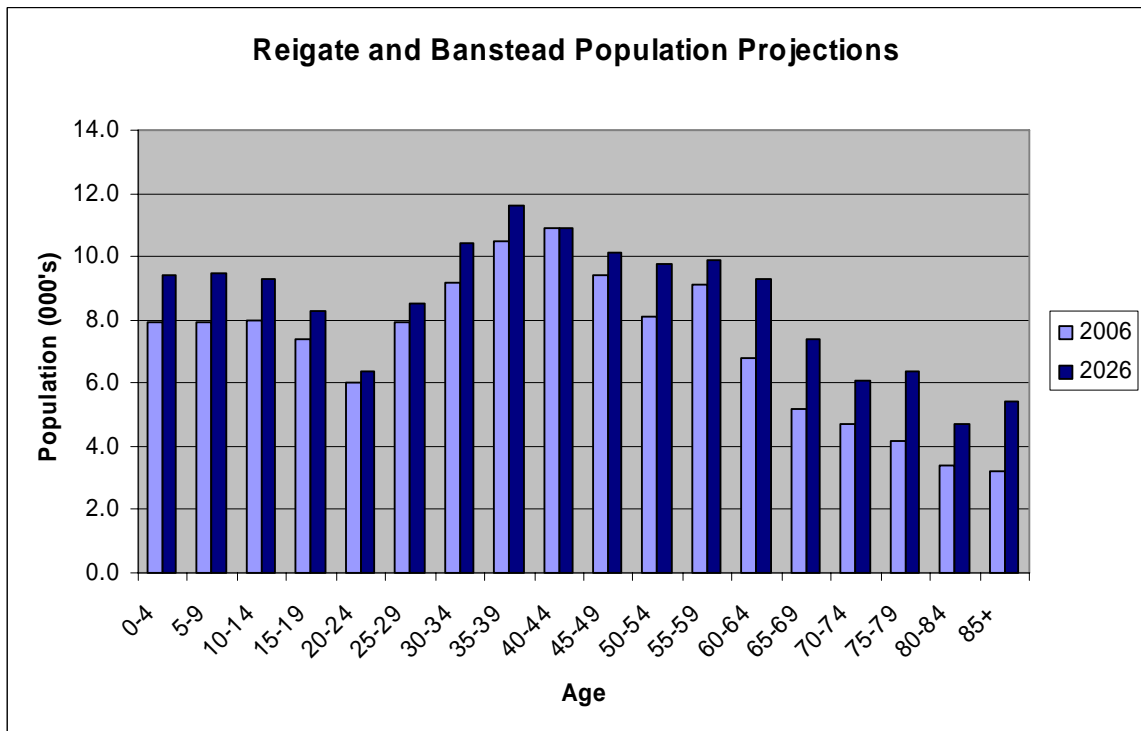


Figure A 6: Runnymede

