

SURREY INFRASTRUCTURE STUDY



Executive Summary

AECOM were commissioned by the Surrey local authorities to prepare an Infrastructure Study for the county. The Study aims to assemble an evidence base, setting out the county's infrastructure requirements in the context of planned growth and estimating likely costs and funding gaps.

This report sets out findings following a desk based assessment carried out by AECOM in parallel with dialogue with the county council, local authorities and other infrastructure providers in Surrey.

This study presents an overview of growth patterns and the infrastructure projects needed to support such growth, their costs, how much funding has already been secured or is expected toward their delivery and the funding gap for the period up to 2030. It has been produced drawing upon information obtained from the county and local authorities, and following a period of engagement with infrastructure providers, but also includes some broad funding and cost assumptions and modelling work with associated limitations that may differ from those used in local infrastructure delivery plans and documents.

It provides a “snap-shot” in time, reflecting the position as of July 2015 and is not intended to supersede or replace local studies, which may have used different metrics that better reflect local circumstances

The preparation of the infrastructure study has highlighted the need for continued collaborative working between the county, local authorities, the Local Enterprise Partnerships and other service providers ranging from the NHS to the numerous utility companies.

It has also shown that shortfalls exist in terms of a standardised agreed approach towards a study of this kind including the collection of data on housing and employment sites, population forecasting, modelling infrastructure requirements and the costs and funding assumption for that infrastructure.

The following key findings are highlighted:

- Surrey authorities are planning to accommodate housing and economic growth over the 15 year period to 2030 delivering on average **3,137 dwellings per year**. This compares to completions of 2,495 dwellings per year across Surrey from 2010 to 2014.
- **47,053 dwellings** are expected between 2015 and 2030 with an associated population **increase of 60,991 people** (an increase of 5%).
- Delivering the necessary infrastructure to support that growth from now to 2030 is estimated to **cost at least £5.37 billion**.
- The study has estimated a combination of secured funding (over £993 million) and potential funding from the public sector, private sector and developer contributions (£1.23 billion). It is important to note that a full review of the funding position for each project included in the study is required to refine this estimation. This has been outside the scope of this project.
- Taking into consideration the potential funding identified, a **minimum gap in infrastructure funding of £3.2 billion** still remains between now and 2030.
- The study demonstrates that current anticipated developer contributions. Central Government grants and other sources of income are not sufficient to support the scale of growth anticipated in Surrey in the period to 2030. This is without consideration of further potential changes to current funding sources which may reduce finances further, such as reduction

in grants or additional exemptions from the Community Infrastructure Levy (CIL).

- CIL is at varying stages of adoption across the county reflecting variations in land value and the amount of money that will be collected. The identified funding gap should be considered and taken into account when setting CIL rates.
- The infrastructure requirements and associated costs presented represent a **minimum scenario** as these are based on a population forecast constrained by planned housing sites as opposed to ONS population forecasts.
- **ONS population forecasts for Surrey over the same 15 year period are 132% higher than the study forecasts.** The estimated costs associated with the infrastructure to support population growth could therefore be increased considerably if a growth level nearer the ONS forecast was realised.

The following key steps have been identified for Surrey and its partners to take the study findings forward:

- Revisit the evidence base behind this study on a regular basis in collaboration with partners to maintain a rolling understanding of the infrastructure landscape and funding priorities.
- Consider the implications of infrastructure providers decisions both now and in the future. This study has used standard metrics to determine requirements for some infrastructure elements (such as healthcare, libraries, community and leisure, youth services, social care accommodation etc), but the actual requirements will be heavily dependent on service decisions on new

delivery models which are affected by regulatory, financial and technological changes.

- Use the study as a tool for engagement with Central Government in demonstrating the challenges faced in supporting growth within the county and continue dialogue with the GLA and CLG on wider growth issues including London overspill.
- Continue to work with local authorities and other infrastructure providers to maintain an up-to-date understanding of growth distribution and supporting infrastructure.
- Use the study as a basis for identifying local level shortfalls to support bids for future funding, including potential means outlined in Section 6.
- Develop a wider linkage to asset management reviews to best utilise county council estate.
- Continue to work with the Local Enterprise Partnerships and other local authorities in the South East on strategic issues and priorities - in particular transport - to support growth. This may include linkages to London and radial routes to better connect the wider South East. In addition, considering the impacts of major infrastructure proposals such as airport expansion and the Crossrail extension.
- Improve understanding and dialogue with evolving infrastructure delivery and management regimes, i.e. NHS services, adult education, library services etc.
- Develop a long-term strategy for infrastructure investment and how it relates to planned growth, phasing, and the relationships (ie potential synergies and conflicts) between different types of investment.

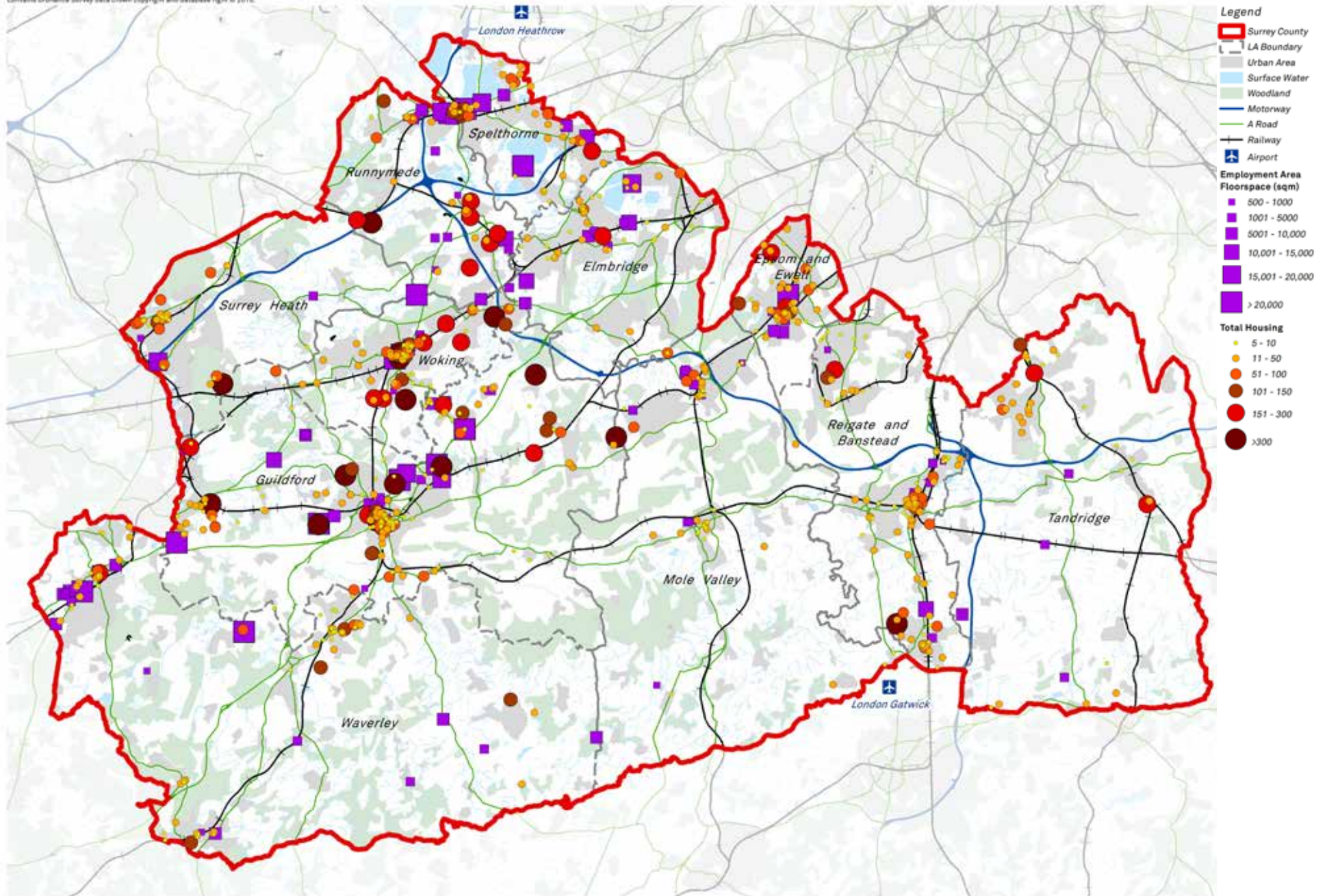


FIGURE A - STUDY AREA AND MAJOR HOUSING/EMPLOYMENT SITES

* This is based on the most up to date information at the time of publication and could be subject to change, subject to review of planning policy documents

Source: Local Authority data

SURREY

THE INFRASTRUCTURE STUDY IDENTIFIES THE FOLLOWING HEADLINES FROM 2015 TO 2030:

47,053
new homes

60,991
new people

59,000
new jobs

Total Infrastructure Costs: **£5,368,480,000**

Total Secured Funding: **£933,760,000**

Total Expected Funding: **£1,231,890,000**

Total Funding Gap: **£3,202,830,000***

% of Infrastructure Funded: **40%**

* (considering both secured and expected funding)

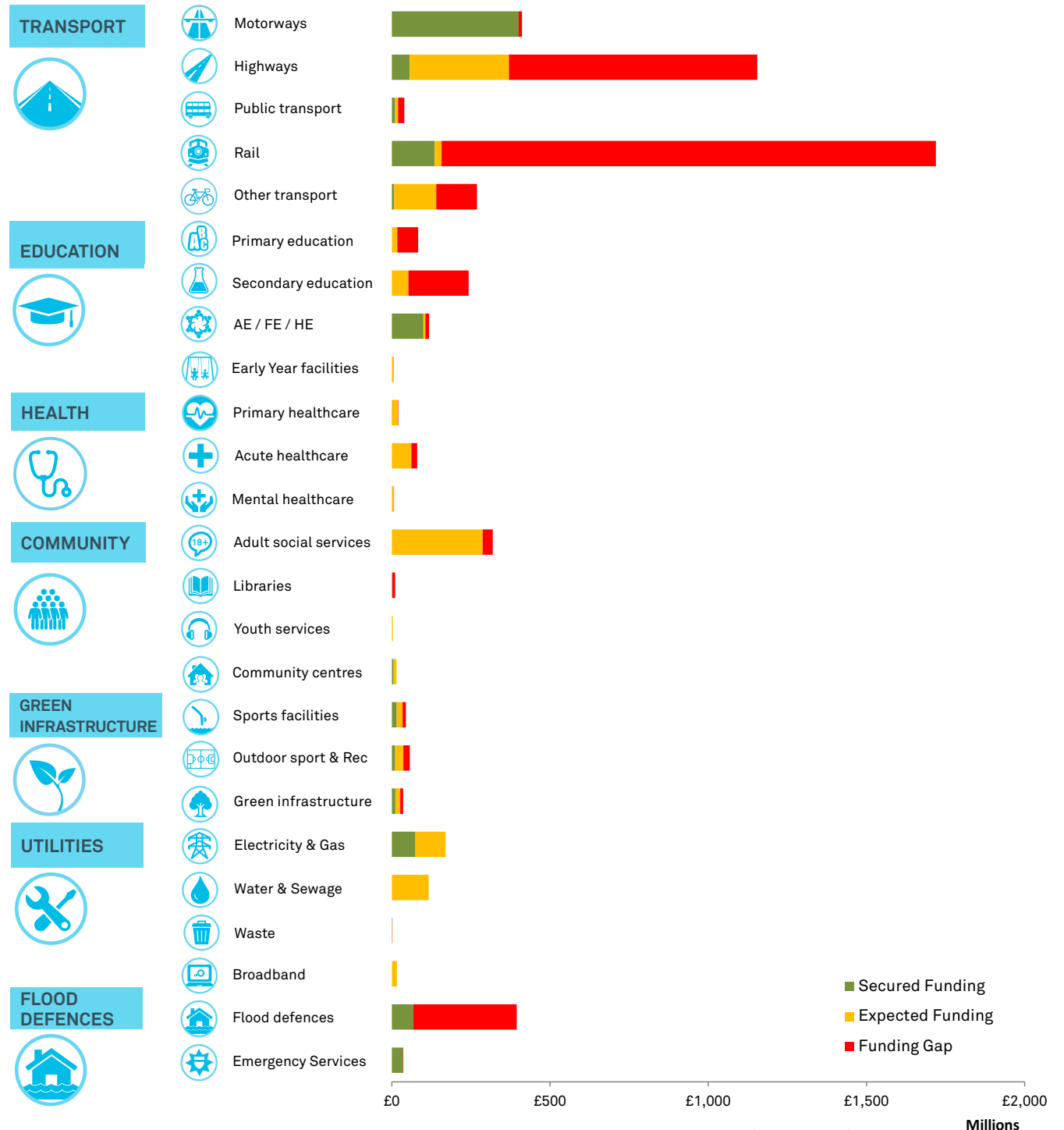


FIGURE B - SUMMARY OF INFRASTRUCTURE PROJECT COSTS AND FUNDING GAPS (2015-2030)

Millions

The diagram on the facing page illustrates the range of infrastructure required to support the delivery of 47,053 new homes from social infrastructure to transport and utility networks, open space and flood protection.

Our analysis has identified the potential costs of delivery alongside currently identified secured funding, potential funding from public, private and developer contributions and the remaining funding gap.

Having considered the range of potential funding options the analysis highlights more than £3.2 billion in funding gap between 2015 and 2030.

A similar level of investment in infrastructure is required across each of the three phases. However, given the budgets for beyond 2020 have not yet been set, it is difficult to gauge any degree of certainty regarding the level of investment beyond this date. Based on the information available, each phase currently has a significant funding gap identified.

Guildford is shown to have the largest infrastructure costs and gaps due primarily to a large number of major transport projects in the local authority. Woking and Reigate & Banstead are also shown to have considerable infrastructure costs to support growth.

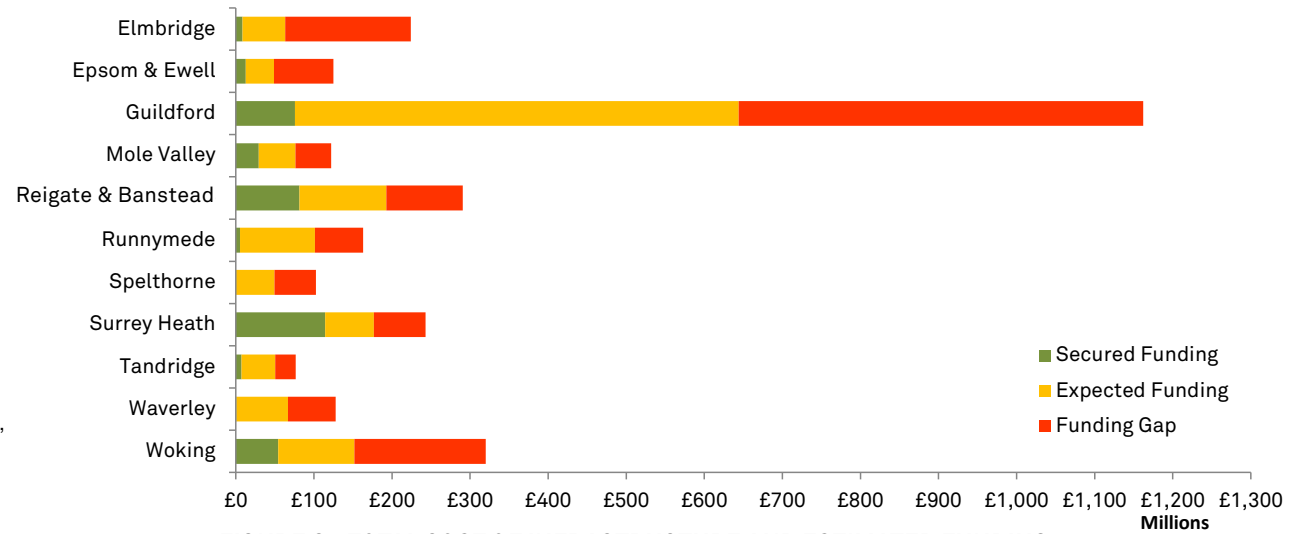


FIGURE C - TOTAL COST OF INFRASTRUCTURE AND ESTIMATED FUNDING



FIGURE D - TOTAL INFRASTRUCTURE COSTS AND ESTIMATED FUNDING

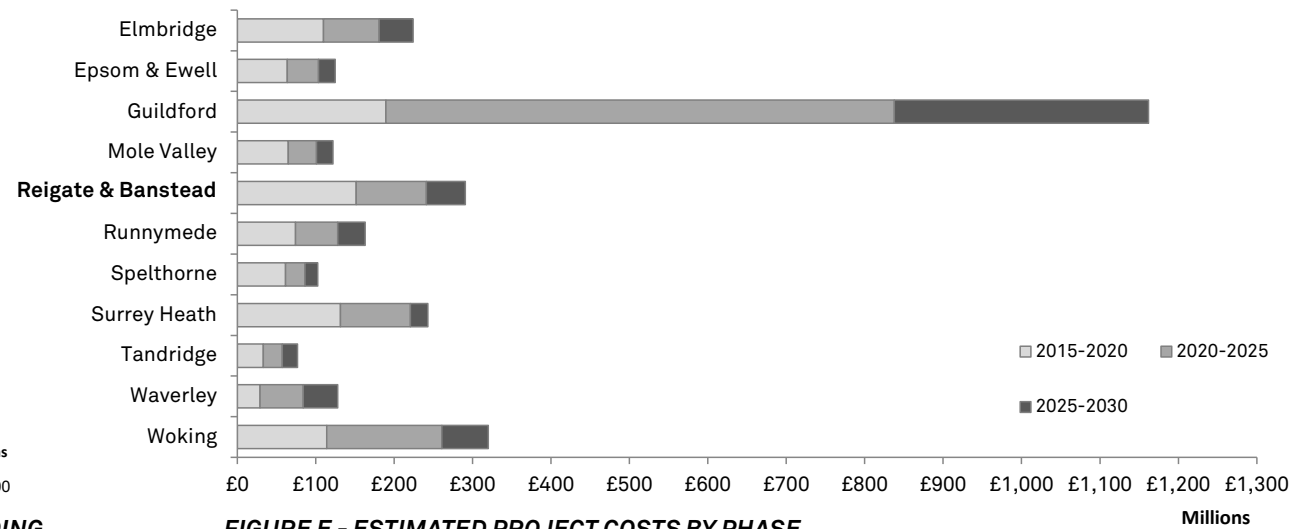


FIGURE E - ESTIMATED PROJECT COSTS BY PHASE

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01

The Surrey Infrastructure Study has been developed to demonstrate to Government, infrastructure providers, local communities and business the challenges being faced across Surrey in funding the infrastructure required to support growth and enhance the lives of existing and future residents.

INTRODUCTION

The Surrey Infrastructure Study has been prepared on behalf of the Surrey local authorities to provide a view of emerging development and infrastructure requirements to support growth across Surrey.

At present a strategic view of growth distribution and infrastructure provision is lacking across Surrey. Each local authority in Surrey is at a different stage of Local Plan preparation and working to a range of viability assumptions. Meanwhile infrastructure is being provided by a host of different providers.

This document begins to paint a strategic picture of the price of and risks to growth. It aims to:

- Collate and summarise population/housing growth projections across Surrey
- Set out a combined understanding of capacity within current infrastructure provision and pipeline infrastructure projects being taken forward by local authorities and other infrastructure providers
- Highlight cumulative costs, funding streams and gaps in infrastructure funding

The Surrey Infrastructure Study has been produced for the following audiences:

- Officers and members within Surrey County Council and the 11 Surrey local authorities
- The Coast 2 Capital and Enterprise M3 Local Enterprise Partnerships to inform priorities for investment to support growth objectives at a local level, central to the Government's aspirations of devolution

- Government and Infrastructure Providers – to demonstrate the potential distribution of growth, infrastructure requirements and funding gaps
- Residents and businesses to provide a county-wide view of development and infrastructure requirements and the difficulties in delivering infrastructure across the county.

In addition the study takes into consideration external factors affecting growth and infrastructure provision in Surrey in relation to the wider London and South East growth requirements.

Of particular relevance is the 2014 Inspector's Report on the Further Alterations to the London Plan which highlighted the lack of capacity in Greater London to meet growth requirements with some of the identified 7,000 homes per annum shortfall likely needing to be met in areas outside London, including Surrey.

Within London this context is recognised at the political level. The recent GLA Conservatives Report 'Southern Powerhouse: True Devolution for London and South East' highlights why a joint and collaborative approach is required between London and Surrey. This report raises a number of issues, in particular:

- It recommends a review of the GLA strategic planning boundaries with the likely outcome being "that London will need to exert greater influence over policy decisions outside the M25"
- It acknowledges that much of London's future housing will have to be met outside London and that "London should therefore be granted powers to create new garden suburbs in partnership with the county councils that surround the city"

- It recommends that TfL's (Transport for London) transport powers should be even further extended outside London to grant control over the major commuter routes
- It recommends that LEPs around London should combine much of their funding to address strategic infrastructure provision

The Mayor has now started work on a full review of the London Plan and mechanisms for closer political engagement and joint working with local authorities in the South East and East of England are being put in place.

Surrey is part of the Coast to Capital LEP and the Enterprise M3 LEP, which secured over £200m and £115m from the Government's Local Growth Fund, respectively, to support economic growth for the period 2015/16 to 2021. Combined, the Growth Deals will help create 19,000 jobs and 8,000 homes across the LEP areas. Therefore, it is increasingly necessary to adopt a more strategic approach to plan for infrastructure and unlock investment to support growth.

This study assesses the current infrastructure capacity and the impacts of change to 2030. Together with a West Sussex Infrastructure Study to 2030, it also informs a Gatwick Diamond Infrastructure Assessment 2030-2050, that looks at the longer term infrastructure requirements and capacity issues associated with potential growth scenarios at Gatwick airport on Surrey and West Sussex.

SCOPE OF THE STUDY

The Surrey Infrastructure Study covers all forms of infrastructure supporting the economic, environmental and social needs of Surrey (see Figure 1.2).

The categories covered in the report are shown in Figure 1.1.

The study is structured as follows:

Section 2 provides an overview of how growth and infrastructure is planned in Surrey.

Section 3 sets out social and economic growth drivers and the potential distribution of development in Surrey.

Section 4 provides an overview of infrastructure requirements across the county for a range of infrastructure provision including education, health, community, transport, utilities and flood protection.

Section 5 provides analysis on a local authority basis of development suitability taking into account infrastructure capacity and proposed investment.

Section 6 presents a commentary on delivery and funding issues affecting growth and infrastructure across Surrey.

Section 7 identifies recommendations and conclusions.

Section 8 details specific caveats supplied by some of the local authorities to accompany the housing forecasts.