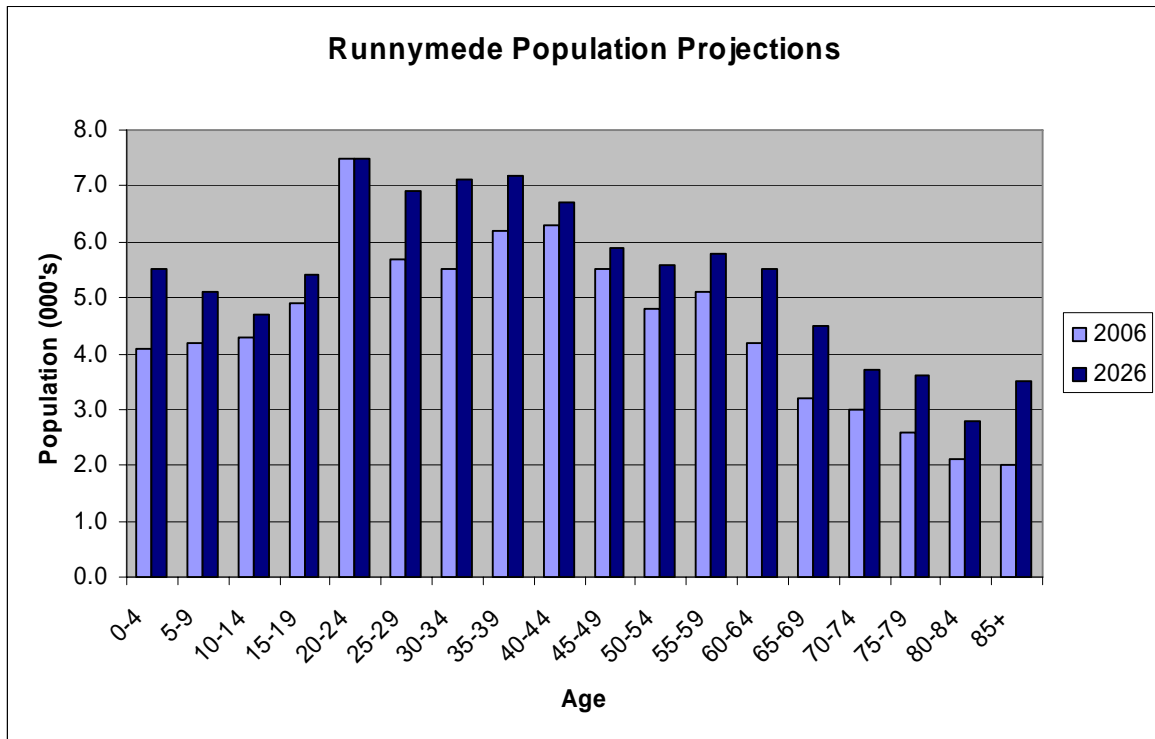


Figure A 7: Spelthorne

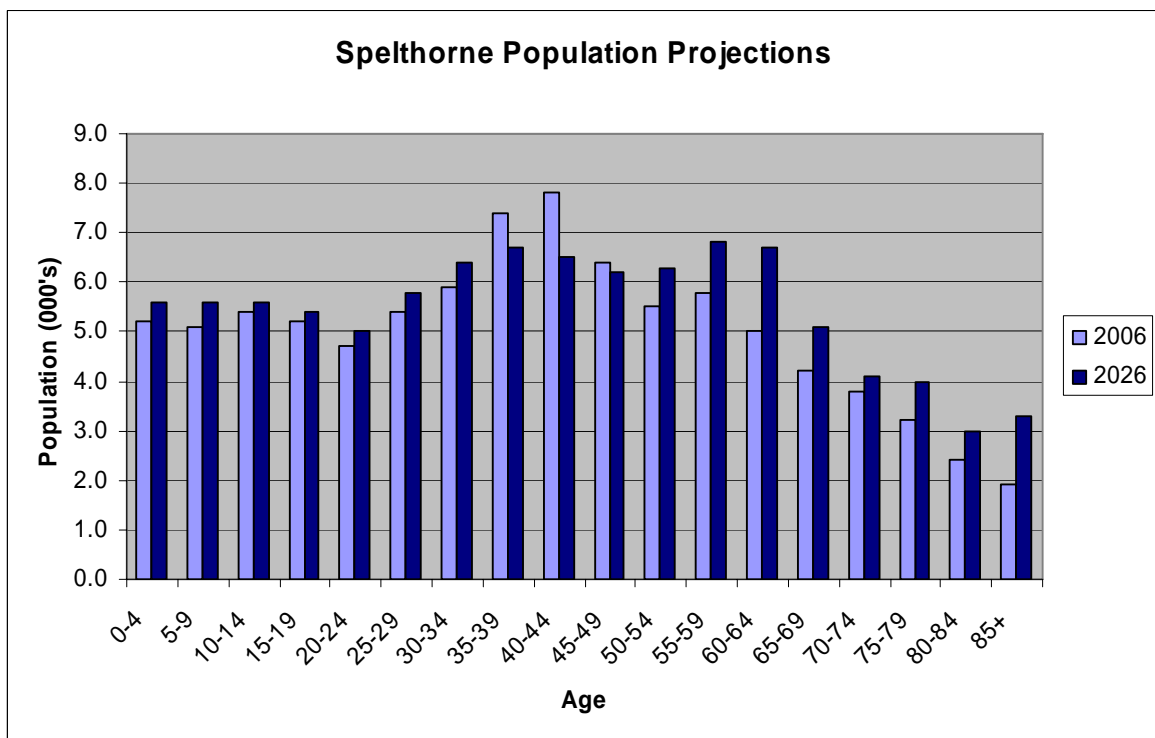


Figure A 8: Surrey Heath

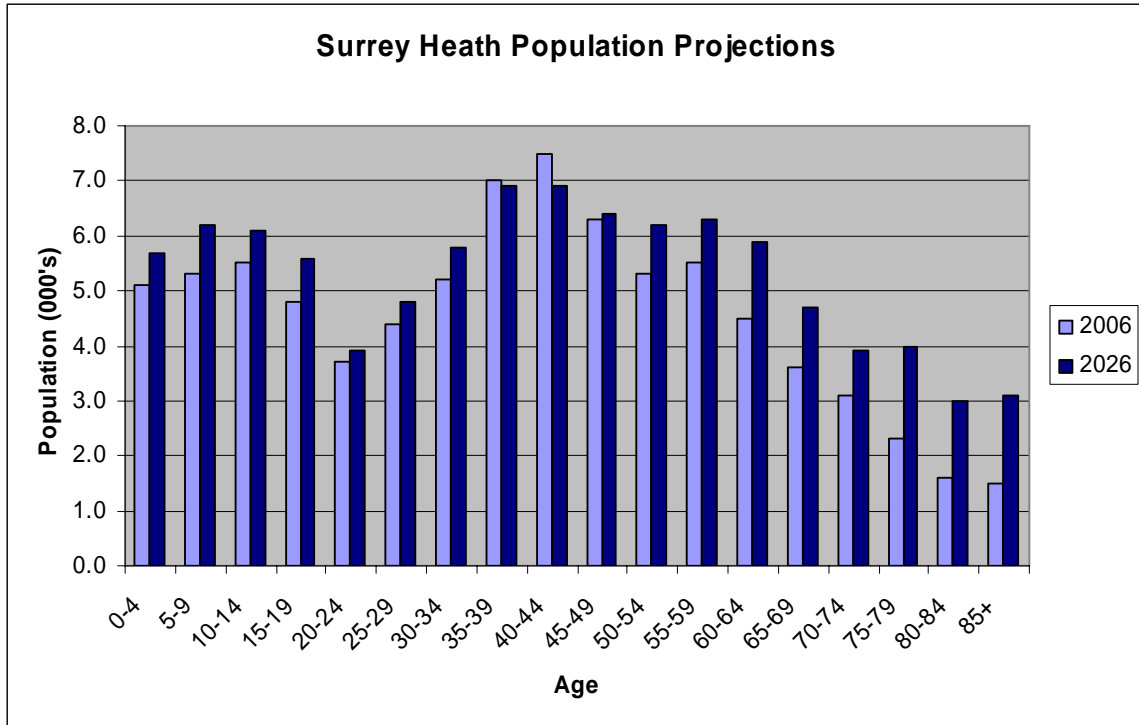