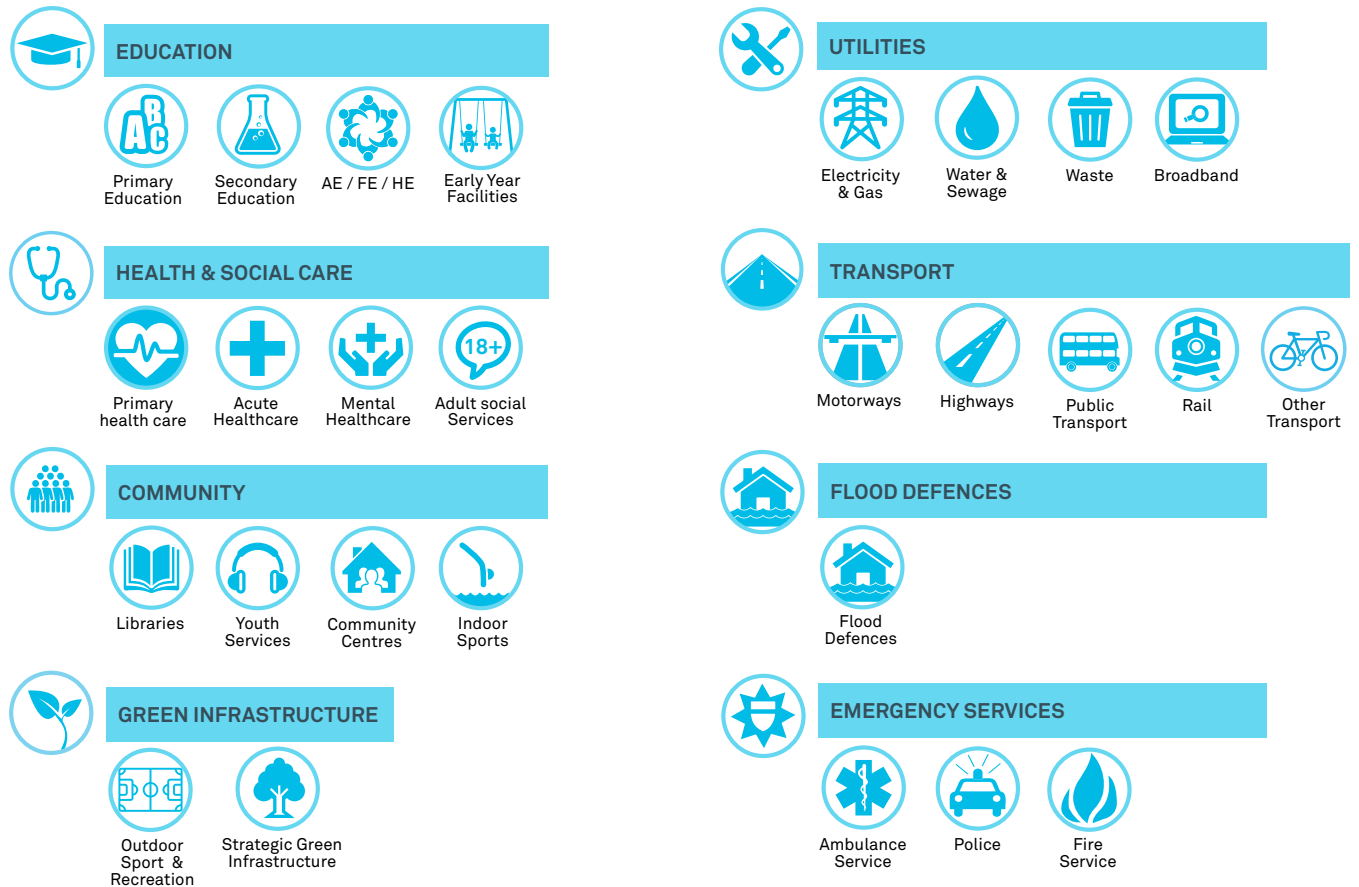


FIGURE 1.1 - INFRASTRUCTURE CONSIDERATIONS

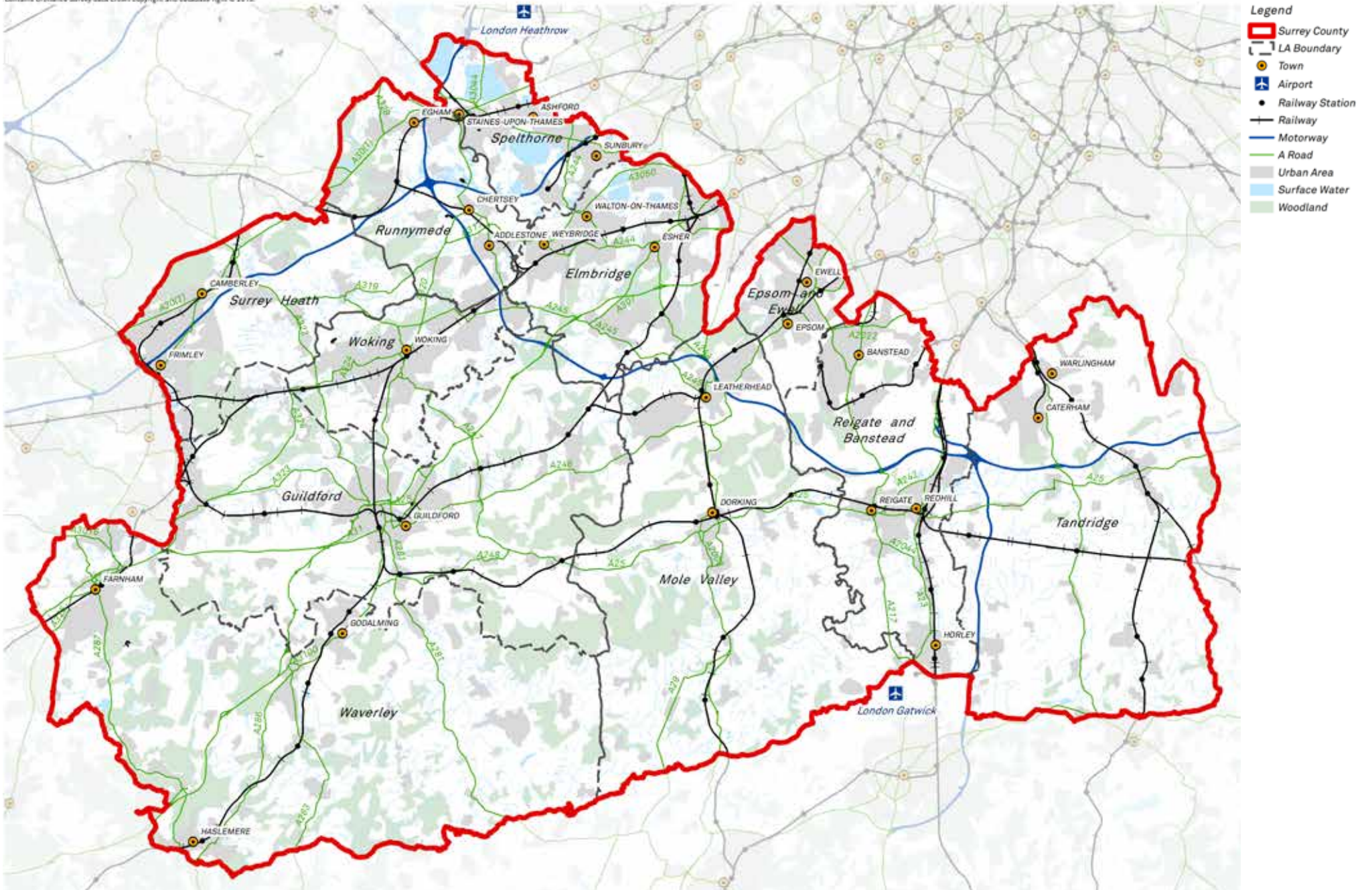


FIGURE 1.2 - STUDY AREA

PARAMETERS OF THE STUDY

This study has been prepared in accordance with the following parameters:

A Snapshot in Time:

- The housing, employment and population forecasts presented in this document represent our understanding of the growth context at July 2015 but it is recognised that this information is continually evolving and should therefore be treated as a snapshot in time only.

Housing Growth:

- The production of the Infrastructure Study has required close working with the local planning authorities (LPAs) to establish the latest understanding of potential additional housing delivery between 2015 and 2030.
- It is crucial to highlight the fact that across the eleven local authorities a significant variation in the progression of local plans and associated technical work exists. As a result the ability of all local authorities to contribute an official housing trajectory covering 2015 to 2030 with associated housing sites has not been possible and subsequently a draft working set of figures has been provided.
- The housing trajectories presented in this document have been provided by the LPAs but represent only the latest working assumption on likely housing delivery. Some are based on anticipated completions of sites and/or adopted local plan annual average figures, while Guildford's (2015 -2030) is the minimum recommended

figure from the 2014 draft Strategic Housing Market Assessment (SHMA) and Runnymede's (2020 – 2030) is the minimum from the 2015 draft SHMA and both have yet to be tested. Specific caveats have been supplied by some of the local authorities and are presented in Section 8.

- It should be noted that the majority of the Surrey LPAs currently base the need for housing in their area on population forecasts from the ONS, household forecasts from the DCLG and also to some extent on the historic guidance provided by the now withdrawn Regional Plan (The South East Plan). Therefore, not all the housing trajectories will have been fully informed by housing market and affordability data. A number of the LPAs are currently in the process of reviewing their future housing needs and so the housing figures presented in this report may differ from emerging forecasts from the LPAs.

Employment Sites:

- Key employment sites presented in this document have been provided by the LPAs as sites likely to have significant implications for infrastructure provision. It does not include all employment sites and excludes smaller employment areas.

Population Forecasts:

- A technical population modelling scenario forecast has been produced by SCC using the PopGroup Model to inform the infrastructure study document and the technical infrastructure modelling associated with it. This is a bottom-up forecast constrained by the number of dwellings to be built in each individual local authority as advised by the local planning authorities in July 2015.

- As set out earlier under 'housing growth' it is possible that the housing figures presented in this report under-represent the actual number of homes delivered over the next 15 years and as such the population forecasts produced by SCC for this assessment should be seen as a minimum scenario which could potentially be exceeded with the subsequent infrastructure demands and costs also increased.

Infrastructure Analysis:

- The study has sought to establish the existing scale, distribution and capacity of all infrastructure types and the required additional investment in infrastructure to support growth to 2030 through the consolidation of existing service planning and through theoretical modelling where no service planning is available.
- The eleven local authorities have undertaken considerable work to understand the infrastructure requirements to support their local plans. Figure 2.3 presents the current availability of existing Infrastructure Delivery Plans (IDPs) across the county. These IDPs have formed important source documents for this study.
- Again, it is crucial to highlight the fact that across the eleven local authorities a variation in the progression of infrastructure planning work exists in conjunction with the progress on local plans. As a result, the inclusion of findings and proposed projects from those documents

within this study must be accompanied by a health warning that they may not represent the latest position in the local area. It should also be noted that a number of the local authorities are currently in the process of updating their IDP.

- The topic specific infrastructure analysis represents a snap shot in time and does not necessarily reflect all current work underway across the various service areas to address capacity issues and plan for change in service provision.
- The analysis does not include detailed analysis of the impact of housing growth within London and adjoining counties (especially West Sussex, Hampshire and the Berkshire unitary authorities) which will have an impact on service demands within Surrey, particularly along border areas. This is explored however at a high level within Section 3.
- A project database has been created to record all identified project requirements, including the type, location, timing, costs and funding of those investments.

Cost Analysis:

- The costs of infrastructure presented in this document represent the sum of all entries in the project database under that infrastructure theme and location. It should be noted that not all items in the project database have an associated cost due to a lack of project details from which to estimate costs. This therefore means that the costs of infrastructure presented in this document represent a minimum figure.

- All costs presented in this report are based on current day prices and have not been index linked forward to the assumed date of requirement.
- A full set of cost caveats have been included at the conclusion of this document and explain the predominant source of cost information by each infrastructure topic.
- It is important to note that the total costs of infrastructure requirements for each local authority presented in this report are unlikely to match exactly those presented in the Infrastructure Delivery Plan of that LPA. This study covers all infrastructure topics for each local authority and has subsequently included additional project requirements which may not have been included in the local authority studies.

Funding Assumptions:

- The funding of infrastructure presented in this document is primarily based on the sum of all entries in the project database where a project has been identified as having secured funding or is expected to receive funding from one or more sources.
- The existing understanding of project specific funding is not complete and will need to be advanced by all interested parties.
- Funding has been classified into two categories of secured and expected.
- Secured funding represents any project funding that has been identified within each Local Authority's IDP or specifically noted as secured by source documents or in

discussions with stakeholders such as the Environment Agency.

- Expected funding includes potential funding from the public sector, the private sector and developer contributions.
- The expected funding category includes a theoretical assumption on the potential developer contributions to that service requirement based on the number of new dwellings forecast in that area. The details of how the potential developer contribution has been calculated is included in Section 6.
- A number of working assumptions have had to be applied to other expected funding sources (both public and private) such as the likely NHS, private sector and utility company contribution to project costs which are inevitable but cannot at this time be confirmed as in many cases the project costs identified have been generated theoretically and do not represent actual projects. These working assumptions are also set out in more detail in Section 6 of the document.
- It should therefore be noted that the funding estimates presented in this document are indicative and based on a number of working assumptions and in the case of the NHS have not been validated. As this study is taken forward a greater degree of accuracy on potential funding sources is required.

PLANNING FOR INFRASTRUCTURE IN SURREY

THE BASIS OF THE STUDY

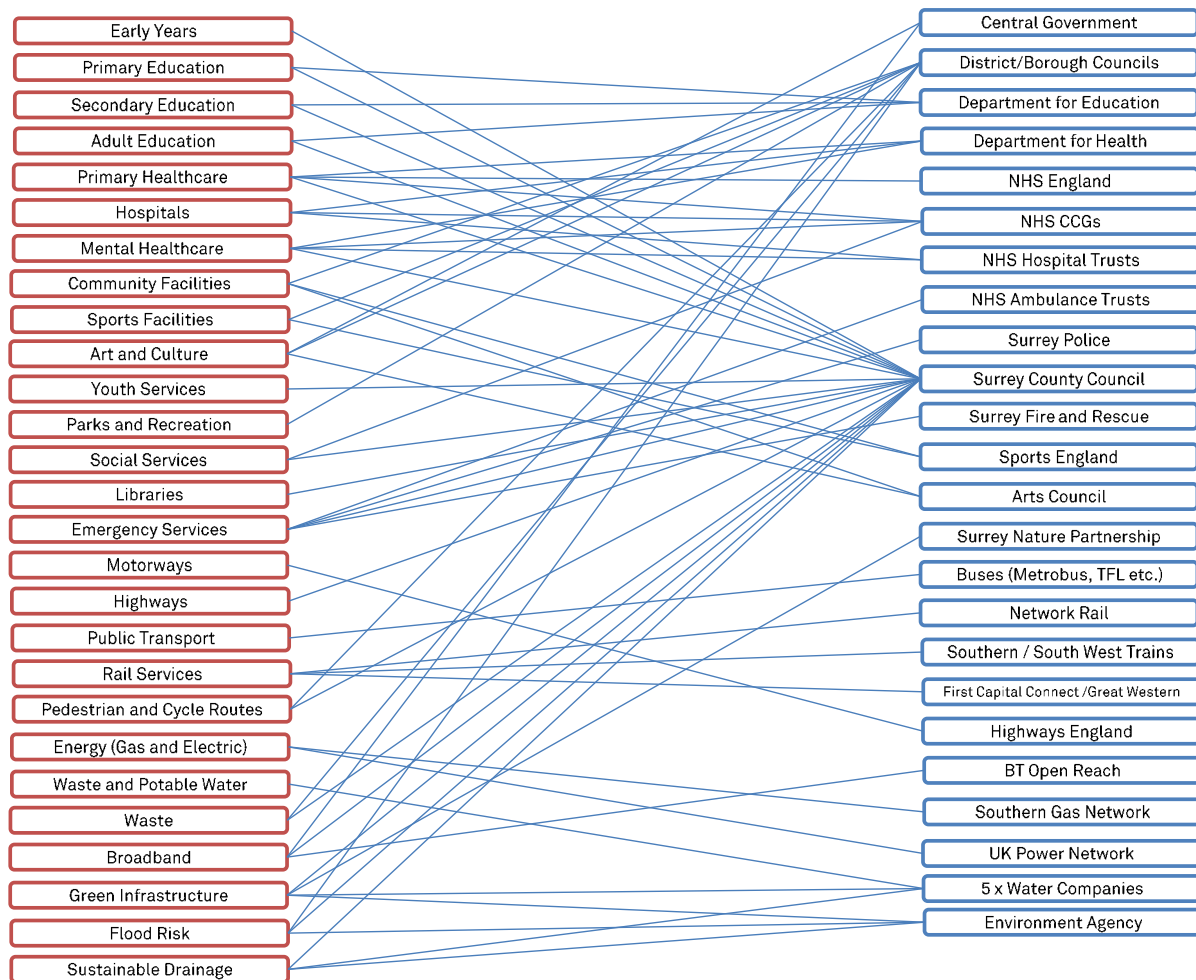
THIS STUDY DRAWS TOGETHER INFORMATION AND DATA FROM A RANGE OF SOURCES. IT SEEKS TO PIECE TOGETHER A STRATEGIC PERSPECTIVE OF GROWTH AND INFRASTRUCTURE PROVISION IN SURREY AT THE PRESENT TIME AND 15 YEARS INTO THE FUTURE.

It draws on the following information:

- Adopted and emerging Local Plans and Infrastructure Delivery Plans for all local authorities within Surrey
- Local Authorities' Local Plan evidence bases
- Other existing and emerging information, strategies and plans from local authorities across Surrey
- GIS database information provided by Surrey County Council
- Surrey County Council Pop Group model for population growth
- Documents produced by Coast to Capital & Enterprise M3 Local Enterprise Partnerships (LEP)
- Surrey Rail Strategy, Surface Access to Airports Study, the North Downs Line Assessment, and the Wessex Route Study
- Documents provided by Surrey Connects
- Information from other infrastructure provider's plans including utility providers, the Environment Agency, Network Rail, Highways England and the National Health Service (NHS).

The study is based on a detailed analysis of issues in Surrey relating to growth and infrastructure current to July 2015. It should be recognised that this presents a snapshot in time and has no legal basis.

A spreadsheet database containing a list of all known infrastructure projects, costs and funding provides a detailed evidence base for this study.



INFRASTRUCTURE PROVIDERS

FIGURE 2.1 SHOWS THE COMPLEX RELATIONSHIP BETWEEN INFRASTRUCTURE REQUIREMENTS AND PROVIDERS IN SURREY. THE COUNTY AND THE LOCAL AUTHORITIES PLAY A VITAL ROLE IN THE SUPPLY OF INFRASTRUCTURE IN SURREY. IN ADDITION A NUMBER OF PUBLIC AND PRIVATE ORGANISATIONS HAVE RESPONSIBILITY TO PROVIDE INFRASTRUCTURE TO SUPPORT EXISTING POPULATION AND PROPOSED GROWTH.

This study covers the following aspects of infrastructure provided by Surrey local authorities.

- Education (primary, secondary, further education and community learning)
- Other social infrastructure (libraries, adult social services and youth services, public health, community and sports facilities, parks and recreation)
- Highways and transport

■ Waste management

In addition, other providers' requirements have been investigated including:

- Healthcare (NHS)
- Highways (Highways England)
- Railway and bus operations
- Utility services
- Other significant infrastructure (e.g. Environment Agency)

FIGURE 2.1- THE COMPLEX PATTERN OF INFRASTRUCTURE PROVISION IN SURREY

PLANNING FOR INFRASTRUCTURE

Changes to government legislation have modified how infrastructure planning is undertaken and placed greater emphasis on the link between the Local Plan and the delivery of infrastructure.

In Surrey it is the local authorities who have responsibility for producing Local Plans as local planning authorities (LPAs).

Surrey County Council is a statutory consultee as an infrastructure provider, but does not have a statutory responsibility for plan making (with the exception of Minerals and Waste planning).

The Government's National Planning Policy Framework (NPPF) states that LPAs should work with other authorities and providers to assess the quality and capacity of a range of infrastructure types and the ability to meet forecast demands and take account of the need for strategic infrastructure within the LPA area (para. 162).

Local Plan policies on infrastructure delivery and development are required to operate together, in order to ensure delivery in a timely fashion. Where possible the NPPF recommends Community Infrastructure Levy (CIL) charges should be developed and assessed alongside the Local Plan (para. 177).

Localism Act 2011 and the NPPF also set out a duty to cooperate across boundaries enshrining the need for local planning authorities to engage with different organisations on strategic planning issues (para.179), in particular infrastructure providers as illustrated in Figure 2.2. County councils are subject to the duty and the local authorities are required to engage with Surrey County Council as a key infrastructure provider. However, there is no body in place to provide strategic co-ordination of growth across local authority boundaries or strategic infrastructure. Therefore, there is a vital need for increased dialogue and close collaboration between local authorities and infrastructure providers to ensure infrastructure is adequately planned

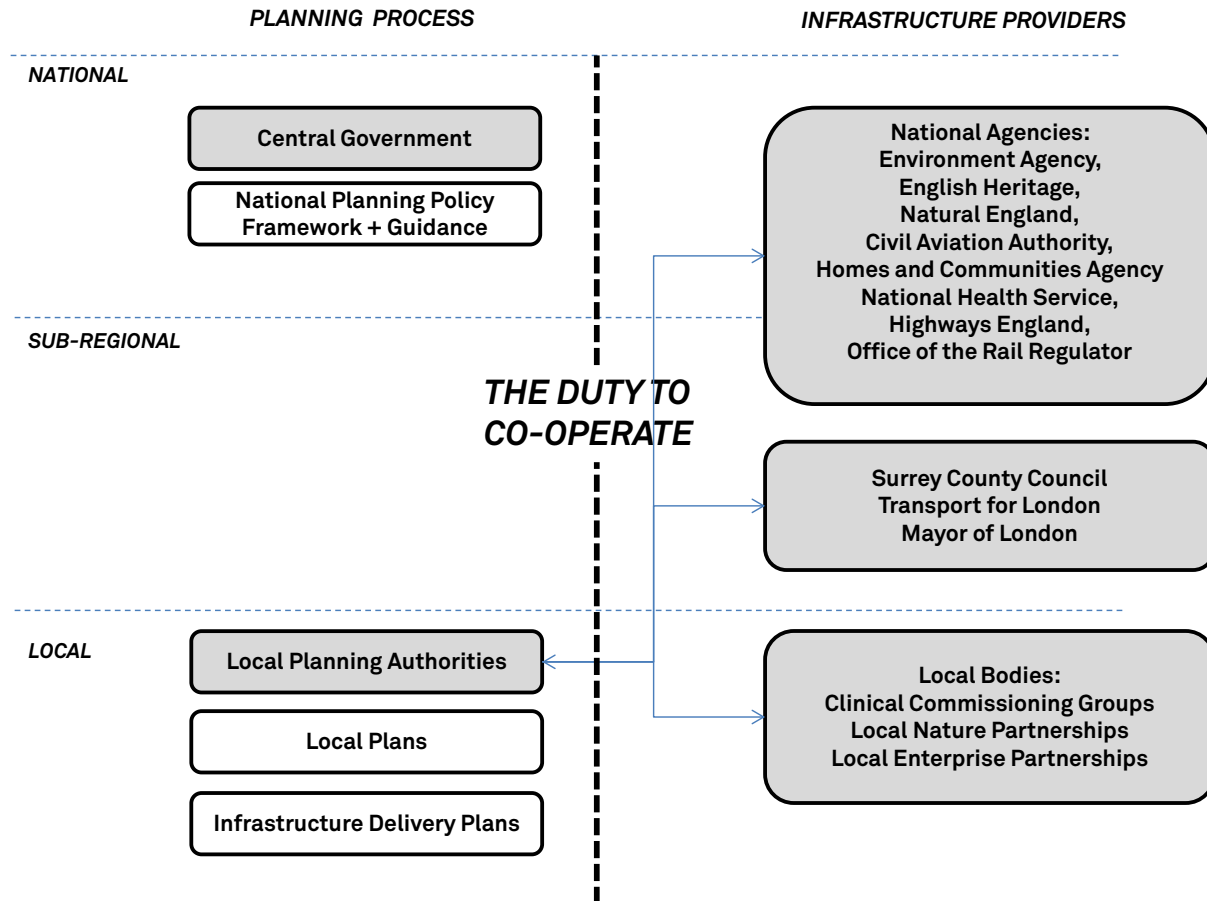


FIGURE 2.2- THE CURRENT PLANNING PROCESS AND INFRASTRUCTURE PROVISION IN SURREY

for and delivered in tandem with area growth projections in order to meet service demand. In this way, this Study seeks to facilitate discussion by highlighting the core infrastructure issues which require attention.

As illustrated in Figure 2.3, all local planning authorities in Surrey are at varying stages in terms of having an up-to-date Local Plan. Some plans have been adopted while others are in the process of being prepared. Where a local

authority's Local Plan pre-dates the adoption of the NPPF, policies may no longer be up to date and may need to be revised. All have produced an "Infrastructure Delivery Plan" which sets out infrastructure required to support growth and funding regimes.

This document will assist Surrey Local Authorities to fulfil the "Duty to Cooperate" and begin to piece together a co-ordinated understanding of growth and infrastructure across Surrey.

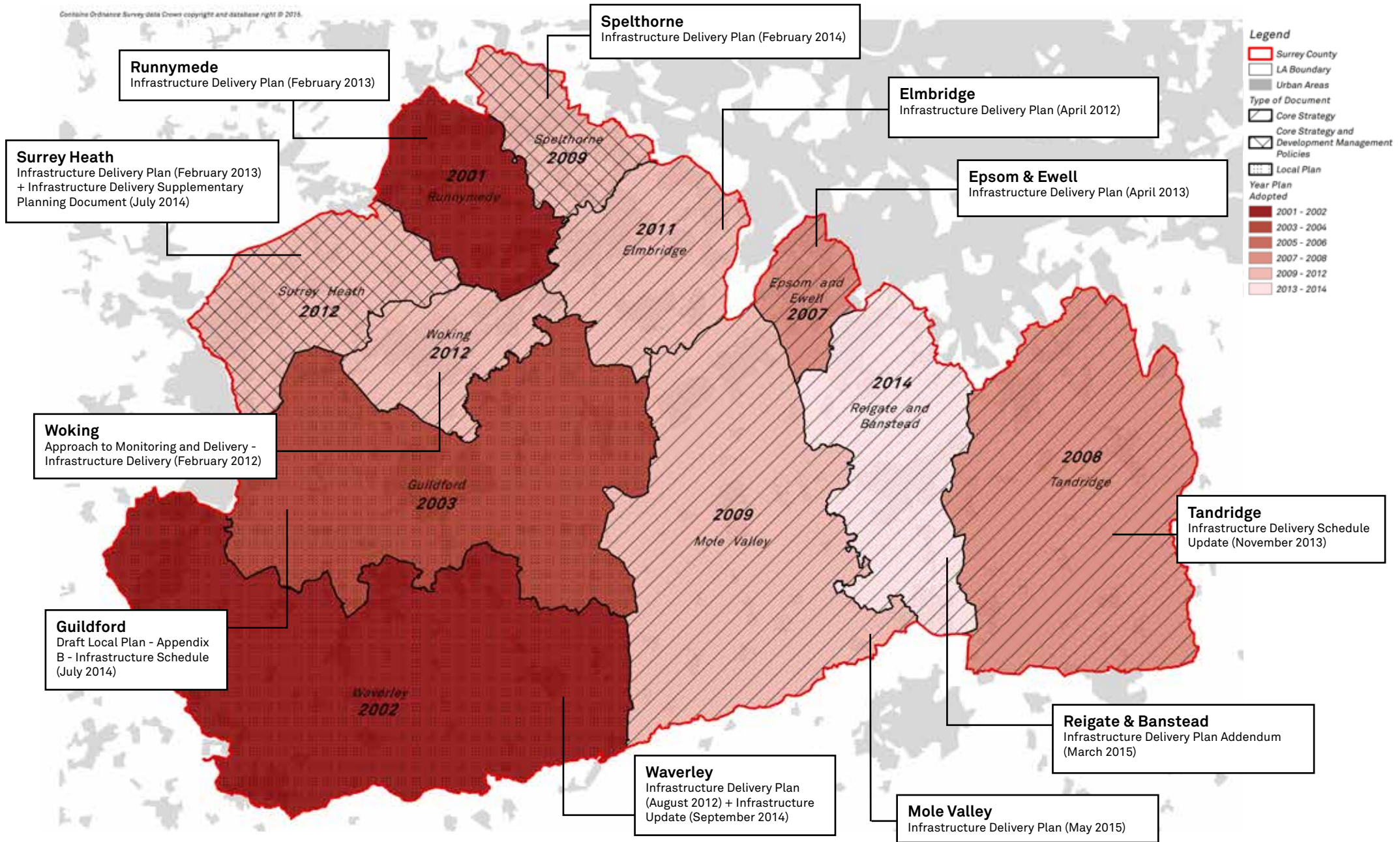


FIGURE 2.3 - LOCAL PLAN AND INFRASTRUCTURE DELIVERY PLAN STATUS IN SURREY LOCAL AUTHORITIES (JULY 2015)

UNDERSTANDING SURREY'S GROWTH REQUIREMENTS

THIS SECTION AIMS TO SUMMARISE THE KEY ISSUES IN PLANNING FOR GROWTH IN SURREY TO 2030.

As highlighted in the previous section, growth in Surrey is planned for through the Local Plan process on an authority-by-authority basis. This section seeks to set the context for county-wide growth requirements and current planned growth areas as established within the Local Plans.

It comprises:

POPULATION GROWTH REQUIREMENTS

- Population modelling and growth assumptions to 2030
- A social portrait summarising current socio-demographic issues and trends likely to impact on growth and infrastructure provision.
- An understanding of housing growth requirements and locations

ECONOMIC GROWTH REQUIREMENTS

- An economic portrait summarising current economic issues and trends
- An understanding of employment requirements and locations

RELATIONSHIP WITH LONDON AND ADJOINING AREAS

- An understanding of impacts on Surrey from potential growth in adjoining areas, especially from London

This growth context is then used as the basis for examining infrastructure requirements in the remainder of this study.

POPULATION PROJECTIONS

THERE ARE 2 DIFFERENT POPULATION PROJECTIONS WHICH NEED TO BE TAKEN INTO ACCOUNT:

2012 Based Sub National Population Projections from ONS

- Based on ONS census results, natural change and migration trends. These are unconstrained projections.
- Provided at the local authority level
- Used by Central Government departments and agencies for local authority funding
- Used by DCLG to produce the latest household forecasts which inform Strategic Housing Market Area Assessments (SHMAs)
- The ONS projection assumes a 2015 population of 1,171,200 for Surrey
- It projects a 2030 population of 1,312,600 - an increase of 141,400, equivalent to 12% growth

SCC PopGroup Model based Population forecast

- A bespoke population forecast produced specifically for this study to establish a population forecast directly linked (and constrained) by the planned housing
- Based on ONS census results, natural change but constrained to the housing trajectories of planned growth for each of the local authorities
- Local authority level data provided July 2015
- This projection assumes a 2015 base population of 1,157,170 for Surrey

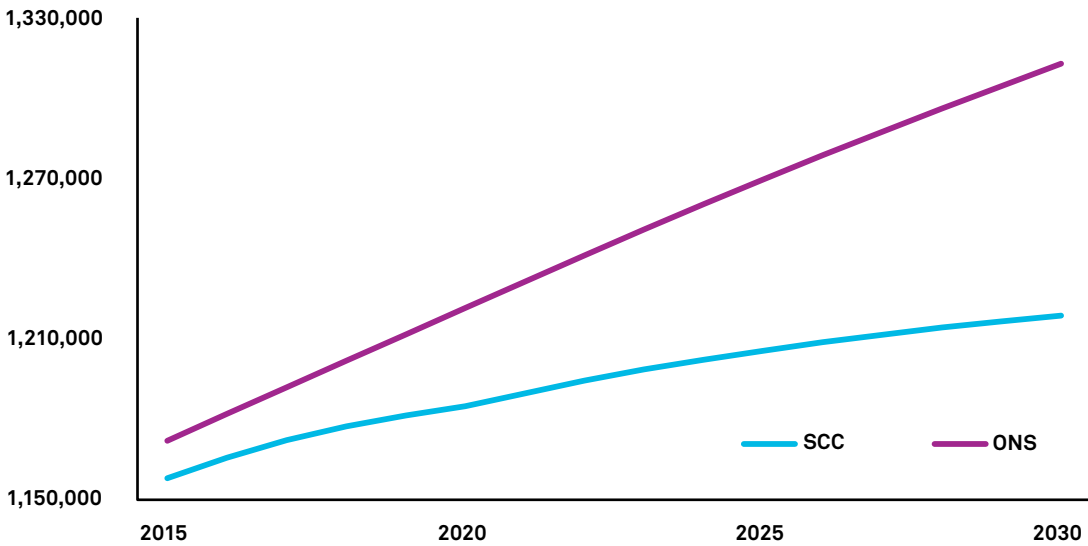


FIGURE 3.1 -2030 POPULATION FORECASTS

Source: SCC PopGroup Model Forecasts, ONS 2012 based Sub National Population Projections

- SCC Forecast projects a 2030 population of 1,218,170 - an increase of 61,000, equivalent to 5% growth
- It should be noted that given this data was taken from a snapshot in time, it may differ from any evidence in emerging plans and SHMAs.

HOW THE POPULATION FORECASTS VARY BY LOCAL AUTHORITY

The housing trajectory based SCC forecasts and trend based ONS forecasts portray a significantly different total population change across Surrey as a whole between 2015 and 2030. There are significant variations between the local authorities. As shown in figure 3.2 the population forecasts which have been driven by the current housing trajectories are considerably lower in Tandridge, Elmbridge and Epsom & Ewell than the trend based forecasts.

Only Guildford shows housing based figures that are higher than the trend based forecasts, while Runnymede has the most similar housing forecasts between the two. However, the housing requirement for both these authorities is in whole or part based on an objectively assessed need figure and has yet to be confirmed through the examination process.

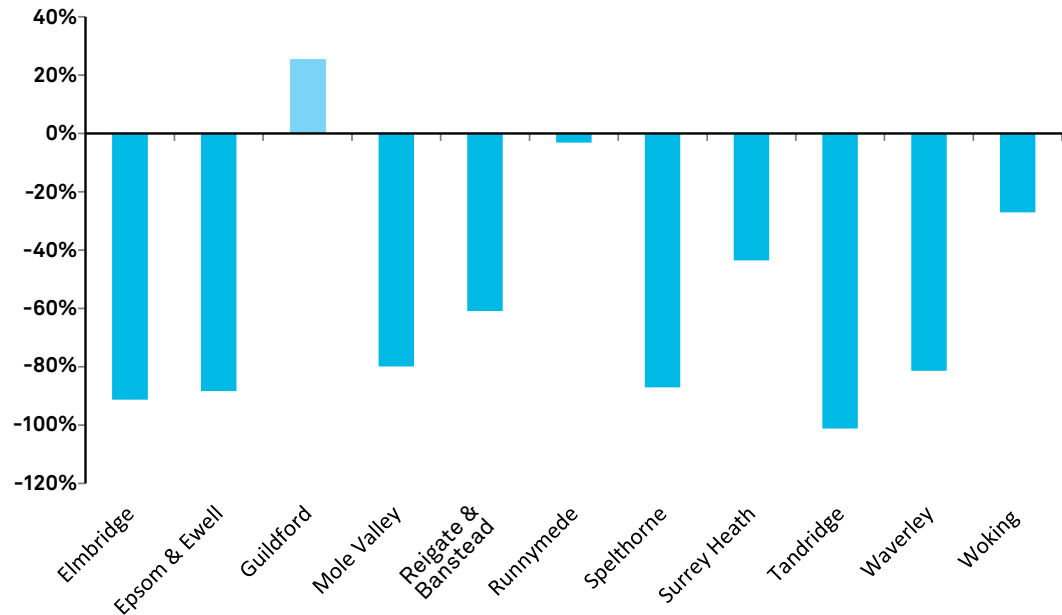


FIGURE 3.2 - SCC FORECASTS VARIATION FROM TREND BASED ONS FORECASTS

It is important to make clear why the population projections produced by SCC using the PopGroup Model are notably lower in most cases than the ONS population forecasts. As set out in the earlier study parameters section, the PopGroup model is constrained by the number of homes planned by the local authorities. All other assumptions on baseline population and natural change will match the ONS forecasts.

Additionally, most of the housing trajectories provided by the local authorities are based upon anticipated delivery of sites and/or annual average plan requirements that, with the exception of Reigate & Banstead and Woking, have not considered objectively assessed needs for housing. The trajectories for Guildford and Runnymede use the minimum recommended figure for objectively assessed need from published draft SHMAs at July 2015.

3.1 SOCIAL PORTRAIT

THE FOLLOWING HEADLINES SUMMARISE KEY SOCIO-DEMOGRAPHIC TRENDS AND PROJECTIONS THAT WILL AFFECT THE DISTRIBUTION OF GROWTH AND PLANNING FOR SUPPORTING INFRASTRUCTURE TO 2030.

Surrey will grow by at least 61,000 people (5% increase) by 2030

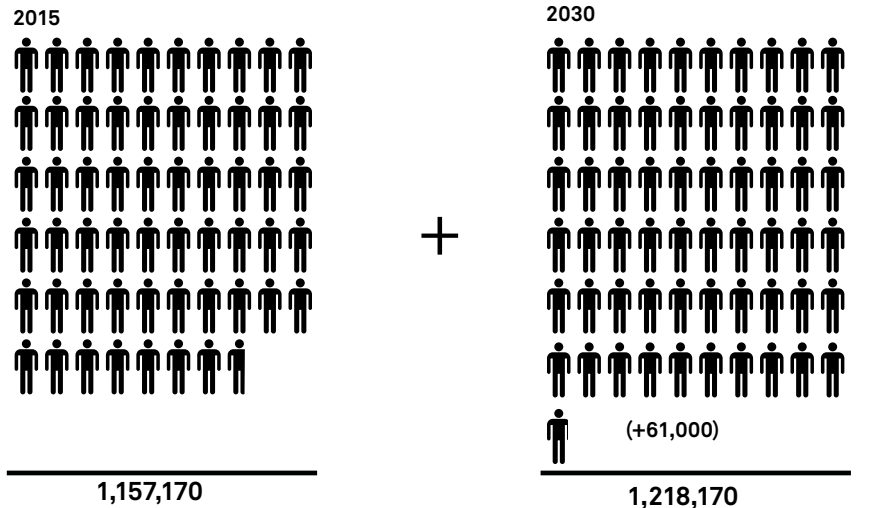


FIGURE 3.3

Source: SCC PopGroup Model

However, this growth varies significantly within Surrey, with the greatest increases currently projected in Guildford, Runnymede and Reigate & Banstead. Tandridge is forecast to see no population increase which is a direct result of the housing trajectory.

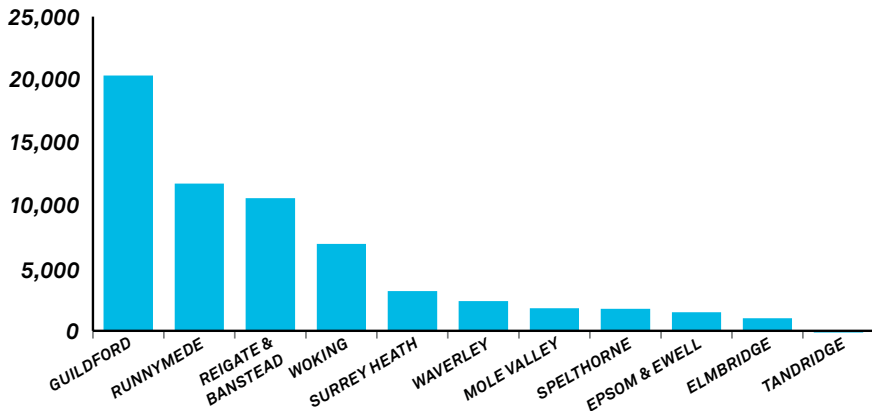


FIGURE 3.4

Source: SCC PopGroup Model

In 2013 the natural increase of Surrey was 3,726 people:

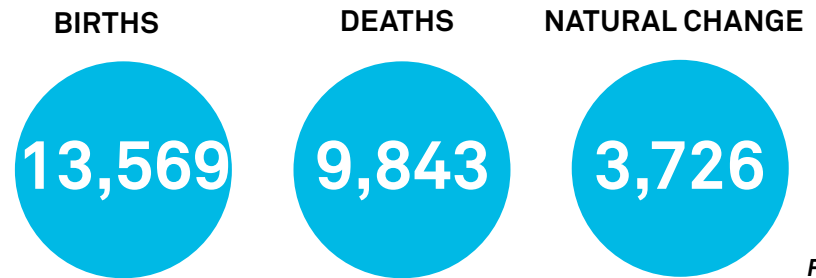


FIGURE 3.5

Source: ONS, 2013

In 2014 there was net international migration of 3,035 people into Surrey

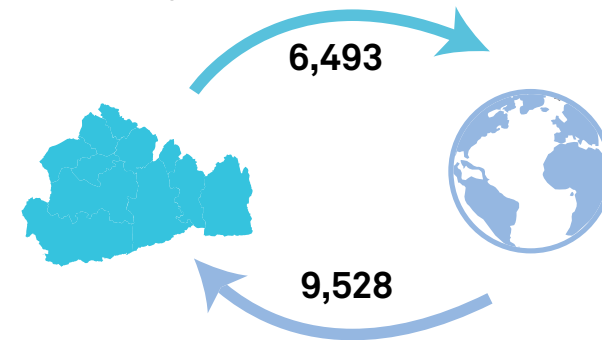


FIGURE 3.6

Source: ONS, 2014

Guildford saw the biggest net-increase in international migration of 1,540 people.

In 2014 there was net domestic migration (within UK) of 2,570 people into Surrey

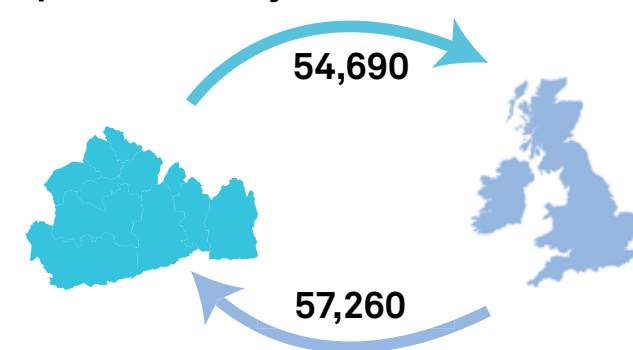


FIGURE 3.7

Source: ONS, 2014

Migration between Surrey and London 2002-2014

London and Surrey are increasingly interconnected - the flow of migrants from London into Surrey is nearly 2:1 from 2002 - 2014, in which Surrey received a net increase of 137,830 people from London.

Elmbridge received 17% of migrants while Reigate & Banstead received 13% and Epsom & Ewell 11%.

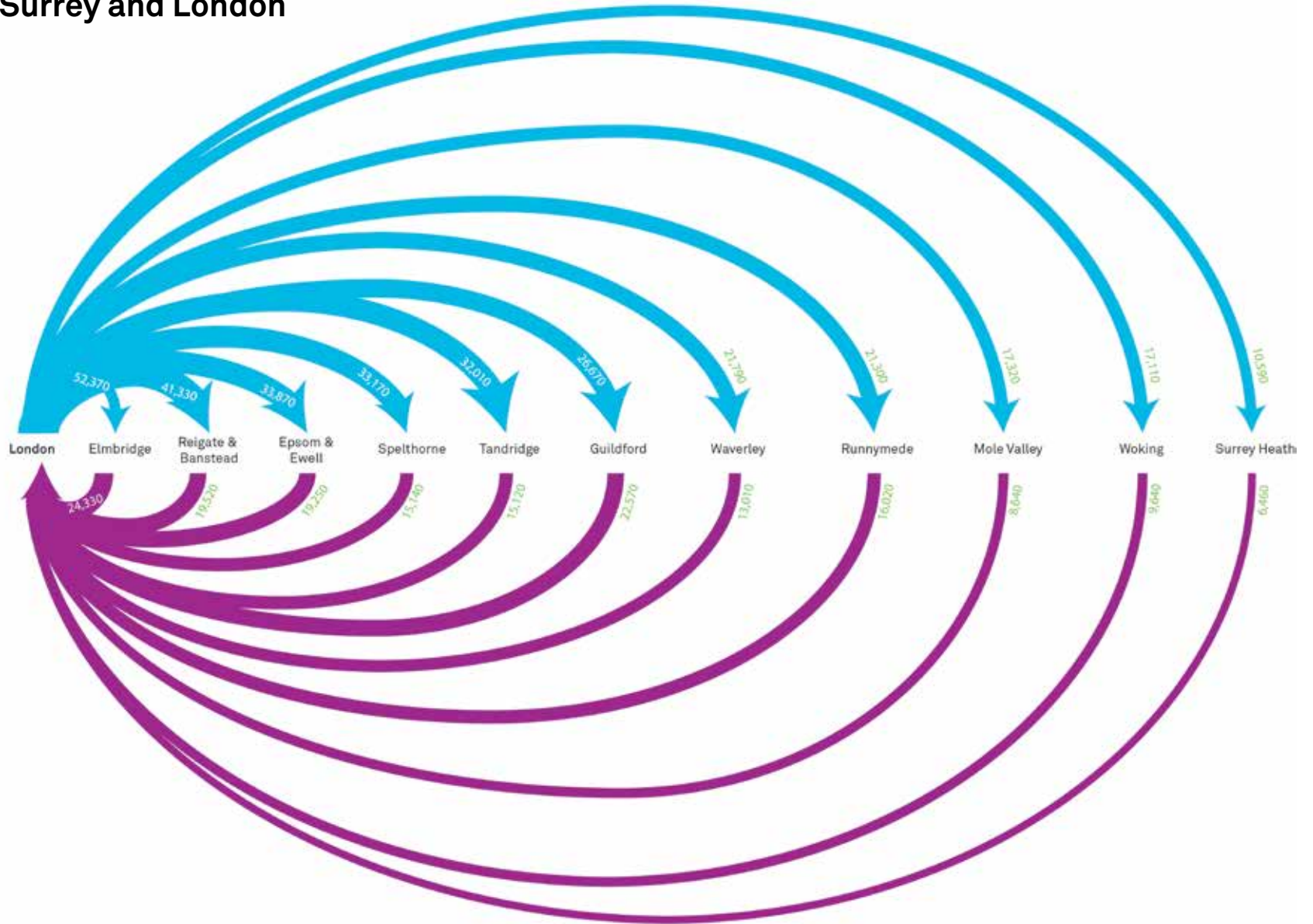


FIGURE 3.8 - INTERNAL MIGRATION BETWEEN LONDON AND SURREY LOCAL AUTHORITIES (2002-2014) (ONS)

Source: ONS, 2002-2014

The population is ageing: The greatest increase in age categories will be those over 60, with the biggest increase in 85+

Forecast Change in Age Profile 2011 -2030

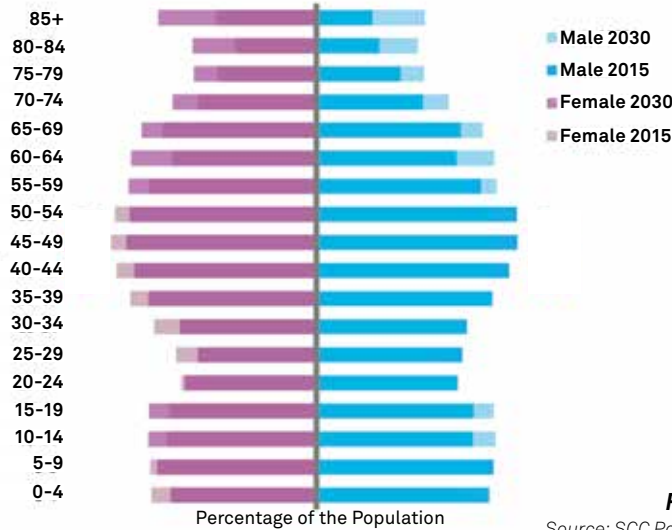


FIGURE 3.9
Source: SCC PopGroup Model

As the population gets older, working age residents will decline by 3% in their total share of the population by 2030, whereas elderly residents will increase their share by 4% of the population

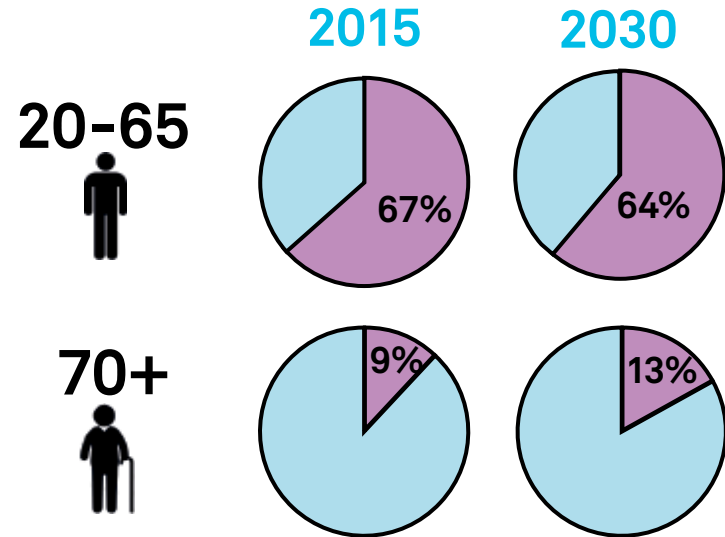


FIGURE 3.11
Source: SCC PopGroup Model

NEW PERSON BY AGE BRACKET

An ageing population will cause significant pressures on certain types of infrastructure demands in Surrey. Changing requirements for housing typologies, to increasing needs for healthcare and accessible infrastructure will almost certainly rise as those over the age of 60 will begin to represent an increasingly significant proportion of Surrey's population.

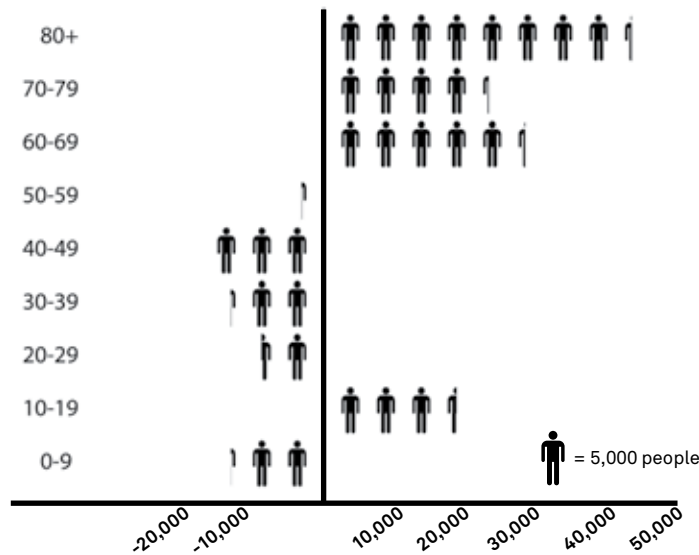


FIGURE 3.10
Source: SCC PopGroup Model

As the elderly population increases this will likely create greater demand for 1 bedroom dwellings, including apartments. Although evidence suggests a large majority of elderly residents prefer not to downsize which also presents challenges as larger family homes are not made available to younger and larger families.

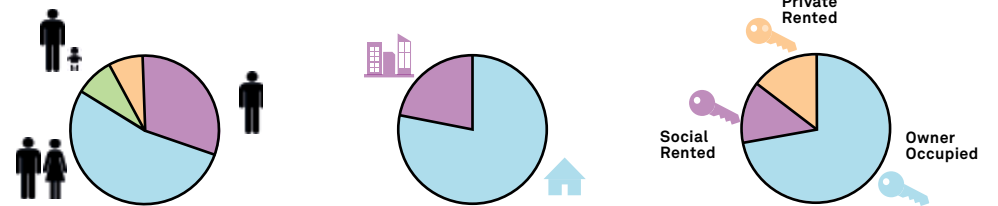


FIGURE 3.12
Source: ONS 2011

The majority of Surrey's current housing stock is well suited for family couples (49%), however as the population ages housing stock requirements will alter.

Over 78% of the current housing stock is single family homes, which are not ideally suited for an ageing population that requires smaller accommodation

The current population in Surrey mostly own their homes (73%), with few renting (14%) or in social housing (11%)

Quality of life is generally high across Surrey

However, there are some pockets of deprivation in certain urban areas such as north Tandridge, areas around Spelthorne and Elmbridge, parts of Guildford, and one small area of high deprivation in Woking.