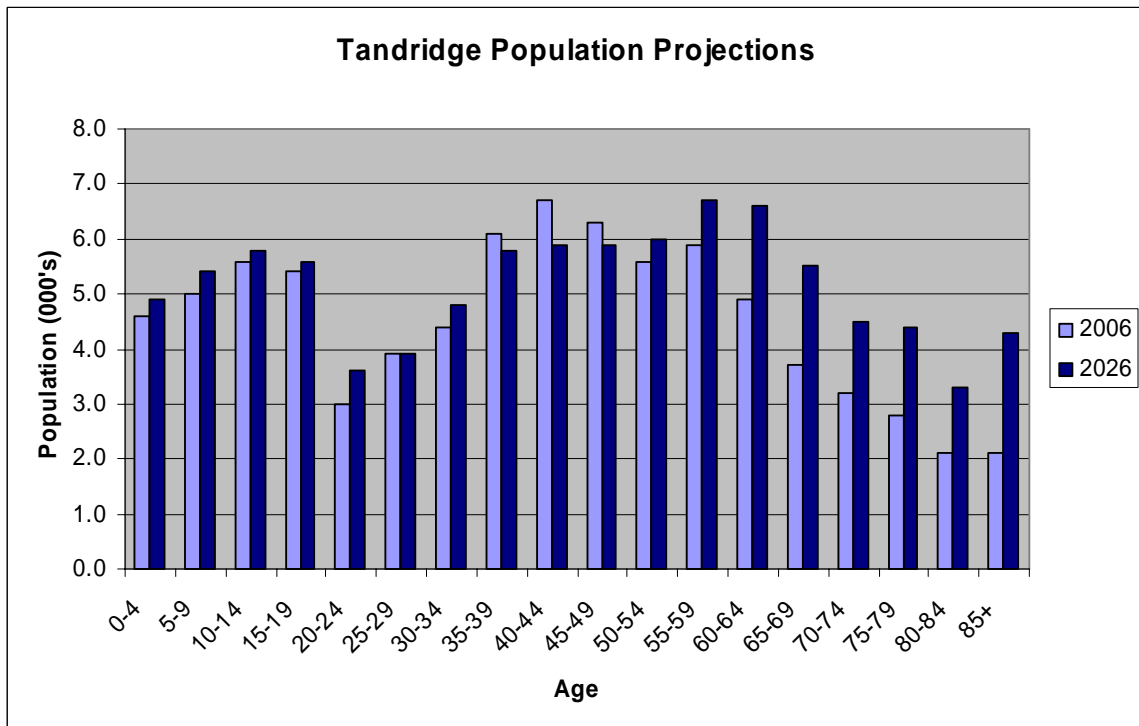
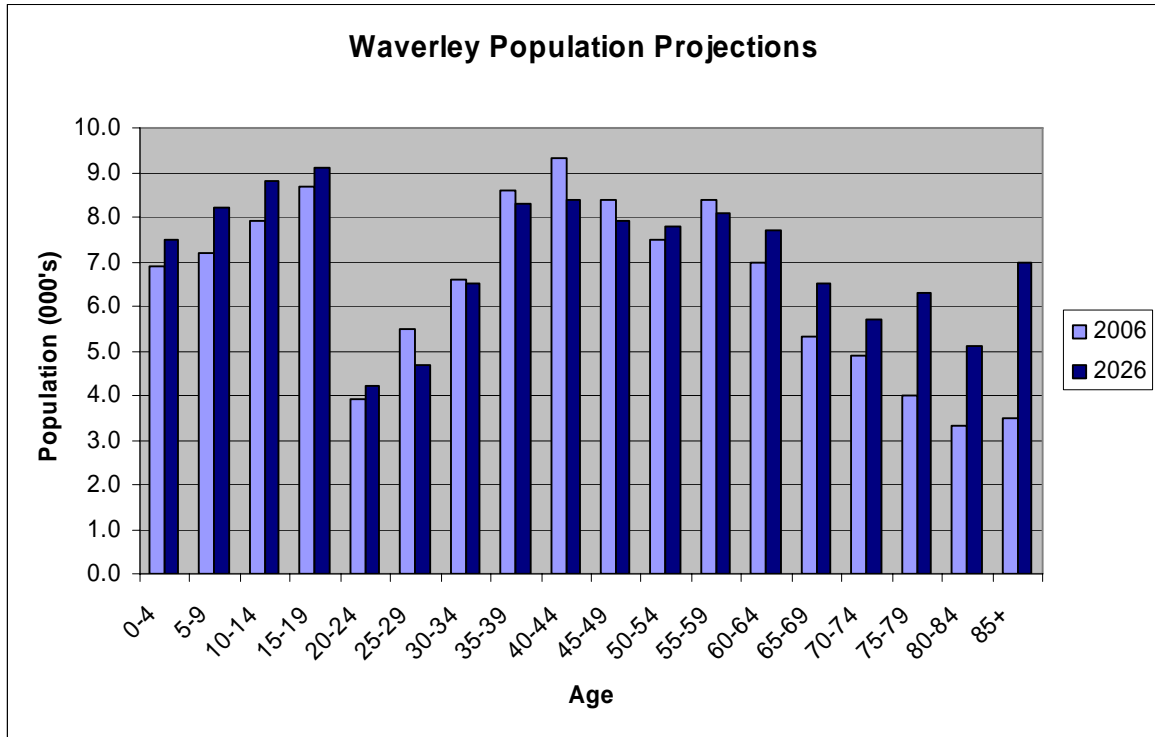