This typically high quality of life is reflected by the fact that only 0.8% of Surrey's working age population are claiming Job Seekers Allowance (JSA). Furthermore, an analysis of the number of JSA claimants from June 2014 to June 2015 shows a significant drop of 30%, suggesting an improving economic position in Surrey.

Guildford (12%) and Reigate & Banstead (15%) experience the highest level of JSA claimant rates across Surrey, reflecting the disparities in wealth commonly representative of major urban centres.

WORKING AGE JOB SEEKERS ALLOWANCE CLAIMANTS 2014-15

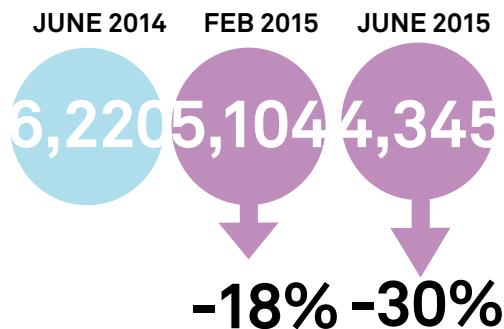
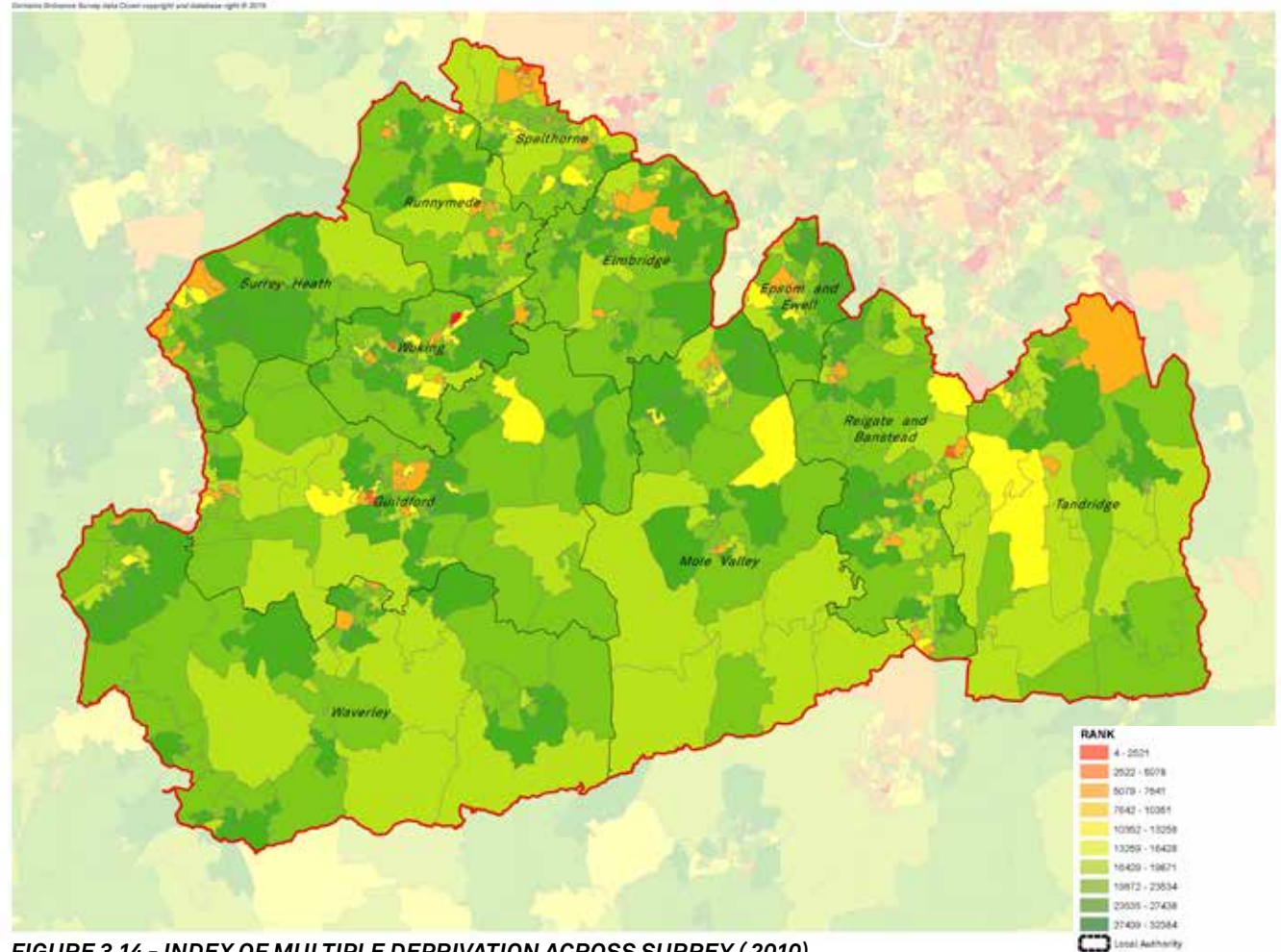


FIGURE 3.13
Source: NOMIS 2015



3.2 HOUSING A GROWING POPULATION

EXISTING HOUSING

There are approximately 483,000 housing units existing across Surrey local authorities. Figure 3.15 illustrates the distribution of those existing homes across the county with the largest share of homes accommodated by Reigate and Banstead, Guildford, Elmbridge and Waverley and the least homes within Epsom and Ewell.

The same figure illustrates the forecast additional dwellings between 2015 and 2030 as informed by the eleven local authorities for the purposes of this study (these are not all derived on the same basis as set out under the study parameters in Section 1 and the data caveats in Section 8). Figure 3.15 shows both the spread of that additional housing across the county as a whole but also the relative increase within each of the local authorities.

The local authority housing trajectories indicated that some 47,000 housing units are planned across Surrey between 2015 and 2030. This would equate to an annual completion rate of 3,137 dwellings which is considerably higher than the average achieved between 2010 and 2014 for Surrey as a whole which was closer to 2,500 dwellings per annum on average. Figure 3.16 illustrates the total completions achieved for each local authority between 2010 and 2014 according to DCLG data.

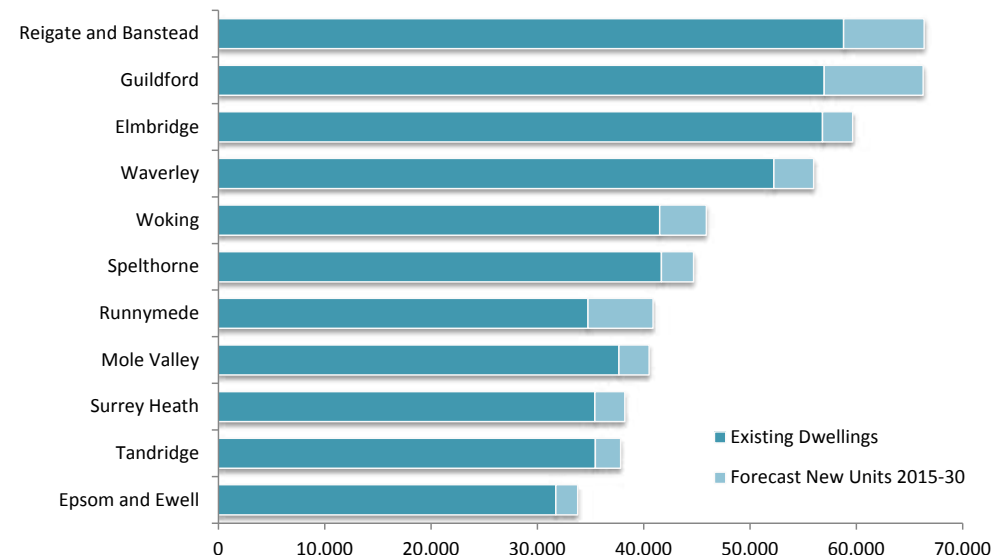


FIGURE 3.15 - EXISTING AND PROPOSED HOUSING

Source: ONS 2011, Local Authority data provided to Surrey County Council for Infrastructure Study

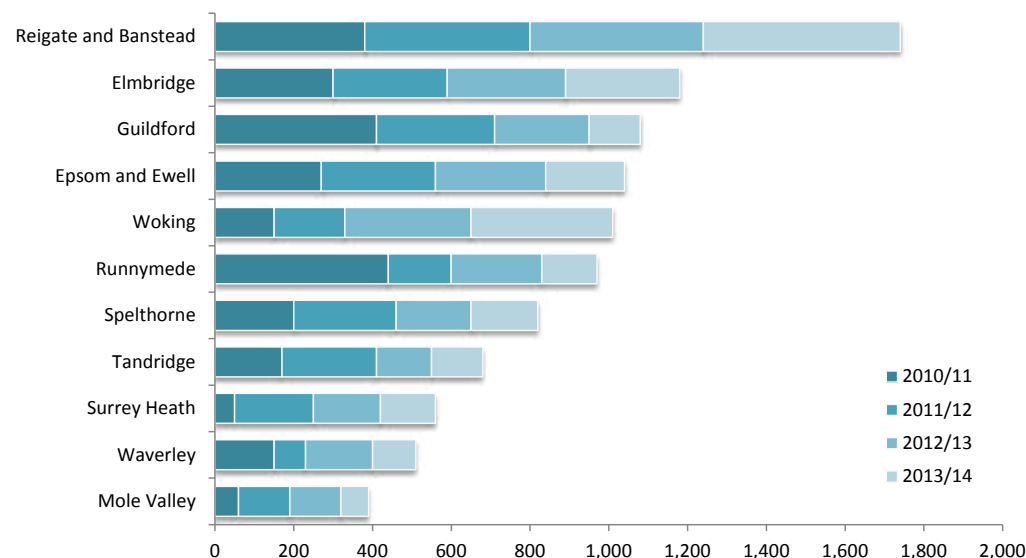


FIGURE 3.16 - RECENT HOUSING COMPLETIONS 2010/11 - 2013/14

Source: DCLG Completions Data

IDENTIFIED HOUSING SITES

For the purpose of this study the eleven local authorities were asked to provide two information sets.

The first was an agreed macro target housing trajectory for the local authority as a whole between 2015 and 2030. This was required to establish the total scale of housing growth expected over the study period and allow a bespoke population forecast to be produced to inform the assessment. The total number of homes forecast for each local authority is presented in figure 3.18.

The second set of information requested was detailed site specific data setting out the currently identified potential housing sites from all sources (permissions, allocations, strategic sites etc.) Where possible the associated phasing of these sites was also requested. This data has been used to map the distribution of forecast growth as illustrated in figure 3.19 over the page.

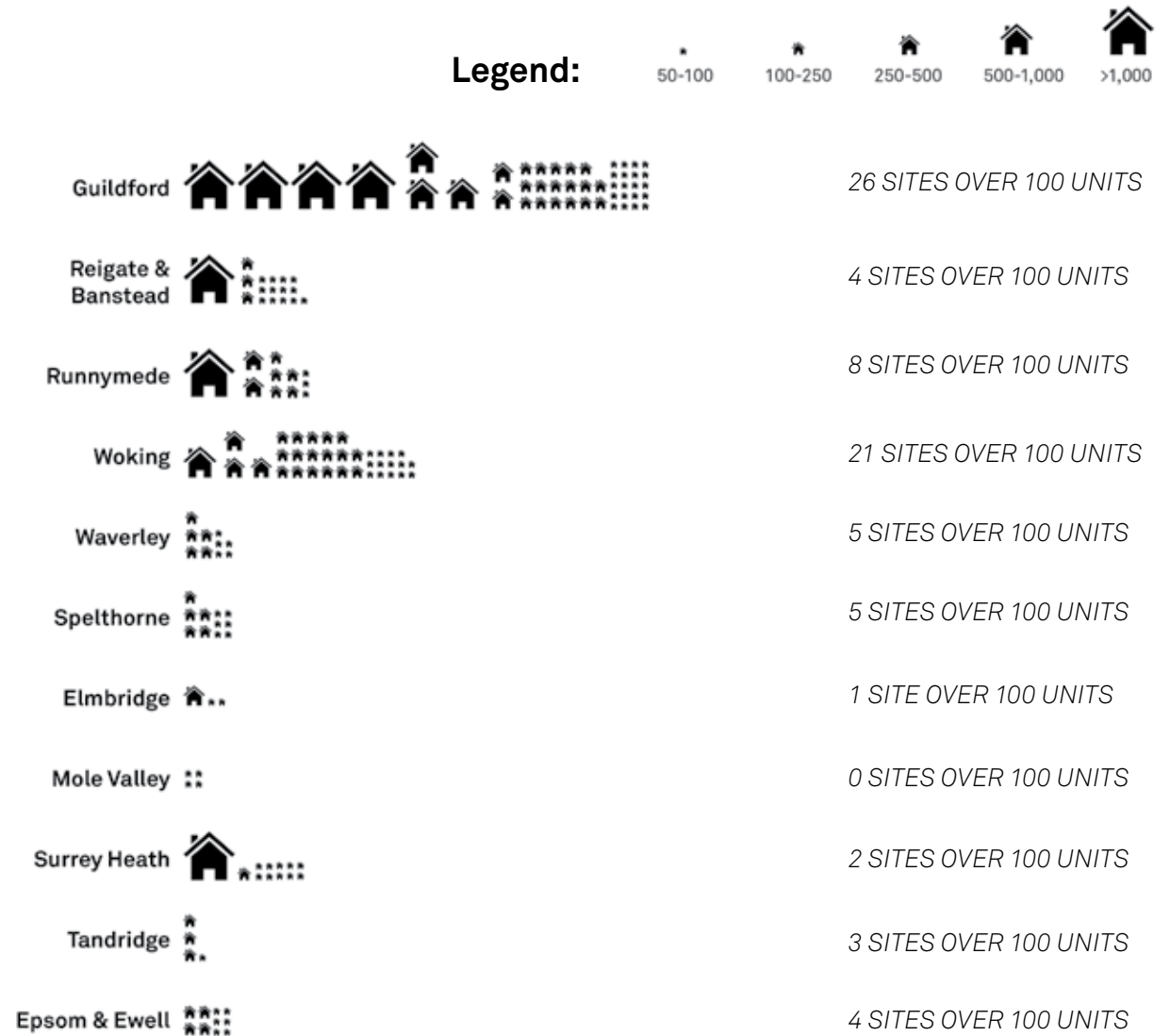


FIGURE 3.17 - NUMBER OF POTENTIAL SITES CURRENTLY IDENTIFIED FOR EACH AUTHORITY

Source: Local Authority data provided for Infrastructure Study

PHASING

Figure 3.18 demonstrates current anticipated phasing of housing in the period to 2030.

The phasing has been recorded alongside the trajectories at a site specific level allowing the growth in housing to be illustrated using GIS, as well as phased over time. The phasing is broken down into the following periods:

- 2015-2020;
- 2020-2025;
- 2025-2030.

The housing trajectories show the following:

- The greatest proportion of houses will come forward between 2015-2020, in which 17,000 units are proposed. This accounts for 36% of the housing across Surrey;
- Housing trajectories are lower in the long term as fewer sites have been identified for development

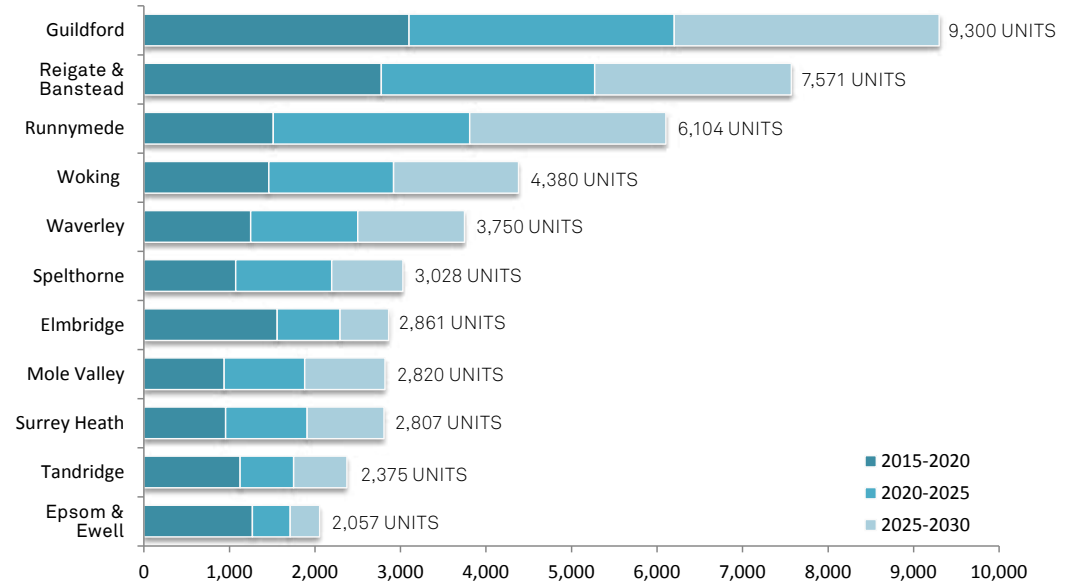


FIGURE 3.18 - PROPOSED HOUSING TRAJECTORIES PHASED OVER 15 YEARS

Source: Local Authority data provided for Infrastructure Study

Technical Note on Housing Trajectories:

As stated in the Study Parameters in Section 1 of this report the housing trajectories presented in this document have been provided by the LPAs but represent only the working assumption on likely housing delivery at July 2015 and do not necessarily represent the latest local plan position.

Importantly, analysis of the latest ONS population forecasts and associated DCLG household forecasts for Surrey suggest the housing figures presented for some of the local authorities within this section could underestimate future housing growth to a significant degree. The exact extent of this underestimation is hard to quantify however due to the number of variables of objectively assessed housing need but it is considered reasonable to assume **the forecasts in this study represent a minimum scenario of housing growth.**

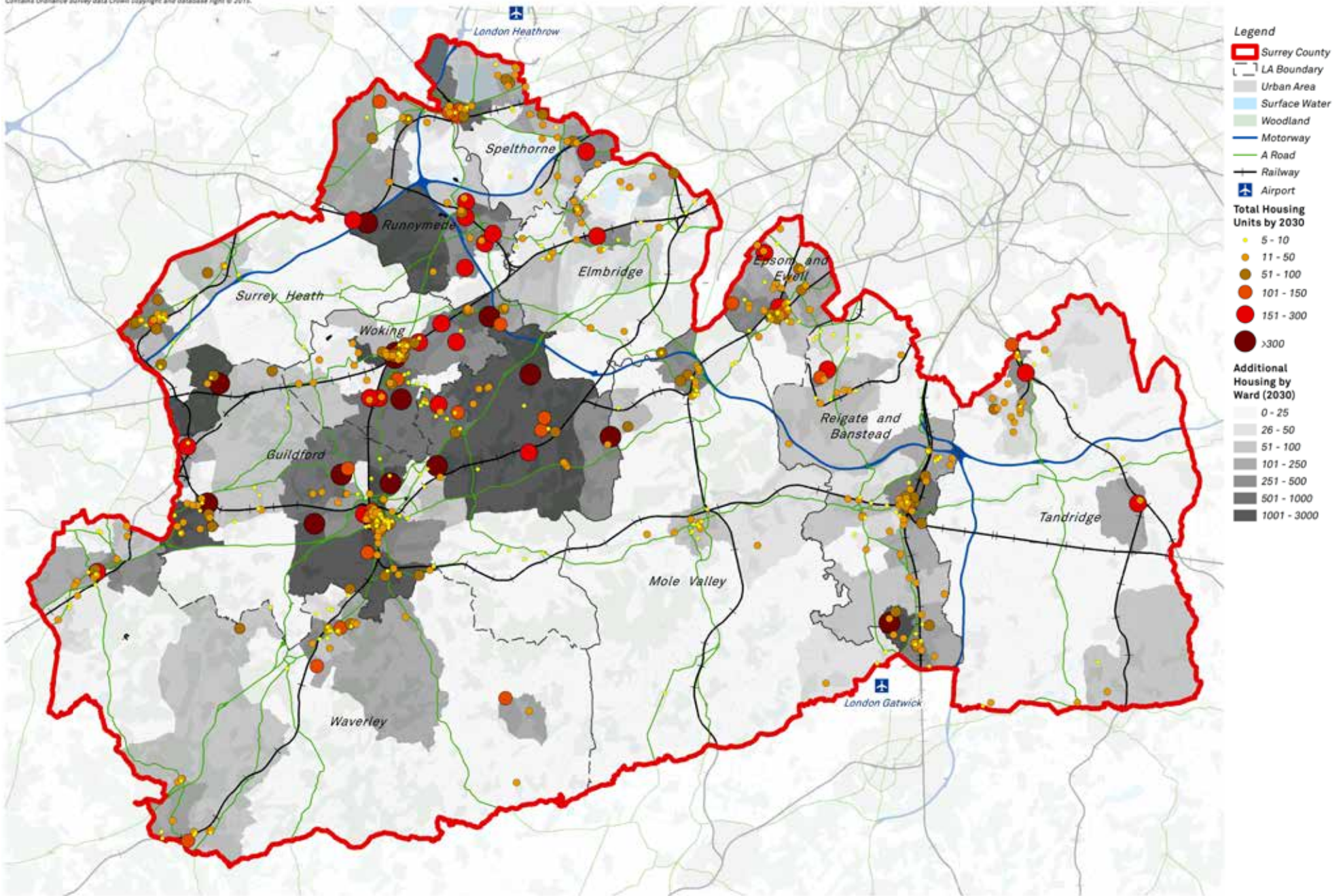


FIGURE 3.19 - MAJOR HOUSING SITES AND GROWTH BY WARD IN SURREY TO 2030

* This is based on the most up to date information at the time of publication and could be subject to change, subject to review of planning policy documents

Source: Local Authority data provided for Infrastructure Study

3.3 ECONOMIC PORTRAIT

SURREY'S ECONOMIC GROWTH IS DEPENDENT UPON ONGOING INVESTMENT IN INFRASTRUCTURE TO SUPPORT ECONOMIC ACTIVITIES, AND A WELL SERVICED HOUSING STOCK TO ENSURE A GROWING WORKFORCE CAN BE ACCOMMODATED. THIS SECTION SEEKS TO SET OUT THE CURRENT AND FUTURE ECONOMIC CONTEXT FOR SURREY AND LIKELY IMPLICATIONS FOR INFRASTRUCTURE.

ECONOMIC CONTEXT

Economic growth in Surrey varies across local authorities, with some areas performing well in many sectors, and others facing economic challenges.

On average, Surrey has seen strong economic growth. It is in close proximity to London as well as key infrastructure including Gatwick and Heathrow airports that connect it with the UK, Europe and the rest of the world. It has strong road and rail infrastructure providing primary connections to London and the rest of the UK (see Figure 3.20).

Surrey is located within the boundaries of 2 Local Enterprise Partnerships (LEPs) - Enterprise M3 (EM3) LEP and Coast to Capital (C2C) LEP.

Enterprise M3, which has been ranked the most resilient LEP area in England, currently has the second largest local business base, third highest skills and labour market, while ranking first in community cohesion. It covers mid and north Hampshire and west Surrey. It covers 14 district authorities across the two counties.

Currently, within the Enterprise M3 LEP there are 86,000 businesses that support 740,000 jobs. The LEP has a total GVA of £35bn. Future investments will focus on knowledge-intensive services that produce high value added in computing, defence, cyber security, digital media and professional services.

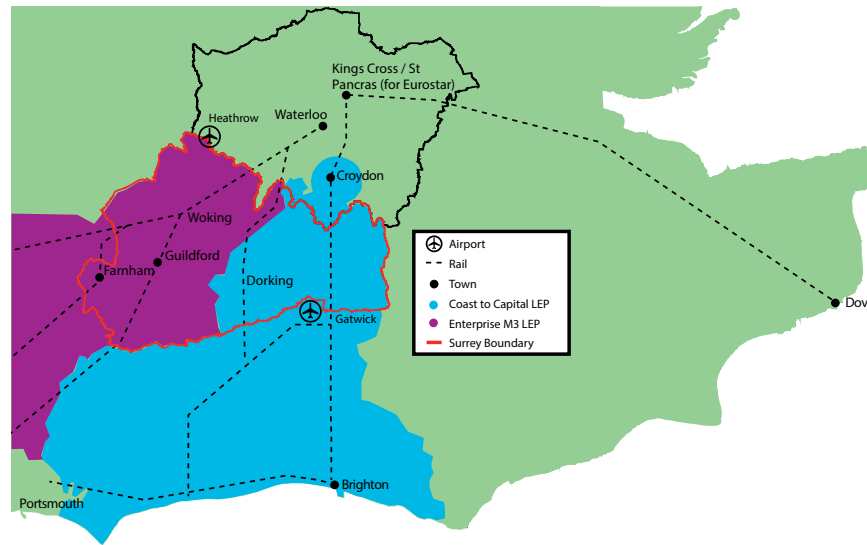


FIGURE 3.20 - REGIONAL ECONOMIC CONNECTIONS

Enterprise M3 aims by 2020 to have an increase of 25,000 jobs, improved GVA per head from 8% to 10% and to grow the overall business base by 1,400 businesses per annum.

The Coast to Capital LEP, covers all of West Sussex, Brighton and Hove, parts of East Sussex, parts of Surrey and extends up to Croydon in South London. The LEP's investment has a strong transport theme which accounts for the largest single part of its spending, with continued growth around Gatwick a priority as it will improve UK and international connections within the C2C area.

Currently, the entire Gatwick Diamond area creates 50% of the region's Gross Value Added, increasingly becoming the economic hub of the local area. The Gatwick Diamond Initiative is a business-led partnership, funded by seven local authorities (Epsom & Ewell, Reigate & Banstead, and Crawley Borough Councils, Mole Valley, Horsham Mid Sussex and Tandridge District Councils), two County Councils (Surrey & West Sussex) and Gatwick Airport,

aiming to grow the region's existing jobs base, attract new jobs and secure investments from companies that most closely match local industry strengths and the predominant sectors that drive the local economy.

Coast to Capital LEP increasingly sees future growth focused on service industries, where 80% of the area's economy is focused. To meet its targets the LEP is focusing on key sectors to improve the digital economy, enhance the environmental resilience to open up new land for development and enhance educational facilities and research centres.

A summary of economic headlines is shown overleaf whilst the county's distribution of employment density is illustrated by Figure 3.21 on the adjoining page.

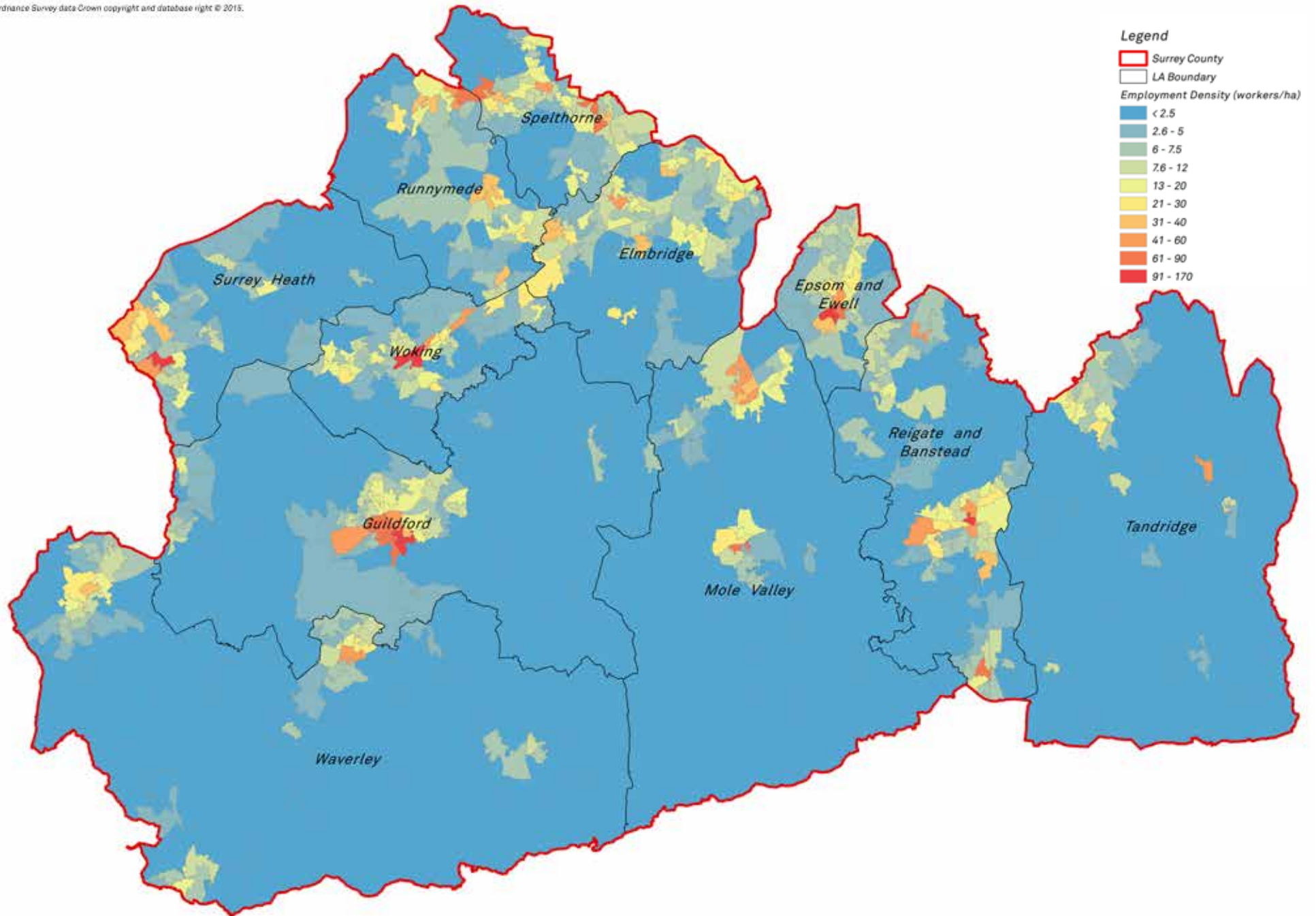


FIGURE 3.21 - EMPLOYMENT DENSITY

Source: ONS 2011

Gross Value Added (GVA) per head

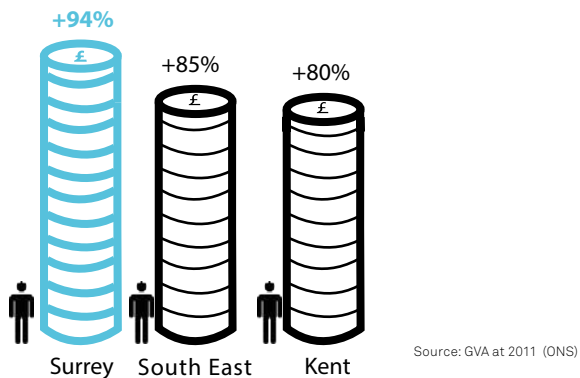
is high on average in Surrey



FIGURE 3.22 - GVA PER HEAD

Surrey's GVA per head growth from 1997-2011

has outpaced the areas around the county



This rate of growth will slow down to 2030, however Surrey can still expect a significant increase in its GVA per head to 2030

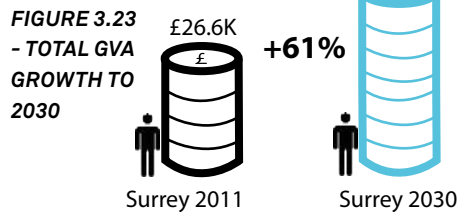


FIGURE 3.23 - TOTAL GVA GROWTH TO 2030

Source: Forecasts and future scenarios for the economy of Surrey: an update to the work done in 2010, 2013, SQW

What does this mean?

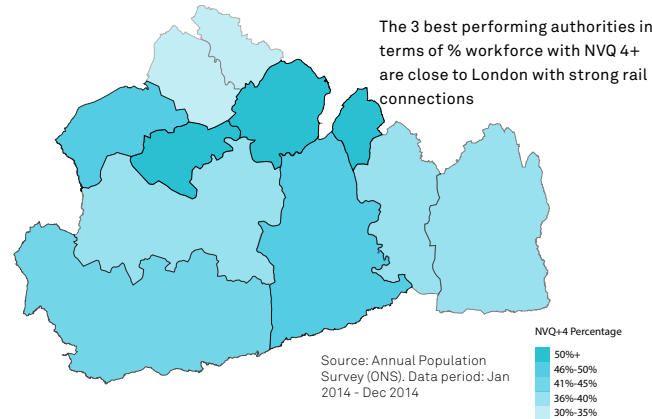
Surrey does comparatively very well in its GVA per head, however continued economic investment in infrastructure to enhance the competitive advantage of its proximity to Gatwick, Heathrow and London is necessary.

There is a strong workforce skills profile on average



Source: Annual Population Survey (ONS), Data period: Jan 2014 - Dec 2014

FIGURE 3.24 - % WORKFORCE WITH NVQ4+



Source: Annual Population Survey (ONS), Data period: Jan 2014 - Dec 2014

FIGURE 3.25 - % WORKFORCE WITH NVQ4+

However,

highly skilled occupations

make up 53% of occupations in 2014

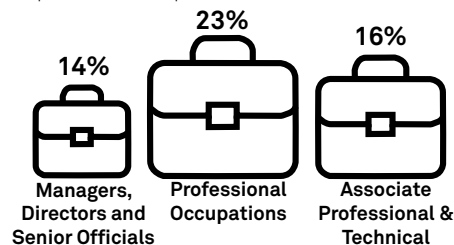


FIGURE 3.26 - OCCUPATIONAL TYPE 2014

Source: ONS

What does this mean?

Overall, Surrey has a highly skilled and diverse occupational base meaning disposable income and in turn quality of life is generally high. However, there are areas of Surrey which lag behind the rest of the county in this respect. Although quality of life is still by no means poor, there is a need to continually invest in these areas, such as Spelthorne, to restrict any further decline and promote growth, while continuing to take advantage of Surrey's strong strategic location relative to London.

Median Salary levels

are significantly higher in Surrey than the English average and the South East



Source: ONS

FIGURE 3.27 - SURREY EARNINGS (2014)

This highlights Surrey as a **net exporter of labour** which can impact negatively on GVA figures



FIGURE 3.28 - EXISTING COMMUTER PATTERNS

Source: ONS

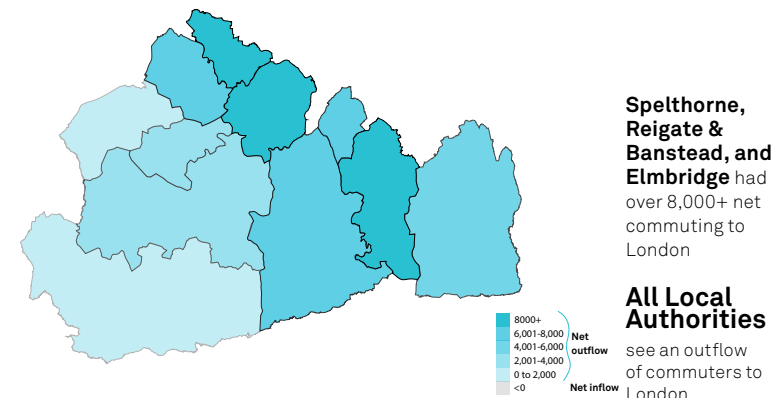


FIGURE 3.29 - NET COMMUTING IN 2014

Source: ONS

What does this mean?

More investment is also needed in transport infrastructure in the areas of high outflow commuting.

Job growth forecast to 2030

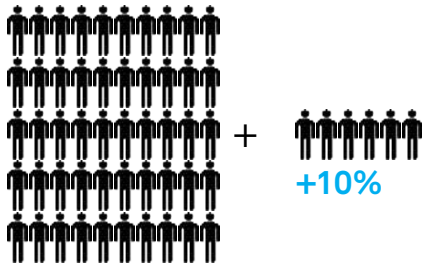


FIGURE 3.30 - JOB GROWTH FORECAST TO 2030

Source: Forecasts and future scenarios for the economy of Surrey: an update to the work done in 2010, 2013, SQW

59,000

new jobs in Surrey to 2030

By 2030 Surrey will have experienced an increase of 59,000 new jobs, the equivalent of a 10% increase over the time period

Employment Growth in the following sub-sectors:

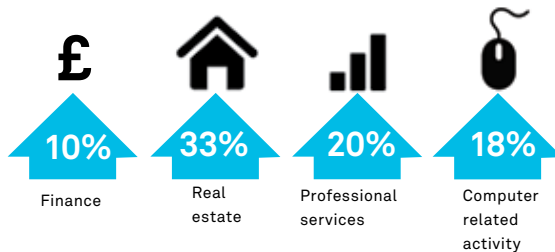


FIGURE 3.31 - SUB-SECTOR GROWTH TO 2030

Source: Forecasts and future scenarios for the economy of Surrey: an update to the work done in 2010, 2013, SQW

What does this mean?

Infrastructure investment is required to support job growth in areas where economic performance is comparatively weaker and address imbalances across the county.

The largest concentration of jobs is in wholesale, retail & public services

in line with the rest of the country

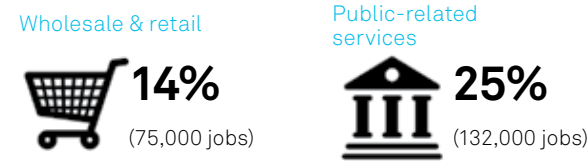


FIGURE 3.32 - LARGEST EMPLOYMENT SECTORS IN SURREY

Source: - BRES (2013)

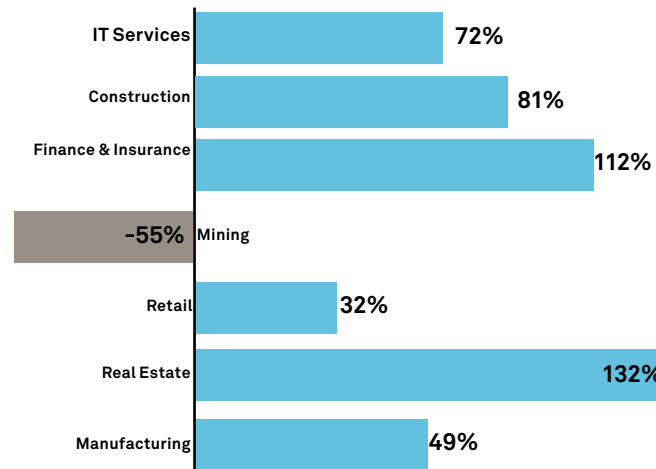


FIGURE 3.33 - SECTOR CHANGE TO 2030

Source: Forecasts and future scenarios for the economy of Surrey: an update to the work done in 2010, 2013, SQW

On average, Surrey has a strong representation in the knowledge economy



FIGURE 3.34 - % OF EMPLOYEES IN THE KNOWLEDGE ECONOMY

Source: - BRES (2013)

However, growth has slowed down in these sectors recently



FIGURE 3.35 - GROWTH IN KNOWLEDGE ECONOMY EMPLOYEES (2009-12)

Source: - BRES (2013)

The knowledge economy is strongest in Mole Valley, Reigate & Banstead, Elmbridge, Runnymede, Waverley and Woking where higher value jobs are located:

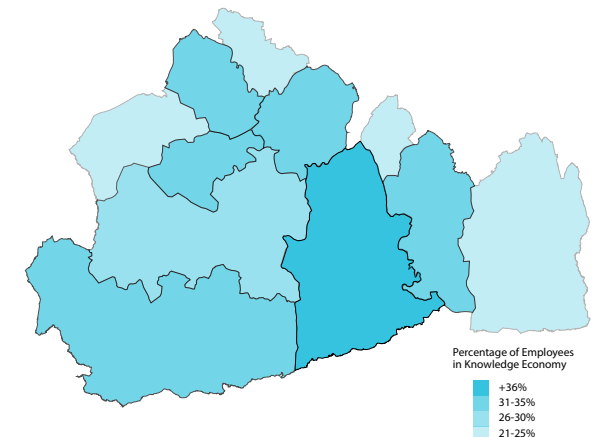


FIGURE 3.36 - PERCENTAGE OF EMPLOYEES IN KNOWLEDGE ECONOMY 2013

Source: - BRES (2013)

What does this mean?

Infrastructure investment is required to support growth in the knowledge economy. This should include attention to softer skills infrastructure provision.

3.4 SITES TO SUPPORT ECONOMIC GROWTH

In order to ensure ongoing economic growth, a number of key employment sites exist across the Surrey Local Authorities.

Planning permissions, adopted and draft Local Plan employment allocations and existing employment sites with identified capacity have been recorded and those sites with over 500 sq.m of additional floorspace have been noted in Table 3.1 and illustrated in Figure 3.37.

The data presented here does not represent the net position on employment space (including the loss of employment space over the plan periods as well) but instead highlights significant new sites and capacity.

As illustrated, Surrey will continue to provide a wide range and quantum of commercial accommodation over the coming years and these employment sites will create additional requirements on the local and strategic infrastructure network, in particular the transport network and utility services.

It should be noted that Surrey accommodates a significant number of smaller businesses and employment sites below the 500 sq.m threshold included here.

	BUSINESS	INDUSTRIAL	MIXED USE	RETAIL	OTHER	N.A	TOTAL
Elmbridge	5	4	0	0	0	0	9
Epsom & Ewell	2	1	1	0	0	4	8
Guildford	23	13	2	10	0	1	49
Mole Valley	3	6	0	2	0	0	11
Reigate & Banstead	3	6	0	3	0	0	12
Runnymede	16	3	0	0	0	0	19
Spelthorne	2	1	2	0	2	0	7
Surrey Heath	0	1	0	0	3	0	4
Tandridge	0	3	0	0	0	0	3
Waverley	7	4	0	0	0	0	11
Woking	6	3	12	0	1	0	12
SURREY	67	45	17	15	6	5	155

TABLE 3.1 - KEY EMPLOYMENT SITES IDENTIFIED OVER 500 SQ.M - PERMISSIONS, ALLOCATIONS AND EXISTING SITES WITH CAPACITY (N.A = FUTURE USE UNCONFIRMED i.e. use has not been detailed in local plan)

Source: Local Authority data provided for Infrastructure Study

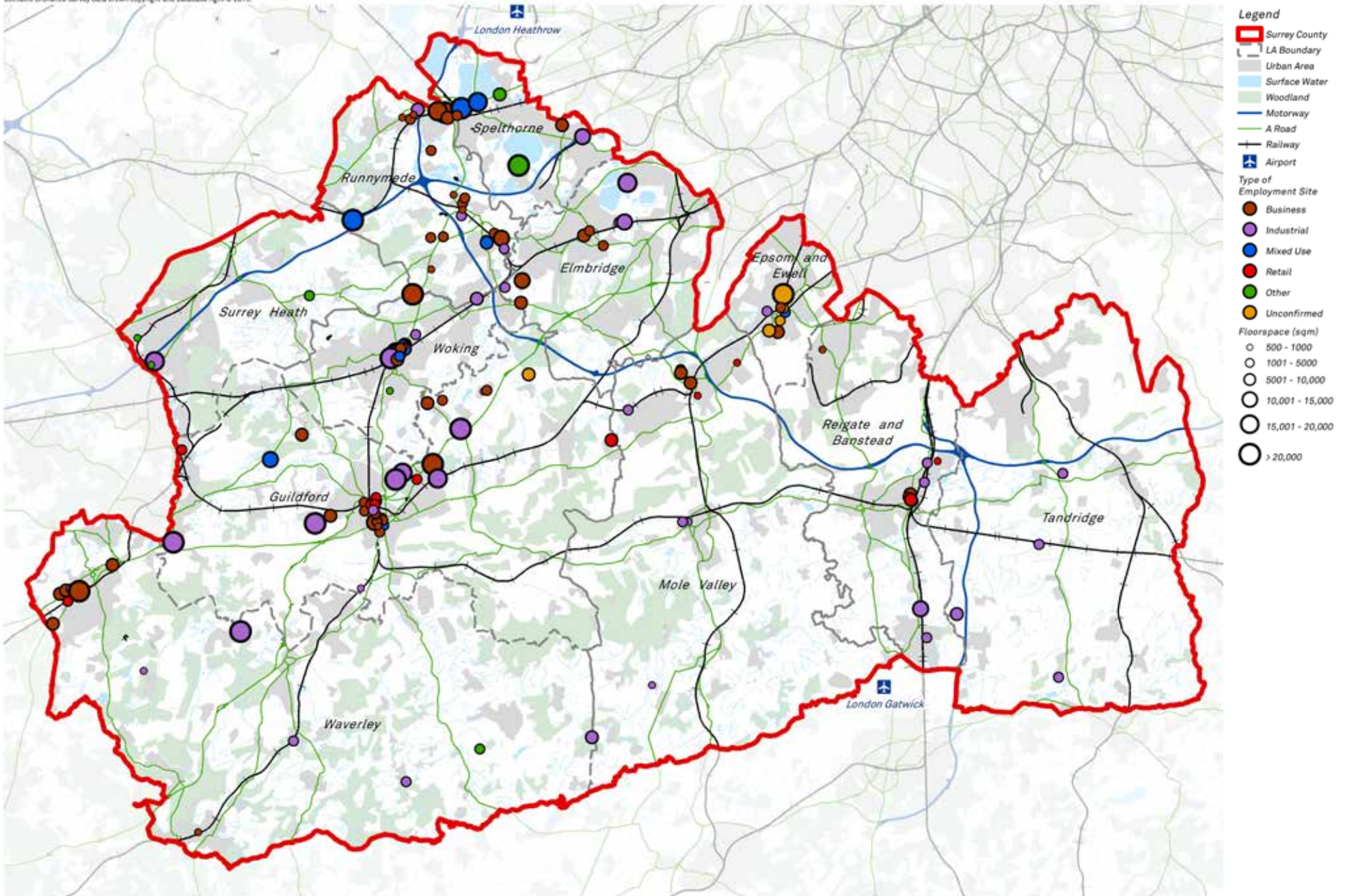


FIGURE 3.37 - SURREY EMPLOYMENT PERMISSIONS, ALLOCATION AND CAPACITY OVER 500 SQ.M

* This is based on the most up to date information at the time of publication and could be subject to change, subject to review of planning policy documents

Source: Local Authority data provided for Infrastructure Study

3.5 WIDER GROWTH

Having presented the forecast housing and economic growth across Surrey to 2030 it is also important to consider the planned growth in Greater London and the counties surrounding Surrey.

Figure 3.38 on the facing page illustrates the extent of planned housing across all local authorities which adjoin the boundaries of Surrey County Council between 2015 and 2030.

Figure 3.38 also illustrates a number of key strategic development sites which are proposed in neighbouring authorities and are considered likely to impact on the strategic infrastructure that also serves Surrey in particular transport, education and healthcare. These include but are not limited to:

- Arborfield Garrison, Wokingham.
- Aldershot Urban Extension, Rushmoor.
- Whitehill Bordon, East Hampshire.
- Warfield, Bracknell Forest.
- Northern Horsham, Horsham.
- Heathrow opportunity Area, Hillingdon.
- Croydon Opportunity Area, Croydon
- Bromley Town Opportunity Area, Bromley
- Kingston Town Centre Opportunity Area, Kingston

As can be seen by the illustration of planned growth the greatest pressures of additional growth are likely along the northern and western boundaries of Surrey with a number of large strategic sites to the west of the county and the high level of planned housing delivery across the London boroughs.

ACCOMMODATING LONDON'S HOUSING DEMAND

The GLA's Further Alterations to the London Plan (FALP) sets out the average annual minimum housing supply targets for each London borough until 2025. This identifies a minimum housing supply target across all boroughs of 42,000 homes.

These targets are informed by the need for housing as evidenced by the GLA's 2013 SHMA and London's housing land capacity as identified through its 2013 SHLAA. The FALP acknowledges that even against its own evidence base the alterations are planning for at least 7,000 shortfall each year over the plan period.

In terms of past housing delivery across London, over the 10 year period between 2004 and 2014, a total of 200,940 homes were completed across London. This equates to 20,094 homes per annum. This is under half the 42,000 housing target set out in the FALP for the next 10 years, creating a significant shortfall of homes per annum unless delivery is improved significantly.

The report 'London's Unmet Housing Needs' (April 2014) authored by NLP has undertaken a high level assessment of the potential impacts of London forecast demand for housing in relation to the planned housing supply set out within the FALP.

This report identifies that whilst London itself may act with a degree of self containment as a housing market area, it is also clear that it exerts significant housing market pressures across a much wider area. This was recognised by SERPLAN which identified this area as the Rest of the South East (ROSE) area, but which NLP define as London's 'wider HMA' reflecting the fact that London's influence is wider than its administrative boundaries.

London's wider HMA effectively represents the area which London's unmet housing needs will have an influence upon and, therefore, encompasses the areas which will likely need to respond to London's unmet needs within their own Local Plans.

NLP looked at two factors: the migration flows from London to that local authority; and the commuting flow from that local authority to London. These were then converted into a simple percentage representing the extent of housing market linkage an area has with London, and therefore a theoretical proportional share of London's unmet housing demand.

This assessment by NLP suggests that if London fails to meet its housing need between 2015 and 2030 there is every indication that unmet needs in London will necessitate additional delivery of new homes in areas around London including Surrey. The assessment suggests a theoretical demand for housing across Surrey of up to 47,800 homes between 2015 and 2030 in addition to those already planned within the Local authority local plans. The greatest additional pressures are identified for Elmbridge, Epsom and Ewell, Reigate and Banstead and Spelthorne.

It is important to note this is purely a theoretical exercise and has not taken into account the limitations to development from the Green Belt and other constraints. It does however demonstrate the scale of potential impact the London housing demand can have upon Surrey into the future and with it the associated pressures on existing and planned infrastructure capacity.