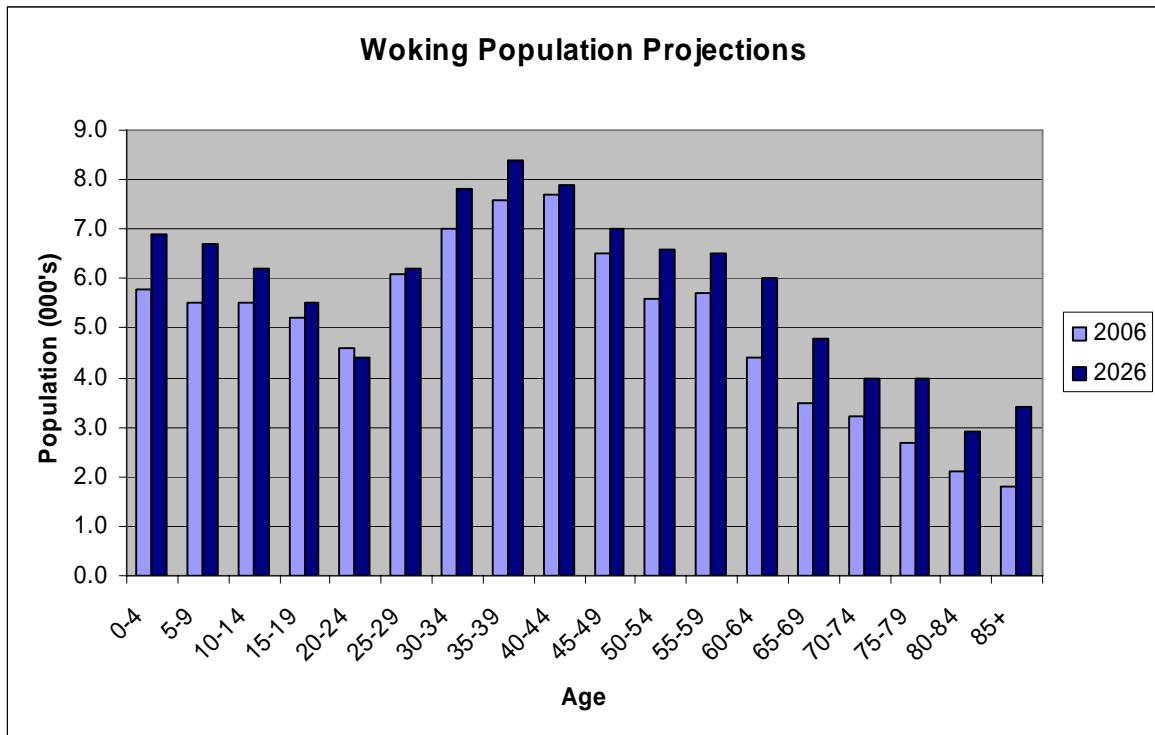
Figure A 9: Tandridge



**Figure A 10: Waverley**



**Figure A 11: Woking**



## Appendix 2 – references

- Ashford Borough Council and Strategic Partners (2002) **Ashford's Future**. Ashford Borough Council: Ashford
- Brooklands College website. Available online from: <http://www.brooklands.ac.uk/>
- CLG (2007) **Indices of Deprivation**. Available online from:  
<http://www.communities.gov.uk/communities/neighbourhoodrenewal/deprivation/deprivation07/>  
/[last accessed 07/05/09]
- Colin Buchanan (2008) **Buckinghamshire Infrastructure Study**. Colin Buchanan: London
- Colin Buchanan (2009) **Identifying Existing and Future Social and Community Infrastructure Needs for the Luton and South Bedfordshire Area**. Colin Buchanan: London
- Colliers CRE and Community Sense (2008) **Reading Central Area Community Infrastructure Report**. Colliers CRE and Community Sense: London.
- Darzi, A. (2007) **NHS Next Stage Review Interim Report**. Department of Health: London
- Davies, C., MacFarlane, R., McGloin, C., Roe, M. (no date) **Green Infrastructure Planning**. Available online from:  
[http://www.greeninfrastructure.eu/images/GREEN\\_INFRASTRUCTURE\\_PLANNING\\_GUIDE.pdf](http://www.greeninfrastructure.eu/images/GREEN_INFRASTRUCTURE_PLANNING_GUIDE.pdf)  
[last accessed 07/05/09]
- DCSF (2008) **School Destinations of Secondary School Pupils Resident in London Boroughs** (Internet only) Available online from:  
<http://www.dcsf.gov.uk/rsgateway/DB/SBU/b000807/index.shtml> [last accessed 07/05/09]
- DCSF (2008) **The Composition of Schools in England** (internet only). Available online from:  
<http://www.dcsf.gov.uk/rsgateway/DB/SBU/b000796/index.shtml> [last accessed 01/05/09]
- Deloitte (2007) **Cambridge Sub-Region Long Term Delivery Plan**. Deloitte: London
- East Surrey College website. Available online from: <http://www.esc.ac.uk/>
- EDAW/AECOM (2007) **Norwich Growth Area – Infrastructure Needs and Funding Study**. EDAW: London
- EDAW/AECOM (2007) **Thetford Masterplan – Growth Framework and Infrastructure Study**. EDAW: London
- EDAW/AECOM (2006) **Using Increases in Land Values to Support Infrastructure Provision in North and West Northamptonshire**. EDAW: London
- Esher College website. Available online from: <http://www.esher.ac.uk/>