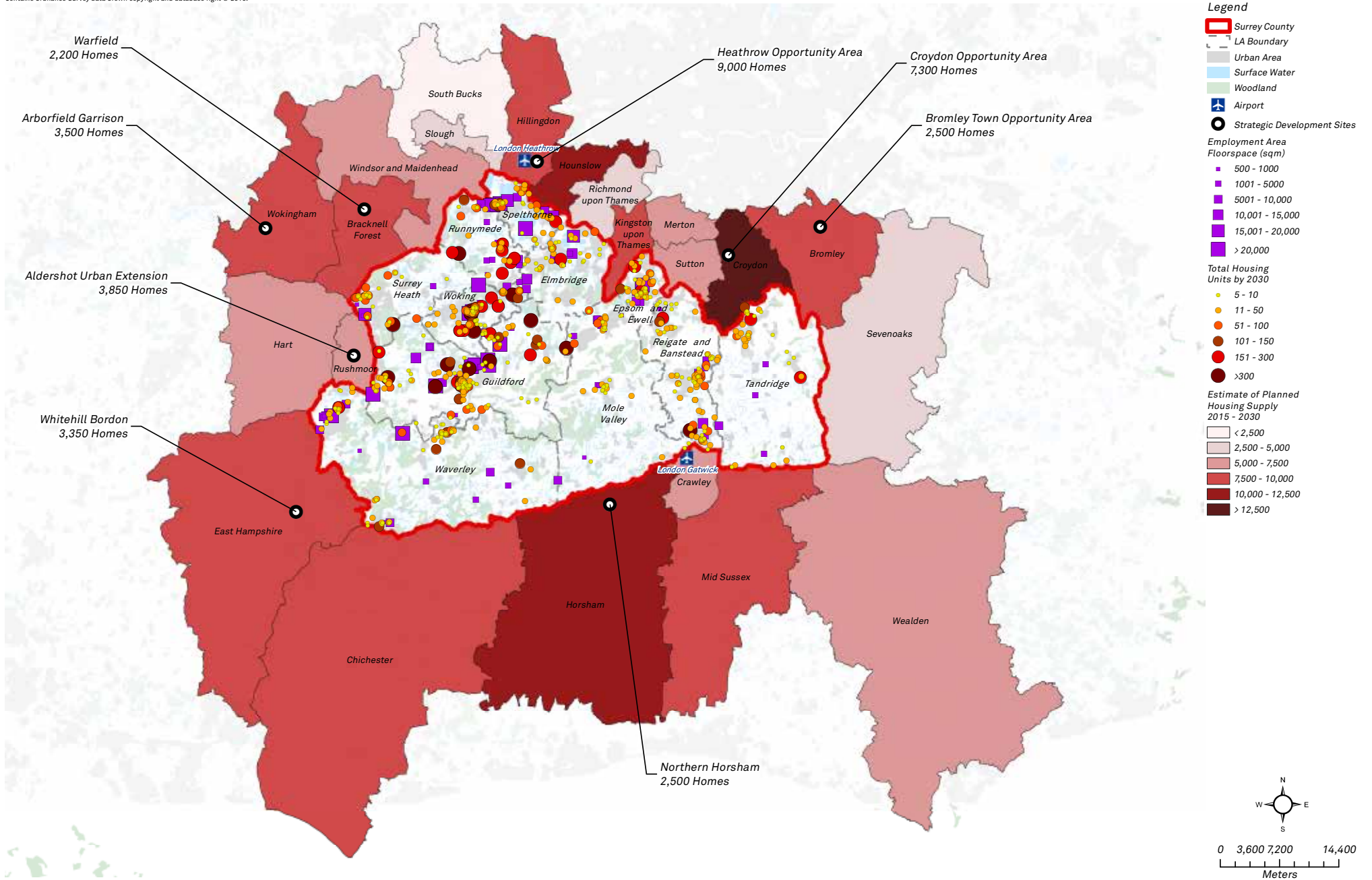


FIGURE 3.38 - ESTIMATED HOUSING FORECASTS AND KEY STRATEGIC SITES FOR LOCAL AUTHORITIES SURROUNDING SURREY COUNTY

Source: Published Local Plan documents and Further Alterations to the London Plan

04



INFRASTRUCTURE NEEDS AND REQUIREMENTS

THIS SECTION PRESENTS AN ASSESSMENT OF CURRENT INFRASTRUCTURE PROVISION AGAINST GROWTH FORECASTS TO 2030.

This covers the following infrastructure categories:

4.1 TRANSPORT

- Highways and roads
- Rail
- Public transport
- Airports
- Walking & Cycling

4.2 EDUCATION

- Early years and childcare
- Primary education
- Secondary and sixth form education
- HE, FE, Adult Learning

4.3 HEALTH + SOCIAL CARE

- Primary Care Services
- Hospitals and Mental Health
- Adult Social Care

4.4 COMMUNITY

- Library Services
- Youth services
- Community and Leisure
- Outdoor sports and recreation

4.5 GREEN INFRASTRUCTURE

4.6 UTILITIES

- Energy
- Broadband
- Water + Waste Water
- Waste

4.7 FLOOD PROTECTION

4.8 EMERGENCY SERVICES

The following is considered for each type of infrastructure:

- Existing capacity across the county
- An understanding of infrastructure requirements to support forecast growth
- An analysis of current proposed projects and costs
- An understanding of additional projects and funding gaps required to support forecast growth.

Technical Note on Modelling Assumptions:

As stated in Section 3 of the report all infrastructure assessments and associated costs are driven from the SCC PopGroup Model Population Forecast, based upon housing trajectories presented within this report, which have been produced to inform this study. This forecast is considered likely to be a minimum increase and therefore the infrastructure requirements and costs presented here are also considered to be minimum estimates.



4.1 TRANSPORT

EXISTING CAPACITY

Surrey	Surrey	Surrey
152	3,600	84
Miles of Motorways	Miles of Public Highway	Rail Stations

CURRENT SITUATION

Due to Surrey's location next to London, and the proximity of both Heathrow and Gatwick airports, there is considerable demand for movement within, to, from, and through the county. Surrey's motorways carry 80 percent more traffic than the average for the South East region and the A roads 66 percent more traffic than the national average. This has led to many of the roads already operating at capacity and if a traffic incident occurs, this can cause severe disruption on the wider network.

Surrey's main road and rail networks are radial, centred upon London. Orbital routes, with the exception of the M25, are relatively poor, exacerbated by the dispersed nature of towns.

While the county has a generally comprehensive rail network and a large number of rail stations, many services are at capacity and suffer from peak time overcrowding.

Improved road and rail access to Heathrow and Gatwick airports would increase Surrey's attractiveness as a business location. Currently it is quickest to travel to both airports by car from nearly everywhere in Surrey. Public transport to both airports needs to be faster with more direct services from Surrey towns to provide an alternative to car travel for passengers and employees.

SCC has used technical highway modelling to look at where current and future congestion bottlenecks are and

will occur. This information has identified the areas under significant strain as:

- Guildford town centre;
- A3 Guildford;
- A3 between the Ripley junction and the A3/M25 (junction 10) Wisley interchange;
- A245 Portsmouth Road, west of A3 Painshill junction;
- A31 Alton Road on the approach to and through Farnham town centre;
- M3 junctions 3 to 4; and
- M25 junctions 13 to 14.

- M23 – key link to Gatwick and South Coast
- A3 – key link to Guildford and Portsmouth

A number of regionally significant trunk roads also make up part of the SRN including the A3 and parts of the A30, A23 and A316 and is managed by Highways England.

Whilst Surrey's highway network is extremely busy, it does not suffer congestion to the degree that some metropolitan conurbations do. However, due to this busy nature, congestion does occur during the peak periods and at local hotspots, and rapidly arises when either incidents occur or traffic flow is disrupted. Surrey is particularly impacted by the knock-on effects of congestion on national roads which results in an increase of through traffic and a reduction in travel efficiency for local traffic. At the same time, travel demand is increasing as a result of additional development, both within and outside the county's boundaries, as well as increasing levels of car ownership and usage across the county which is becoming a larger driver of traffic growth than additional development.

The A3 corridor that provides access to London and Portsmouth in the south is a vitally important strategic route. With the opening of the Hindhead tunnel in 2011 the route has become more attractive to drivers, placing additional pressure on the corridor. Highways England (then Highways Agency) had proposed a number of junction improvements along the corridor as part of the Regional Transport Programme, however funding has been restricted in some instances due to... (see overleaf)



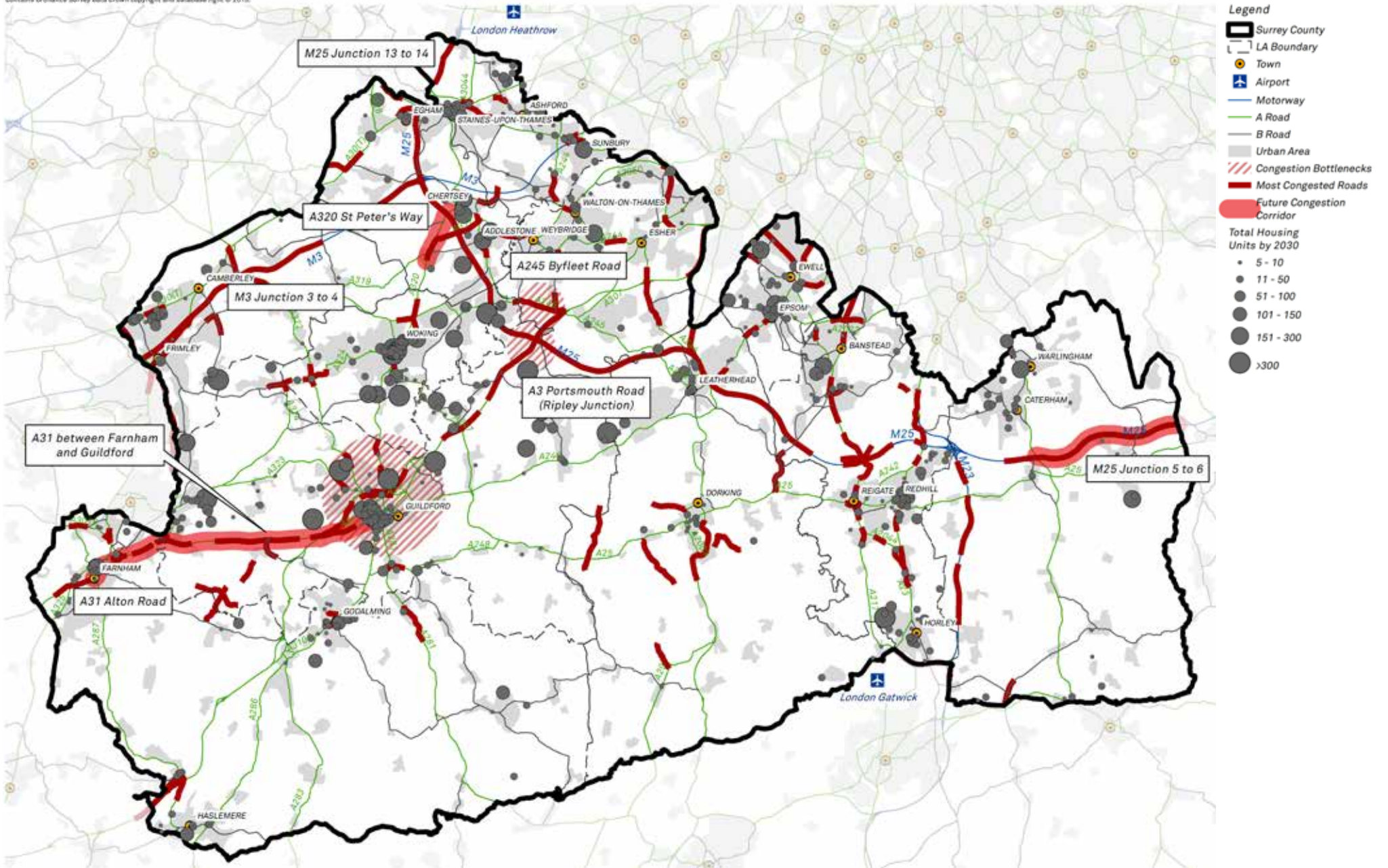
HIGHWAYS AND MOTORWAYS

The road network in Surrey comprises the Strategic Road Network (SRN), Primary Route Network (PRN) and local roads. The SRN has evolved principally to service London and consists of national trunk roads comprising:

- M25 – London Orbital; almost 1/3 of route is within Surrey
- M25 and M3 – forms part of the Trans European Road Network (TERN)

Figure 4.1 Existing major road network and congestion

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Source: Surrey Future Congestion Programme

the abolition of the Regional Transport Board. These improvements are still supported by the County Council and Highways England and are being developed subject to a strong business case and funding. In the longer term a more strategic solution to support a vibrant and growing Guildford is very likely to be required to deal with congestion on the A3.

Existing Motorways and Trunk Roads Capacity Issues:

- M3 Junctions 2 to 4a;
- M23 north of Gatwick;
- M25 J7-14 and J5-6; and
- M25 South West Quadrant – J12 to 14 is the busiest motorway stretch in Great Britain.
- A3;

Existing Highways Capacity Issues:

- A245 Byfleet Road, west of A3 Painshill junction;
- A31 Alton Road between Guildford and Farnham;
- A24 around Dorking; and
- A24 north of the M25 towards Epsom.



There are currently 84 railway stations in Surrey and the county is served by an extensive rail network. Movements to and from central London are well catered for via the South West Mainline, Portsmouth Direct Line and the London-Brighton mainline. There is limited provision for orbital movement across the rest of Surrey, though the

North Downs Line connecting Gatwick and Reading via Redhill and Guildford. The line from Redhill to Tonbridge, the Ascot-Aldershot line and the Virginia Water to Weybridge route offer opportunities to move from one part of Surrey to another without having to interchange closer towards London.

Surrey has some of the most overcrowded train journeys in England and Wales. Not all parts of Surrey are well served by rail. Some towns have no direct connections to London and some rail connections to Heathrow and Gatwick airports are unsatisfactory.



The local bus network is an integral part of the transport system in Surrey. Some of the more urbanised areas of Surrey, and particularly those areas bordering London, are relatively well served by bus services. In rural areas, particularly to the south of the county, there are fewer routes and services are less frequent, many operating only hourly or at lower frequencies.

SCC, as the local transport authority, has an important role in the delivery of local bus services and is also responsible for the highways on which the buses run, the traffic signals, junctions and bus lanes that can expedite their movement, as well as bus stop infrastructure, information and passenger waiting facilities.



Heathrow and Gatwick airports are vital to Surrey's economy and convenient and efficient access is essential. Improved road and rail access would increase Surrey's attractiveness as a business location.

Currently it is quickest to travel to both airports by car from nearly everywhere in Surrey, even at peak times and with the high levels of congestion on Surrey's roads. Over 80% of passengers to both airports travel by car (private, rented or taxi), as do most employees at the airports coming from Surrey.

Congestion travelling to the airports leads to lost time for individuals and businesses. Improvements are needed on a number of routes including the A23/ M23 Hooley Junction, part of the A23 corridor to Gatwick. Public transport to both airports also needs to be faster with more direct services from Surrey towns to provide an alternative to car travel for passengers and employees.

The impact of various options is currently being assessed, including improving rail access to Heathrow from the south, and improving bus and coach services to both airports, as well as the North Downs Line improvements for Gatwick.



Surrey has almost 3448 kilometres (2143 miles) of footpaths, bridleways, and byways. SCC are currently reviewing/completing a Walking Strategy for Surrey as part of the county's Transport Plan.

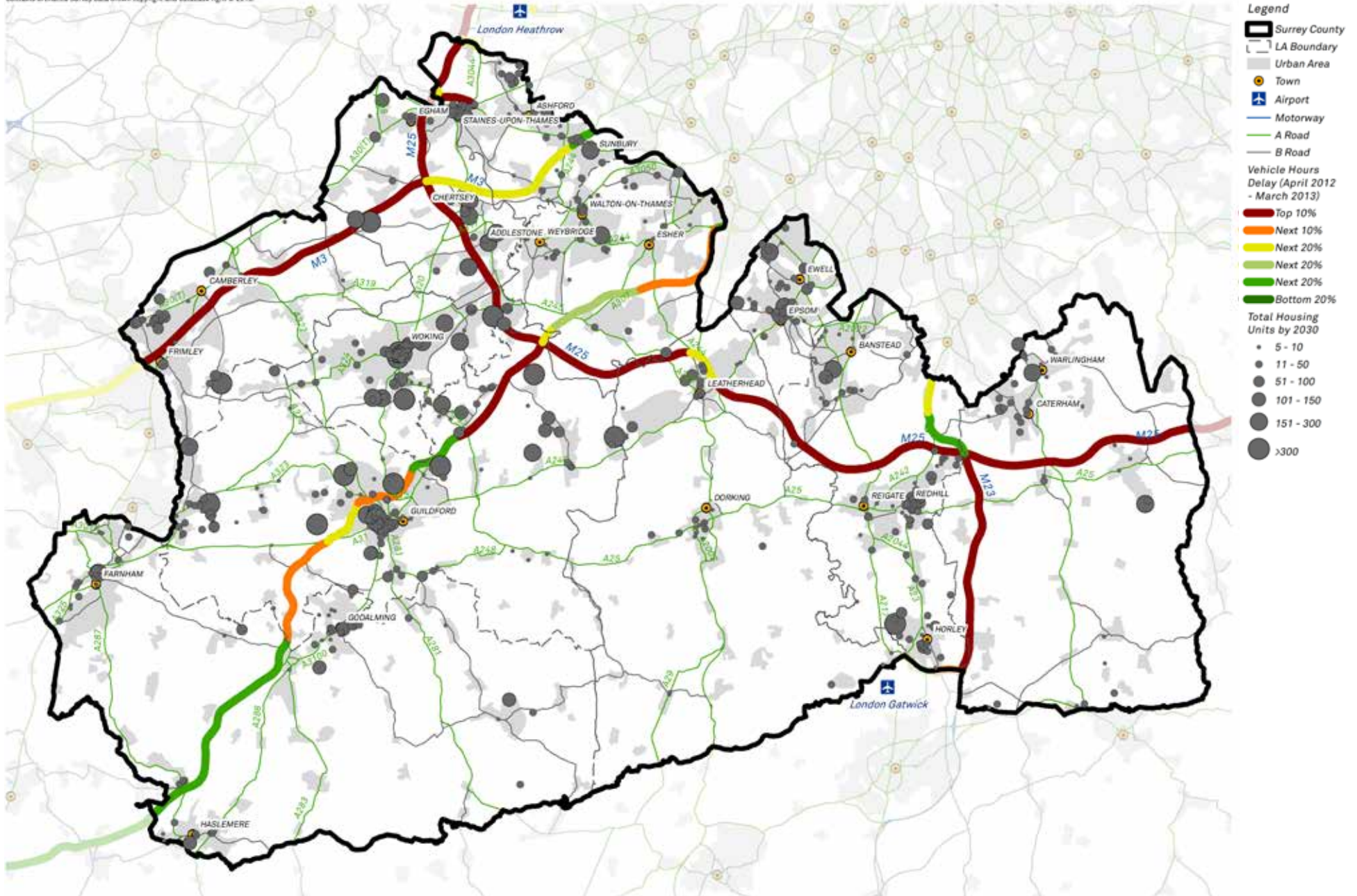
High levels of bike ownership in Surrey indicate significant suppressed demand for cycling. However there are a number of issues and challenges, including but not limited to:

- Limited funding available for cycling improvements
- The need to equip different road users with the skills to share the road safely
- The challenge of achieving cycle infrastructure segregation on narrow, congested roads

Figure 4.2

Motorway and trunk road - Vehicle Hours Delay

Contains Ordnance Survey data Crown copyright and database right © 2014.



Source: Highways England Route-Based Strategy Evidence Reports 2014

PROJECTS TO SUPPORT GROWTH

MOTORWAYS

Strategic corridors within the county are subject to high levels of congestion. Based on estimates of housing and population growth, Highways England are expecting future congestion on these routes. Schemes are required to manage this additional stress upon the network:

- The M3 Junctions 2 (M25 interchange, Surrey Heath) to 4a (Farnborough) Smart Motorway is under construction and due to open for traffic in 2017/18. This section is to be resurfaced as part of the upgrade project.
- Improvements to the strategic Wisley interchange between the A3 and M25 Junction 10
- The A23/M23 Hooley interchange north of the M25, experiences high levels of congestion and is identified as an investment priority by Highways England but is currently on hold.
- Capacity problems at M25 Junction 9 need to be addressed to facilitate growth in Leatherhead, whilst the future congestion projected between junctions 5 and 6 will also need to be considered and addressed.

Cost = £411,250,000

Funding Gap = £10,250,000*

HIGHWAYS

The A3 is an area of significant congestion that is likely to get progressively worse. Delivery of projects to relieve congestion in town centres and along congested corridors will be critical to delivering growth.

- Guildford A3 Strategic Corridor improvements are needed to address the operational performance of the A3 including junction improvements between the A3/A31 Hogs Back and the A3/A3100 Clay Lane/Burpham Junction.
- Several improvements are proposed in Guildford including Town Centre traffic improvements. The Guildford Town Centre Masterplan will also explore

options to significantly reduce traffic flows through the gyratory/Onslow Street area.

- Highways England are looking at an improvement scheme on the A31 to Burnt Common
- A series of interventions along the A217 to relieve traffic congestion
- Dense urban areas including Epsom & Ewell, Woking and Farnham require local mitigation measures to improve journey times and traffic flows in order to facilitate growth.

Cost = £1,154,870,000

Funding Gap = £785,070,000*

RAIL

Capacity improvements are required to support growth and sustainable travel.

- The Surrey Rail Strategy presents capacity improvements which include electrification of, and train lengthening on the North Downs Line and Brighton Main Line junction improvements, which would improve the orbital services across Surrey, increasing capacity on both lines and improve rail access to Gatwick. Additional station requirements at Merrow and Park Barn have also been highlighted through this strategy.
- The latest Wessex Route Study identifies key projects including the Woking Flyover, Platform 6 extension at Woking and an additional platform at Guildford Station.
- Crossrail 2 could potentially provide a significant capacity increase on the Southwest Main Line (SWML) largely addressing the forecast capacity gap. The proposed regional route which extends into Surrey at Epsom and potentially other stations in the county is currently supported within Surrey's Rail Strategy. SCC has launched a study to identify the optimum configuration of Crossrail 2 for Surrey and the best use of released capacity.
- Public transport to Heathrow needs to be faster with more direct services from Surrey. The impact of various

options is currently being assessed, including options to improve Southern Rail access.

- Major station upgrades at Guildford and Longcross Stations

Cost = £1,719,350,000

Funding Gap = £1,562,170,000*

BUSES

Improvements to the local bus network are needed across the county to improve frequency, journey time, passenger experience and increase accessibility to employment and new development areas.

- Bus route improvement schemes are being planned in congested urban areas which include provision of bus priority lanes, real time passenger information, and upgrading of bus facilities in places such as Redhill town centre, Godalming, Guildford, and Horley.

Cost = £39,120,000

Funding Gap = £19,580,000*

WALKING & CYCLING & OTHER TRANSPORT

A series of walking and cycling improvements from the provision of new cycle routes to the widening of footways are required across all local authorities within Surrey in town centres and at busy junctions, not only to enhance connections for pedestrians and cyclists but to also improve access to public transport.

- The Guildford Sustainable Movement Corridor initiative is the largest walking/cycling/public realm scheme currently planned in the county. It will provide an attractive, landscaped priority pathway for pedestrians, cyclists and buses, largely along existing roads in the town.

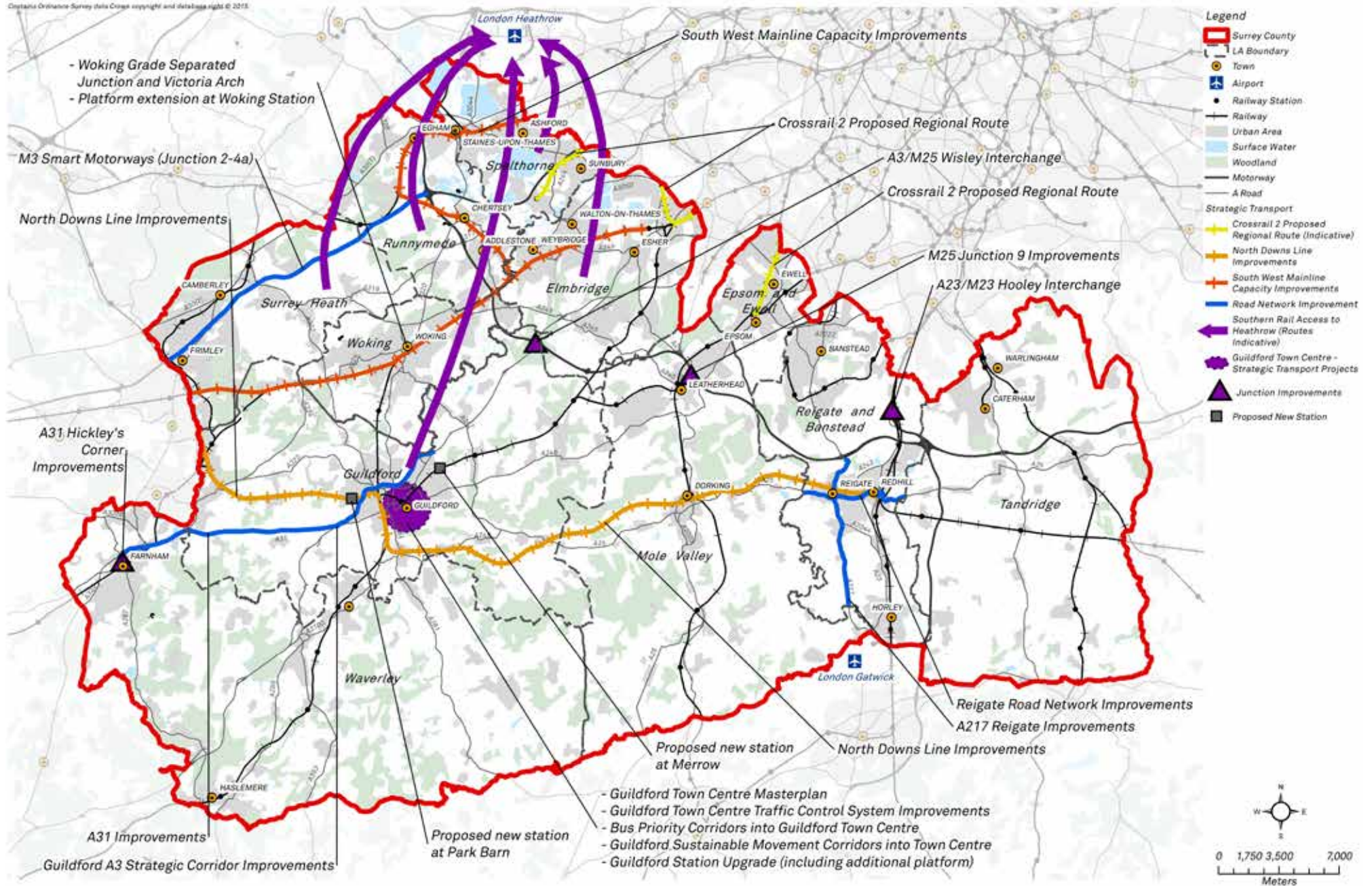
Cost = £268,790,000

Funding Gap = £128,720,000*

* (considering both secured and expected funding)

Figure 4.3

Strategic transport projects



Source: Map illustrates key strategic projects across the county but is not exhaustive of all schemes recorded.

4.2 EDUCATION

EARLY YEARS & CHILDCARE



Surrey
1,160
Early Year &
Childcare Providers

Surrey
8,820
Child Minding
Places

CURRENT SITUATION

Childcare provision in Surrey comprises independent nurseries, school nurseries, crèches, after school clubs, playgroups, holiday and weekend schemes, and individual child minders. The Childcare Act 2006 places a duty on all local authorities in England to ensure there is enough childcare services for parents that want them.

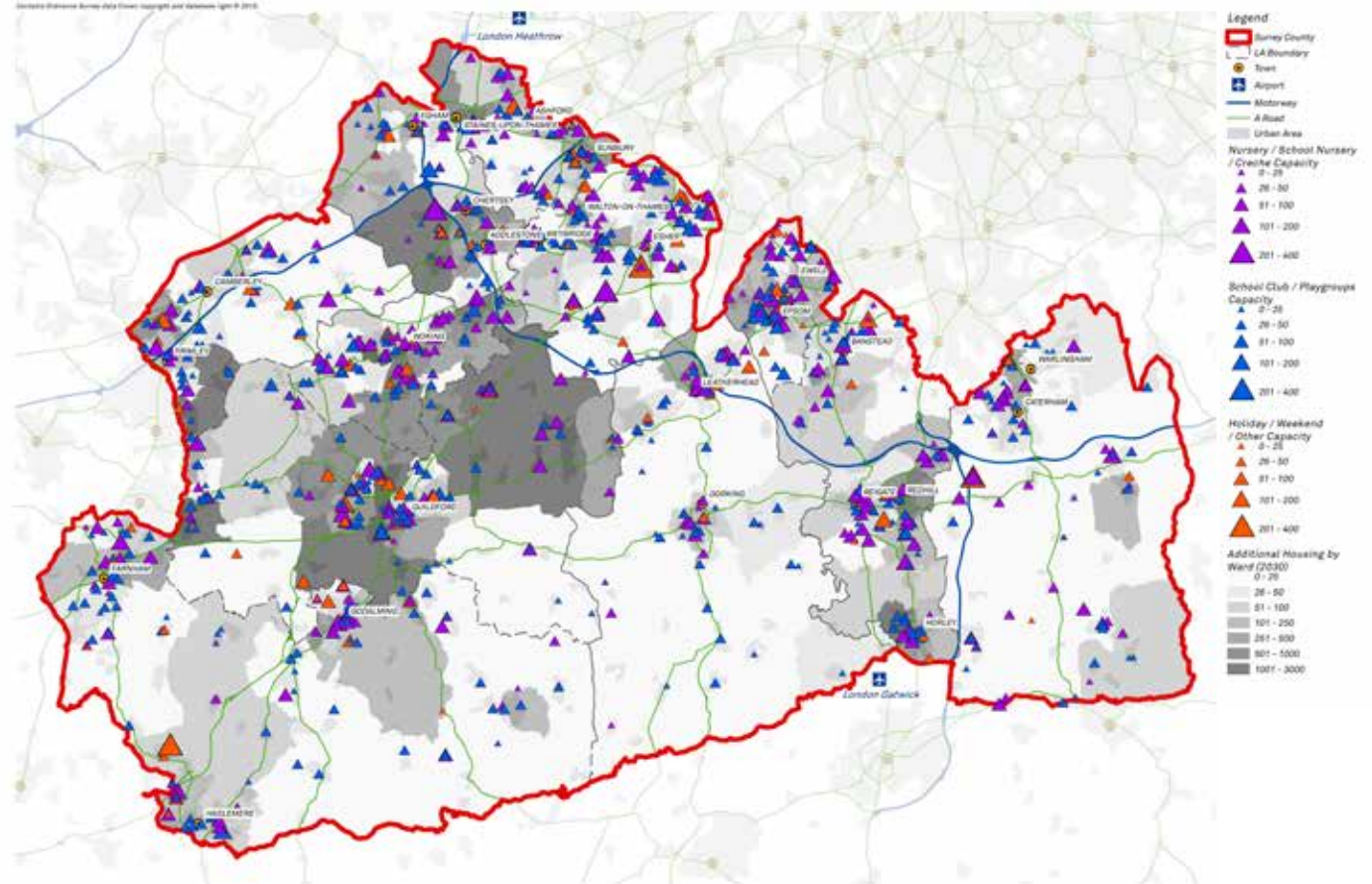
Surrey County Council therefore holds a responsibility for providing certain elements of Early Years provision, particularly with regard to identifying any gaps in childcare provision. Many of the Early Years services are provided independently, however Surrey County Council retains a responsibility to audit the statutory standards for learning, development and care for children from birth to five that all early years providers must meet. Distribution /capacity is shown in Figure 4.4.

HEADLINES

- There are a variety of different Early Years service types provided in Surrey. These include the more permanent nursery and crèche facilities as well as after school, weekend and holiday clubs.
- Provision of services is higher and more wide-ranging in the more densely populated urban areas of Guildford and Elmbridge, whilst the range of services is more limited in the more rural areas such as Mole Valley.

Figure 4.4

Early years and childcare capacity against housing growth



Source: Surrey County Council location and capacity data 2015

The **SCC Childcare Sufficiency Assessment 2014** has identified nine areas where current provision will not be able to meet future demand for early education. These clusters are:

- Molesey North, Molesey South and Molesey East wards in Elmbridge
- Burpham and Merrow wards in Guildford
- Stoke, Stoughton and Westborough wards in Guildford
- Earlswood & Whitebushes, Meadvale & St. John's and South Park & Woodhatch wards in Reigate & Banstead
- Bletchingley & Nutfield, Merstham, Redhill East and Redhill West wards in Reigate & Banstead and Tandridge
- Addlestone Bourneside, Addlestone North and Chertsey South and Row Town wards in Runnymede
- New Haw and Woodham wards in Runnymede
- Egham Hythe and Thorpe wards in Runnymede
- Byfleet, West Byfleet and Pyrford wards in Woking

Table 4.1

Early years and childcare capacity

	NURSERY / SCHOOL NURSERY / CRÈCHE		SCHOOL CLUB / PLAYGROUPS		HOLIDAY / WEEKEND / OTHER	
	FACILITIES	TOTAL CAPACITY	FACILITIES	TOTAL CAPACITY	FACILITIES	TOTAL CAPACITY
Elmbridge	53	2,986	68	2,408	18	1,185
Epsom & Ewell	28	1,579	41	1,594	14	596
Guildford	41	2,353	84	2,467	23	1,457
Mole Valley	22	1,051	48	1,309	8	390
Reigate & Banstead	39	2,295	79	2,384	13	798
Runnymede	21	1,115	43	1,332	13	535
Spelthorne	26	1,425	53	1,689	11	493
Surrey Heath	20	1,105	55	1,553	10	568
Tandridge	30	1,574	50	1,441	11	573
Waverley	43	2,312	78	2,323	21	1,323
Woking	34	1,703	52	1,637	10	434
SURREY	357	19,498	651	20,137	152	8,352

Source: Surrey County Council

FUTURE REQUIREMENTS TO MEET GROWTH TO 2030

Table 4.1 sets out the current capacity in terms of Early Years provision. The project age specific population forecasts show a decline in early years age children to 2030 and at the local authority level. We cannot therefore show future requirements for facilities. It is acknowledged however that major developments will produce increased demand locally which will need to be catered for and the challenge for adequate cover is greater in the rural parts of the county.

EXAMPLE INFRASTRUCTURE PROJECTS PROPOSED

Notable investment in Early Years provision as set out within the IDPs include the following:

- Early Years education facility in Horley
- Private nursery at the former DERA site in Runnymede
- Early Years provision for 130 places in Spelthorne - £1.3m
- Provision for an additional 156 children (to 2021) in Woking - £1.5m
- Rationalisation of Children's Centre provision in Woking

COSTS AND FUNDING

Based upon information contained within each local authority's IDP the following costs and funding have been recorded:

Cost = £5,120,000

Funding Gap = £260,000*

Costs are set out for each local authority in Section 5

* (considering both secured and expected funding)

PRIMARY EDUCATION



Surrey
304
Schools

Surrey
13%
of schools
Academies

CURRENT SITUATION

In Surrey there are 169 primary, 46 junior and 89 infant schools. These comprise state funded or controlled schools; voluntary aided or controlled schools and academy schools. Currently, there are also two free schools providing primary education. Distribution /capacity is shown in Figure 4.5. This representation of primary education provision excludes that supplied by independent schools which accounts for around 20%.

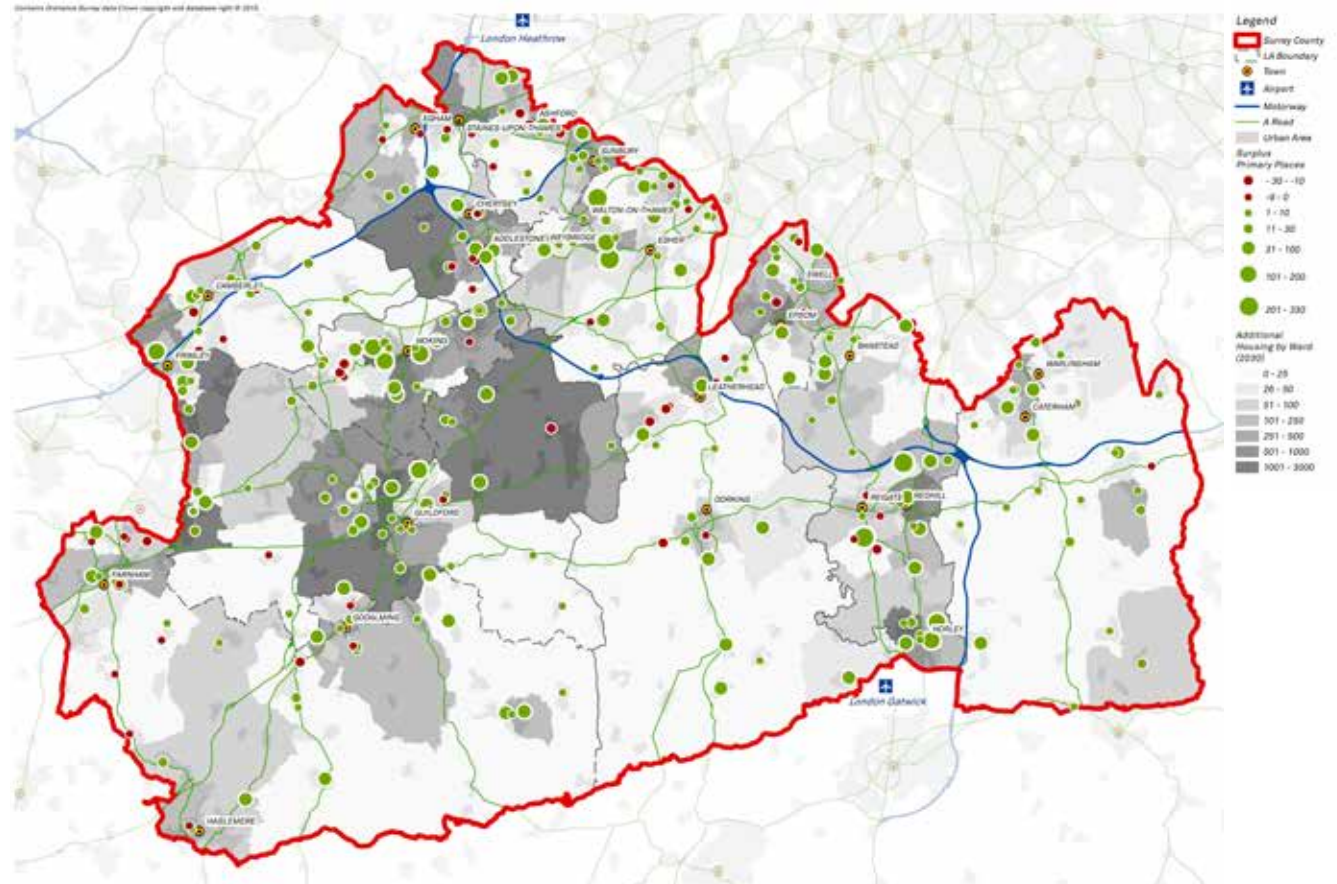
HEADLINES

- In May 2015, there was an 8% overall surplus of primary school places across all year groups.
- In May 2015, there was a 5% surplus of reception year places, compared to an 11% surplus of Year 6 places
- In the 2014/15 academic year, SCC added an additional 1058 temporary bulge primary places. Without this additional infrastructure, there would have been a deficit of 3% in Reception places.

Demand for school places is not uniform, so whilst there may be a surplus of places in one year group or area, there may be a need for additional places in another. For example, there may be a surplus of places in Year 5 but a shortage of places in reception year, or a deficit of places in Waverley but a surplus of places in Tandridge.

Figure 4.5

Primary school capacity against housing growth



Source: Surrey County Council location and capacity data 2015

Table 4.2

Primary school capacity and forecast pupil change

	LOCAL AUTHORITY WIDE PLACE DATA 2015			IDENTIFIED GROWTH IN PUPIL NUMBERS			
	TOTAL SCHOOL PLACES - MAY 2015	TOTAL CHILDREN ON ROLL - MAY 2015	% SURPLUS / DEFICIT* OF SCHOOL PLACES IN MAY 2015	ADDITIONAL PRIMARY PUPILS BY 2021	% CHANGE IN PRIMARY PUPILS BY 2021	ADDITIONAL SCHOOL PLACES PLANNED BY 2021	% SURPLUS / DEFICIT* OF SCHOOL PLACES BY 2021
Elmbridge	10,795	9,734	10%	972	10%	540	10%
Epsom & Ewell	6,030	5,749	5%	1,142	20%	718	8%
Guildford	10,932	10,106	7%	1,049	10%	540	-2%
Mole Valley	6,007	5,576	7%	656	12%	0	6%
Reigate & Banstead	11,563	10,088	13%	2,680	26.5%	1,170	4%
Runnymede	6,196	5,834	6%	195	3%	210	6%
Spelthorne	7,970	7,596	5%	439	6%	0	6%
Surrey Heath	7,164	6,712	6%	395	6%	540	2%
Tandridge	6,568	6,170	6%	276	4%	0	3%
Waverley	9,838	9,031	8%	260	3%	0	6%
Woking	8,937	8,051	10%	693	9%	210	6%
SURREY	92,000	84,647	8%	8,757	10%	3,928	5%

Source: Surrey County Council September 2015 School Capacity Figures and Forecast Numbers to 2021

*Surplus depicted in green , Deficit depicted in red

The need for school places is forecast using a variety of factors including birth data, existing pupil movement trends and housing trajectories from the Local Planning Authorities. However, there are no guarantees and forecasts are updated every six months to ensure they reflect the latest data. As such, the estimated information contained in this table is subject to change.

FUTURE REQUIREMENTS TO MEET GROWTH TO 2030

Table 4.2 sets out forecast growth in terms of primary school places to 2021. The information should be considered in the context of the following key issues:

- Capacity and roll numbers indicate a positive position to accommodate future growth, with the council's programme of additional places providing an average county wide surplus of places by 2021.
- Certain pressure points will however, remain throughout the county and the surplus of places will not be uniform across all schools due to parental preference.

EXAMPLE INFRASTRUCTURE PROJECTS PROPOSED

Notable investment in early provision as set out by Surrey County Council includes:

- Expansion of Danetree Junior School, Epsom & Ewell to primary status.
- Expansion of Hawkedale Infant School, Spelthorne to primary status.
- Expansion at Worplesdon Primary School, Guildford
- Up to 2FE new primary school for Deepcut development, Surrey Heath
- 2FE primary expansion in Woking Town
- 1FE primary expansion in Runnymede

SECONDARY, SIXTH FORM & SEN



Surrey
54
Secondary
Schools

Surrey
50%
of schools
Academies

CURRENT SITUATION

Secondary schools in Surrey comprise maintained state schools, and academies and free schools which are independent of the local authority. It is important to recognise that the data represented does not capture secondary education provision offered by non maintained independent schools, which account for approximately 20% of secondary education in the county. Distribution / capacity is shown in Figure 4.6.

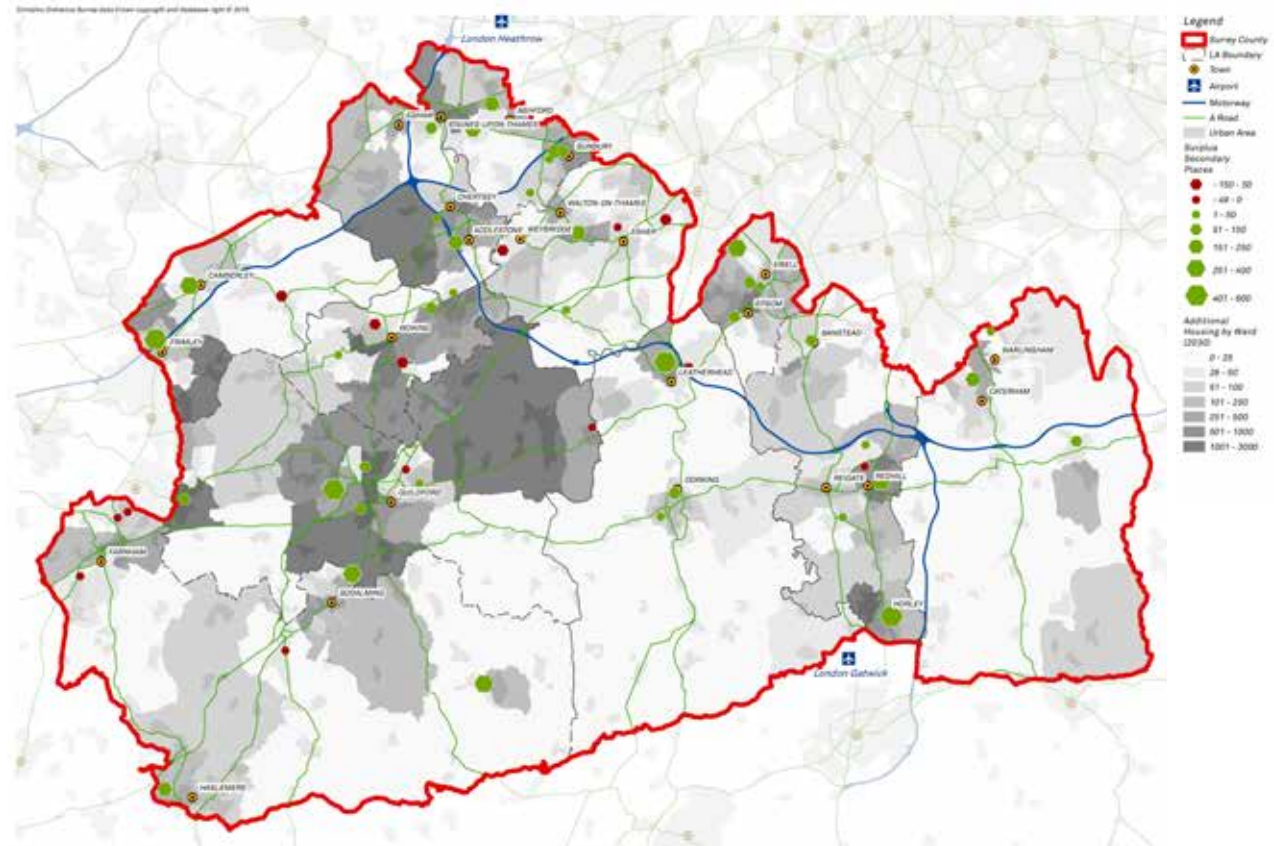
HEADLINES

- In May 2015, there was a 8% overall surplus of secondary school places across all year groups
- In May 2015, there was a 6% surplus of Year 7 places, compared to an 11% surplus of Year 8 places, showing the beginnings of a rising trend of pupils in this sector.

Demand for school places is not uniform, and overall figures can mask the pressures felt in particular year groups and particular areas across the county. For example, there may be a large surplus of places in Year 11, but a shortage of places in Year 7, or a deficit of secondary school places in Farnham town, but a surplus of places in Cranleigh town.

Figure 4.6

Secondary school capacity against housing growth



Source: Surrey County Council location and capacity data 2015

Table 4.3

Secondary school capacity and forecast pupil change

	LOCAL AUTHORITY WIDE PLACE DATA 2015			IDENTIFIED GROWTH IN PUPIL NUMBERS			
	TOTAL PLACES	TOTAL NUMBER ON ROLL	% SURPLUS	ADDITIONAL SECONDARY PUPILS BY 2025	% CHANGE IN SECONDARY PUPILS BY 2025	ADDITIONAL SCHOOL PLACES PLANNED BY 2025	% SURPLUS
			/ DEFICIT OF				/ DEFICIT OF
			PLACES IN MAY 2015				PLACES BY 2025
Elmbridge	4,575	4,722	-3%	2,332	49%	300	-38%
Epsom & Ewell	5,930	5,312	10%	1,337	25%	450	-5%
Guildford	8,510	7,699	9.5%	2,506	32.5%	750	-11%
Mole Valley	4,636	4,124	11%	1,047	25%	300	-5%
Reigate & Banstead	7,638	6,689	12%	2,758	41%	1,680	-4%
Runnymede	5,116	4,850	5%	1,494	31%	1,150	-2%
Spelthorne	5,986	5,431	9%	906	17%	450	2%
Surrey Heath	5,397	4,641	14%	823	18%	0	-1%
Tandridge	4,616	4,226	8%	352	8%	150	4%
Waverley	6,817	6,108	10%	1,053	17%	580	3%
Woking	4,429	4,462	-1%	1,811	40.5%	600	-1%
SURREY	63,650	58,264	8%	16,419	28%	6,410	-5%

Source: Surrey County Council September 2015 School Capacity Figures and Forecast Numbers to 2021

*Surplus depicted in green, Deficit depicted in red

The need for school places is forecast using a variety of factors including birth data, existing pupil movement trends and housing trajectories from the Local Planning Authorities. However, there are no guarantees and forecasts are updated every six months to ensure they reflect the latest data. As such, the estimated information contained in this table is subject to change.

FUTURE REQUIREMENTS TO MEET GROWTH TO 2030

Table 4.2 sets out forecast growth in terms of secondary school places to 2025. The following points should be noted

- Table of local authority level capacity and pupil numbers masks local areas of pressure
- Analysis represents a snapshot in time. Detailed SCC education planning is underway to address pupil capacity.
- Analysis excludes impacts from bordering counties which will have an impact on service demands within Surrey particularly along border areas

EXAMPLE INFRASTRUCTURE PROJECTS PROPOSED

Notable investment in secondary provision includes the following:

- 6FE secondary expansion in Elmbridge
- Up to 3FE secondary expansion in Guildford Town
- 3FE secondary expansion, Epsom and Ewell
- 2FE secondary school expansion, Mole Valley
- 6FE new school in the Reigate/Redhill area
- New secondary school at the Runnymede Centre
- Up to 3FE secondary expansion in Waverley
- 1FE secondary expansion in Spelthorne

Investment in SEN provision includes:

- Replacement of Portesbury Special School
- Provision of a new teaching block at Sunnydown Special School
- Change of age range at West Hill Special School
- Building of four new specialist centres at four existing secondary schools in Surrey, in partnership with National Autistic Society and the Cullum Family Trust

PRIMARY AND SECONDARY SCHOOL COSTS AND FUNDING

COSTS AND FUNDING

Surrey County Council have undertaken considerable work in updating the School Organisation Plan (SOP) which has fed directly into this Infrastructure Study.