- ERM (2007) **Testing the Service Requirement Impacts of Future Housing Growth in Bexley**. ERM: London
- Foster, A. (2009) **A Review of the Capital Programme in Further Education**. London.
- Gershon, P. (2004) **Releasing resources to the front line**. HMSO: Norwich

Godalming College website. Available online from: <http://www.godalming.ac.uk/home/default.asp>

Guildford Borough Council (2007) **Guildford Infrastructure Requirements Study**. Guildford Borough Council: Surrey

Guildford College of Further and Higher Education website. Available online from: <http://www.guildford.ac.uk/Home.aspx>

LSC website. Available online from [www.lsc.gov.uk](http://www.lsc.gov.uk)

LGiU (2007) **Comprehensive Spending Review**. TSO: London

ONS (2007) **Population projections**. Available online from: <http://www.statistics.gov.uk/statbase/product.asp?vlnk=997> [last accessed 01/05/09]

NCHOD (2007) **Total fertility rates**. Available online from: <http://www.nchod.nhs.uk/NCHOD/Compendium.nsf/361d5bea85d84b7c802573a30020fcd5/e826753285932627652570d1001cb770!OpenDocument&Start=1&Count=1000&Expand=3> [last accessed 01/05/09]

North East Surrey College of Technology website. Available online from: <http://www.nescot.ac.uk/sniff.php>

Opportunity Peterborough and Peterborough City Council (2008) **Peterborough IDP Draft Report**. Opportunity Peterborough: Peterborough

Reigate and Banstead Borough Council (2008) **Local Development Framework Community Facilities and Infrastructure Requirements – Position Statement**. Reigate and Banstead Council: Surrey

Reigate College website. Available online from: <http://www.reigate.ac.uk/page.php?pageID=1>

Roger Tym and Partners (2005) **Strategic Residential and Infrastructure Study**. Roger Tym and Partners: London

Roger Tym and Partners (2004) **Costing the Infrastructure Needs of the South East Counties**. Roger Tym and Partners: London

RTPI (2007) **Shaping and Delivering Tomorrow's Places: Effective Practice in Spatial Planning**. RTPI: London

South East Coast Ambulance Service NHS Trust (2008) **Business Plan 2008-2013**. NHS: Banstead

South East Coast Ambulance Service NHS Trust (2008) **The 2008/09 NHS Estates Condition Survey**. RMCGC Agenda Item. NHS: Banstead

South East Coast Ambulance Service Trust (2007) **Budget Setting in Papers and Minutes/Board Papers 22.05.07/Item 7: Budget paper and Cover Sheet**. NHS: Banstead

SEERA (2006) **Draft South East Plan**. SEERA: Guildford

SEERA (2008) **Proposed Changes to the South East Plan**. SEERA: Guildford

- Spelthorne Borough Council (2008) **Examination of the Spelthorne Core Strategy and Policies DPD: Background paper on infrastructure**. Spelthorne Borough Council: Surrey
- SQW (2008) **MKSM Business Plan**. SQW: London
- SQW Consulting (2007) **Integrated Development Programmes Toolkit Draft 3**. SQW: London
- Strode's College website. Available online from: <http://www.strodes.ac.uk/>
- Surrey County Council (2008) **Adult Social Care Services Service Delivery Plan for People with Learning Disabilities, People with Physical and Sensory Disabilities and People with Mental Health Problems**. Surrey County Council: Surrey
- Surrey County Council (2008) '2008/2009 Capital Budgets' in **Medium Term Financial Plan 2008-11**. Surrey County Council: Surrey
- Surrey County Council (2008) **Minerals and Waste Annual Monitoring Report 2007/08**. Surrey County Council: Surrey
- Surrey County Council (2008) **Older People's Services Service Delivery Plan**. Surrey County Council: Surrey.
- Surrey County Council (2008) **draft School Organisation Plan** (including Officer Report to the Executive). Surrey County Council: Kingston upon Thames.
- Surrey County Council (2008) **School Organisation Plan**. Surrey County Council: Kingston upon Thames.
- Surrey County Council (2008) **Surrey Waste Plan 2008**. Surrey County Council: Surrey
- Surrey County Council (2007) **Surrey Fire and Rescue Service Integrated Risk Management Plan Fourth Edition Our 2020 Vision. Surrey County Council**: Kingston upon Thames.
- Surrey County Council (2006) **Waste Disposal Authority JMWMS**. Surrey County Council: Surrey
- Surrey County Council (2006) **Waste Disposal Authority JMWMS Action Plan 2006-2025**. Surrey County Council: Surrey
- Surrey Heath Borough Council (2005) **Infrastructure Requirements Interim Report**. Surrey Heath Borough Council: Surrey
- Surrey Hills AONB Partnership (2009) **Surrey Hills Management Plan 2009-2014** (Consultation Draft). Available online from: <http://www.surreyhills.org/Management-Plan---Guidance/Management-Plan-Review.aspx>
- Surrey Hills Onward Learning website. Available online from: <http://www.shol.org.uk/>
- Surrey Local Government Association (2006) **Joint Municipal Waste Management Strategy**. SLGA: Surrey
- Surrey Police Authority and Surrey Police (2009) **Local Policing Plan 2009-12** (draft). Surrey Police: Surrey
- Surrey Police (2008) **10 Year Capital Programme DRAFT Version 4.4**. Surrey Police internal

document.

Surrey Police (2008) **NEW Surrey Police Property Portfolio as of 19/11/08**. Surrey Police internal document.

Surrey PCT (2007) **Your guide to local health services 2007/8**. Surrey PCT: Surrey

Surrey PCT (2007) **Creating an NHS fit for the future in Surrey**. Surrey PCT: Surrey

Surrey Strategic Partnership (2008) **The Impact of the Economic Downturn on Public Service Provision in Surrey**. SSP: Surrey

Surrey and Sussex NHS Trust (2008) **Capital Plans to 2012/13 from Trust Board Papers 24<sup>th</sup> July 2008**.

Surrey and Sussex NHS Trust (2008) **Surrey and Sussex NHS Operational Plan 2008/9**. Surrey and Sussex NHS: Surrey

Surrey Wildlife Trust (2007) **Annual Partnership Review**. Surrey County Council: Surrey

Surrey Wildlife Trust (2008) **Financial Statements for the Year Ended March 2007**. Available online from: [http://www.charity-commission.gov.uk/registeredcharities/ScannedAccounts/Ends23%5C0000208123\\_ac\\_20070331\\_e\\_c.pdf](http://www.charity-commission.gov.uk/registeredcharities/ScannedAccounts/Ends23%5C0000208123_ac_20070331_e_c.pdf) [last accessed 08/05/09]

Wandless, D. Securing Our Future Health: **Taking a Long-Term View**. HM Treasury: London

Woking College website. Available online from: <http://www.woking.ac.uk/>