Definitive school planning costs can only be provided to 2021 for both primary and secondary schools.

Funding Gap = £138,700,000*

An assessment of potential funding against planned education projects has been undertaken by Surrey County Council which has identified a combined funding gap of £138.7 million across primary and secondary education. It is important to note that this does not represent the full funding requirements from 2015 to 2030.

Costs and funding is set out for each local authority in Section 5. The funding estimates for primary and secondary projects at the local authority level presented in Section 5 have taken into consideration a high level estimate of potential CIL contributions as explained in Section 6. This is purely illustrative however and the overarching cost and funding picture presented here reflects the latest official cost and funding picture for SCC education.

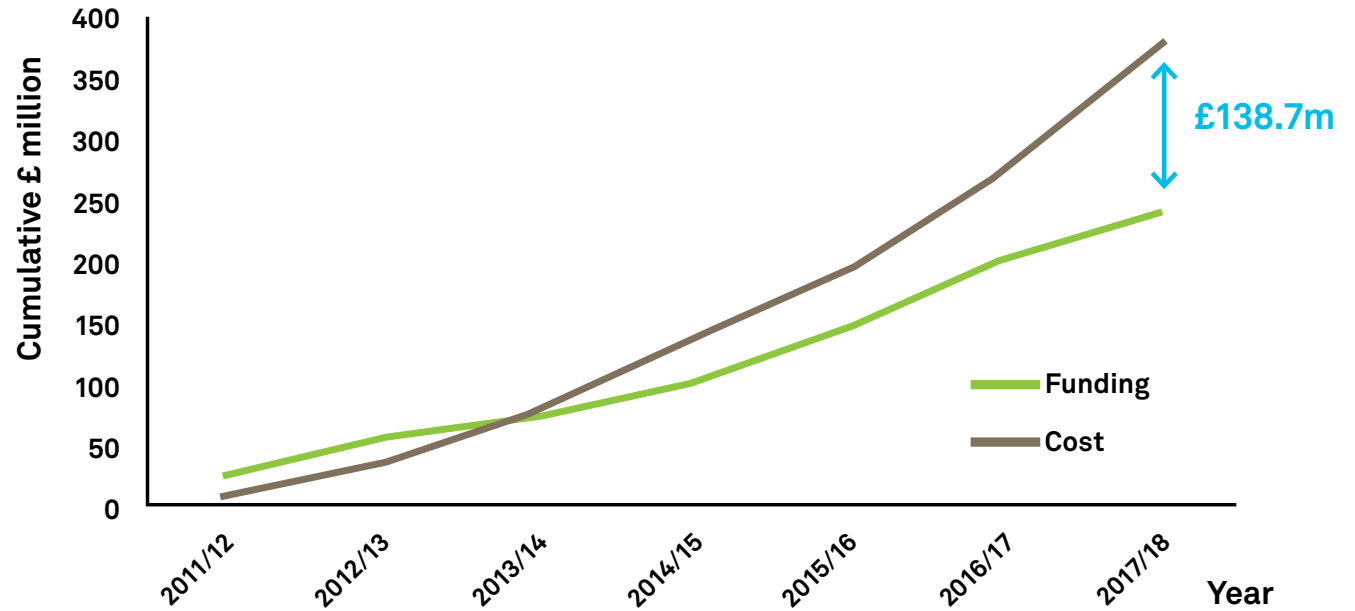


FIGURE 4.7 - PUBLISHED SCHOOL PLACE FUNDING GAP IN SURREY

Source: Surrey County Council



FURTHER EDUCATION, HIGHER EDUCATION AND ADULT LEARNING



Surrey

5

HE Campus

Surrey

14

FE Colleges

Surrey

7

Adult Learning
Enrolment Centres

CURRENT SITUATION

There are 26,091 16-18 year old Further Education places funded by the Education Funding Agency across Surrey. Of the 64 institutions delivering Further Education places across the county, there are; 26 Sixth Forms (captured on the previous page covering Secondary Education), 14 Colleges and 20 Special Schools, as well as 4 specialist training bodies.

HEADLINES

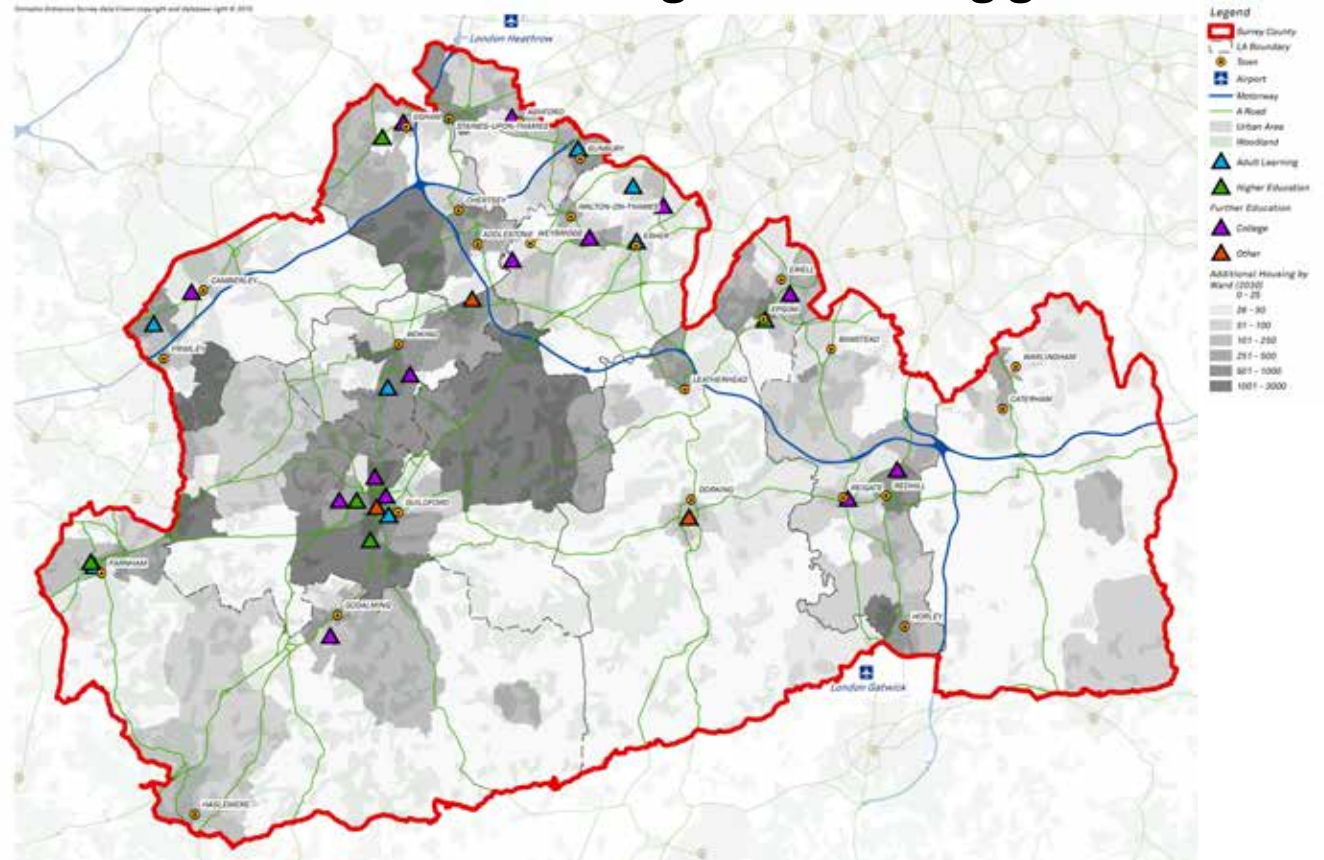
In order to properly evaluate capacity, and in particular Community Learning, an assessment of the current skills gap needs to be undertaken in conjunction with future housing developments to support growth. Moving forward a bespoke model needs to be developed to assess this, in which physical infrastructure to support community learning will continue to be important, while online training will play an increasing role.

The two main Higher Education institutions in Surrey are considered to be Royal Holloway University of London and the University of Surrey, located in Runnymede and Guildford respectively. The University of the Creative Arts also has campuses at Epsom and Farnham Higher Education institutions often lead to a transient student population in the areas they are located, bringing with them their own challenges in planning for infrastructure.

Surrey Adult Learning - run by Surrey County Council - is the key supplier of Adult Education provision across the county. There is a fairly even spread of enrolment centres with at least one centre located in 7 of the 11 local authorities within Surrey. Adult education courses in East Surrey are provided by East Surrey College.

Figure 4.8

Post 16 education facilities against housing growth



Source: Surrey County Council location data 2015

Table 4.4

Post-16 education facilities

	UNIVERSITY CAMPUS	COLLEGES	SCC ADULT LEARNING ENROLMENT CENTRES	TOTAL INSTITUTIONS
Elmbridge	0	3	2	5
Epsom & Ewell	1	1	0	2
Guildford	2	3	1	6
Mole Valley	0	0	0	0
Reigate & Banstead	0	2	0	2
Runnymede	1	1	0	2
Spelthorne	0	1	1	1
Surrey Heath	0	1	1	2
Tandridge	0	0	0	0
Waverley	1	1	1	3
Woking	0	1	1	2
SURREY	5	14	7	26

Source: Surrey County Council and AECOM web-based research

FUTURE REQUIREMENTS TO MEET GROWTH TO 2030



Surrey

756

Additional Adult Learning sqm of space

Royal Holloway University of London,
Runnymede**12,000**

Forecast students (currently 9,000)

EXAMPLE INFRASTRUCTURE PROJECTS PROPOSED

Table 4.4 sets out the current spread of Post-16 Education facilities across Surrey. The IDPs identify the following significant Further Education and Higher Education projects:

- Relocation of Woking College to town centre and improvements to its sports provision
- £10m capital bid submitted by SCC, on behalf of a consortium, for University Technical College, sharing a site with Kings College, Park Barn.
- Growth on campus at Royal Holloway University of London, comprising 3 building projects: Library £40m (opening 2017), Science Building £20m, and Residences £40m - based on feedback from RHUL and assumed to be funded.
- Growth of Surrey University with expansion plans for learning, accommodation and business facilities.

COSTS AND FUNDING

Based upon information contained within each local authority's IDP and theoretical benchmark modelling where no IDP analysis was undertaken, the following costs and funding have been recorded for Surrey:

Cost = £117,830,000

Funding Gap = £12,250,000*

Costs are set out for each local authority in Section 5.

* (considering both secured and expected funding)



4.3 HEALTH + SOCIAL CARE

PRIMARY CARE SERVICES



Surrey
754
FTE GPs

Surrey
291
Dental
Practices

Surrey
229
Pharmacies

CURRENT SITUATION

The Health and Social Care Act 2012 has radically changed the way that primary care services are planned and organised. This has facilitated a move to clinical commissioning, a renewed focus on public health and allowing healthcare market competition for patients. This is primarily provided by the Clinical Commissioning Groups - of which there are 6 covering the Surrey area.

HEADLINES - GPs

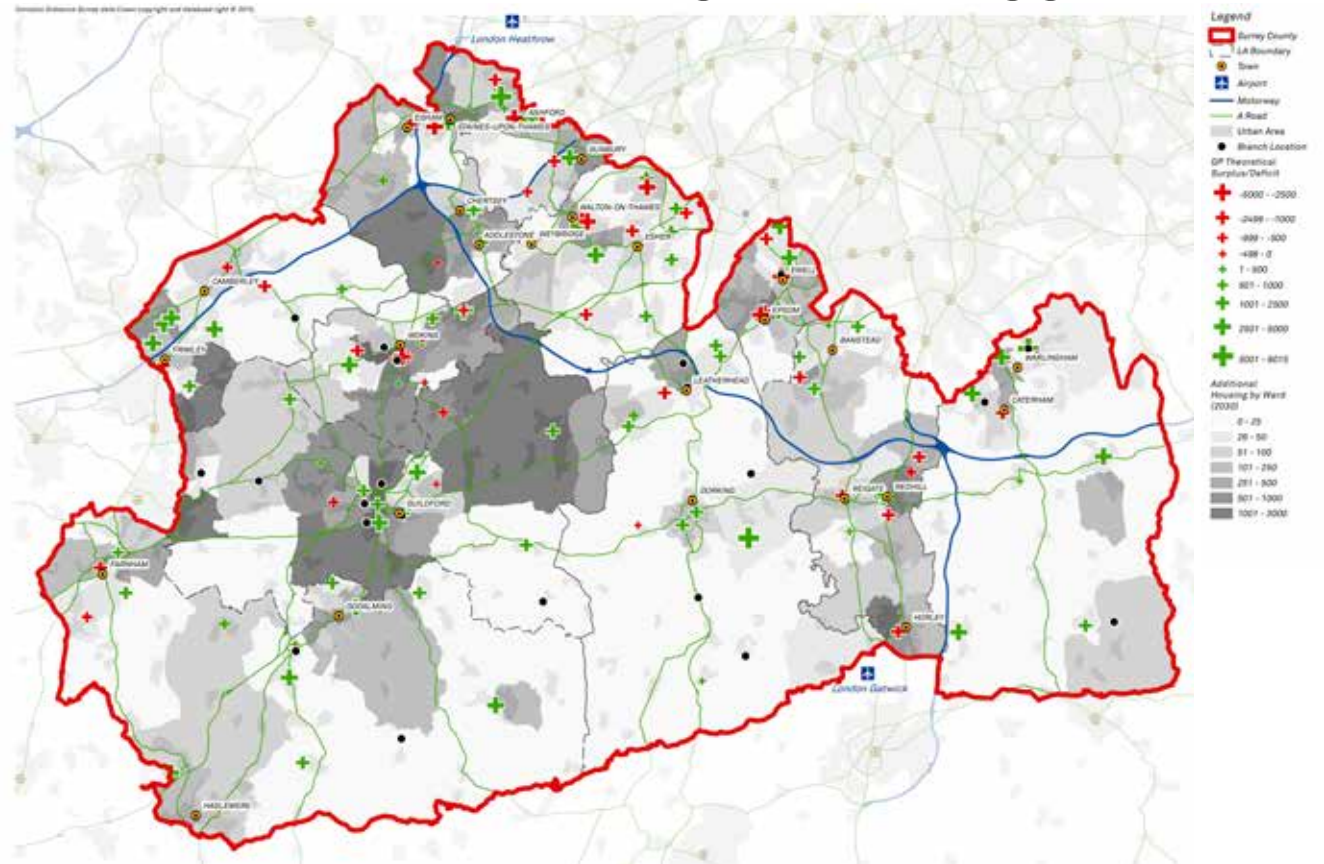
- In general the provision of GP services is in a very strong provision with all local authorities displaying a theoretical surplus in GP provision.
- Waverley appears to be in the strongest position to accommodate growth from a health perspective with a theoretical surplus of 26,861 patients.
- According to mapping of provision and GP numbers there remains a lack of capacity at certain practices, notably in the growth area of Woking.

HEADLINES - DENTISTS

- Guildford has the highest need for additional dentists to accommodate future growth
- Reigate & Banstead displays the lowest provision of dental practices across the county with a ratio of 2,964 residents per dental practice.

Figure 4.9

Primary healthcare capacity against housing growth



Source: MY NHS Website for location, workforce and patient list data 2015

Table 4.5

Primary healthcare capacity & theoretical future needs

	EXISTING PRIMARY CARE PROVISION 2015				2015-2030 ADDITIONAL REQUIREMENTS	
	NUMBER OF FTE GP	PATIENT LIST SIZE	THEORETICAL BALANCE PATIENTS	POPULATION PER PHARMACY	GPS	DENTISTS
Elmbridge	79	142,390	530	4,594	1	1
Epsom & Ewell	48	83,743	2,585	6,493	1	1
Guildford	67	108,719	13,902	6,163	11	12
Mole Valley	60	89,903	17,647	4,111	1	1
Reigate & Banstead	79	137,920	3,668	5,082	6	6
Runnymede	40	66,900	4,902	6,394	7	7
Spelthorne	60	101,038	7,016	4,453	1	1
Surrey Heath	72	114,084	15,678	4,582	2	2
Tandridge	59	85,226	20,794	5,646	0	0
Waverley	105	162,103	26,861	4,079	1	1
Woking	86	150,401	4,003	6,278	4	4
SURREY	754	1,242,427	117,586	5,075	36	37

Source: Primary healthcare capacity and patient list size according to MY NHS 2015 data, Pharmacy data from HSCIC 2015 data.

UK benchmark for GP provision is 1800 patients to 1 GP

FUTURE REQUIREMENTS TO MEET GROWTH TO 2030



Surrey

5,947

Additional sqm of primary healthcare space by 2030



Surrey

1,849

Additional sqm of dental healthcare space by 2030

Future requirements are based on the application of best practise standards against population growth forecasts. Important caveats to note include:

- The benchmarks are high level and do not reflect the significant variation in usage of health facilities and services of communities with differing levels of older residents or the varying health needs caused by factors such as deprivation and poverty.

EXAMPLE INFRASTRUCTURE PROJECTS PROPOSED

Notable investment in primary healthcare provision as set out within the IDPs include the following;

- Satellite facility for Oxted Health Centre in Tandridge - £1,100,000
- Provision of a health centre at Princess Royal Barracks, Deepcut in Surrey Heath - £400,000

COSTS AND FUNDING

Based upon information contained within each local authority's IDP and theoretical benchmark modelling where no IDP analysis was undertaken, the following costs and funding have been recorded for Surrey:

Cost = £20,750,000

Funding Gap = £950,000*

Costs are set out for each local authority in Section 5.

* (considering both secured and expected funding)

HOSPITALS AND MENTAL HEALTH



Surrey
2,594
NHS Acute
hospital beds



Surrey
286
Mental health
hospital beds

CURRENT SITUATION

There are 5 NHS Trusts operating within the Surrey county boundary comprising a number of General Acute and Community hospital facilities. The majority of these are classed as 'General Acute Hospitals', whilst East Surrey Hospital is defined as a 'Multi-Service Hospital'. Ashford and St Peter's Hospitals Foundation Trust and Epsom and St Helier University Hospital Trust jointly run their two respective hospitals.

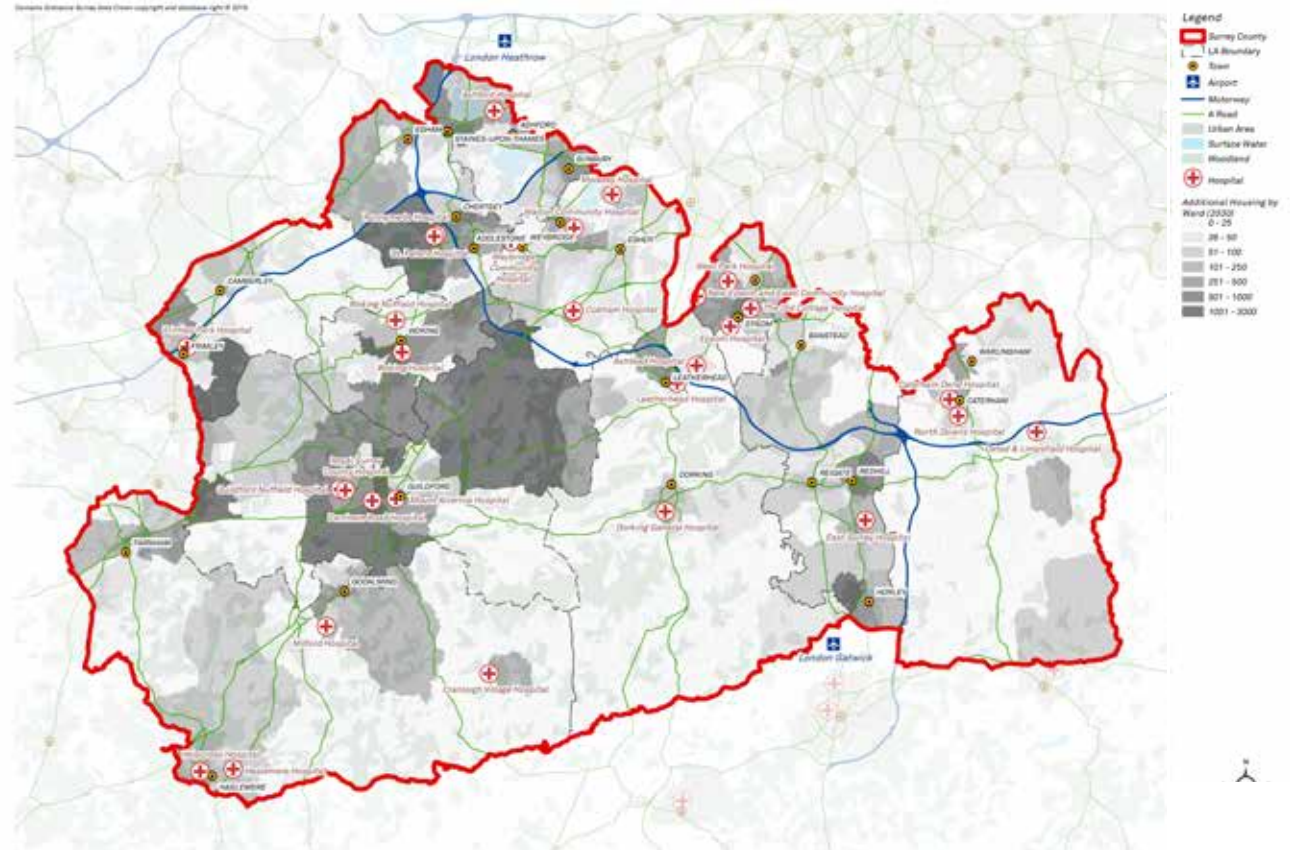
Surrey and Borders Partnership NHS Foundation Trust (SABP) is the mental health trust for Surrey providing community, inpatient and social care services for psychiatric and psychological illnesses.

HEADLINES - HOSPITALS

- Reigate & Banstead and Surrey Heath have the highest proportion of Acute/Specialist hospital beds across the county.
- A significant proportion of mental health beds are located in Runnymede.
- Community hospitals are also located within Elmbridge, Epsom & Ewell, Guildford, Mole Valley, Tandridge and Waverley.
- Figure 4.10 does not include all private hospitals. A large number of health episodes are treated within private healthcare facilities in Surrey.

Figure 4.10

Hospital locations against housing growth areas



Source: SCC using NHS SHAPE Tool. Mapping shows all General Acute and Community Hospitals listed on NHS Shape Tool Database

Table 4.6

NHS hospital capacity and theoretical future need

	EXISTING HOSPITAL BED CAPACITY (2015)					2015-2030 ADDITIONAL REQUIREMENTS	
	GENERAL ACUTE	MATERNITY	MENTAL ILLNESS & LEARNING DISABILITY	TOTAL		ACUTE HOSPITAL BEDS	MENTAL HEALTH BEDS
ROYAL SURREY COUNTY HOSPITAL NHS FOUNDATION TRUST	456	58	-	514	Elmbridge	5	1
FRIMLEY HEALTH NHS FOUNDATION TRUST	1,240	72	-	1,312	Epsom & Ewell	5	1
ASHFORD AND ST PETER'S HOSPITALS NHS FOUNDATION TRUST	520	53	-	573	Guildford	40	8
SURREY AND SUSSEX HEALTHCARE NHS TRUST*	633	42	-	675	Mole Valley	4	1
EPSOM AND ST HELIER UNIVERSITY HOSPITALS NHS TRUST*	763	97	-	860	Reigate & Banstead	21	4
SURREY AND BORDERS PARTNERSHIP NHS FOUNDATION TRUST	-	-	258	244	Runnymede	23	5
TOTAL*	3,611	322	258	4,192	Spelthorne	4	1
					Surrey Heath	6	1
					Tandridge	2	0
					Waverley	5	1
					Woking	14	3
					SURREY	127	26

Source: NHS England: Unify2 data collection - KH03 - Average daily number of available and occupied beds open overnight by sector (April to June 2015)

Source: Future Requirements based on AECOM Analysis of population change and continuation of ratio of beds to population.

Note - Existing Hospital Bed capacity data is not available at the site specific level (and therefore local authority level) but available at NHS Trust level as presented above.

* The NHS Trusts presented above in some cases cover wider areas outside Surrey County (such as Epsom and St Helier University Hospital NHS Trust). Therefore the total figure provides a figure which covers a wider area than Surrey exclusively.

FUTURE REQUIREMENTS TO MEET GROWTH TO 2030



Surrey
20,344

Additional sqm of acute hospital bed space by 2030



Surrey
2,225

Additional sqm of mental health bed space by 2030

Future requirements are based on the application of best practise standards against population growth forecasts. Important caveats to note include:

- Both health and social care services are moving away from bed based care for both physical and mental health with a greater emphasis on avoiding hospital admissions and nursing/residential home placements. The focus is on managing people in their own communities. It is unlikely that the current benchmarks used reflect the planned move towards fewer acute beds with more people with increasingly complex needs being managed in the community and supported, medically, by general practice.

EXAMPLE INFRASTRUCTURE PROJECTS PROPOSED

Notable investment in hospital provision as set out within the IDPs includes the following;

- Redevelopment of Cranleigh hospital in Waverley
- Maintenance at Milford Hospital
- Refurbishment of Caterham Dene Hospital in Tandridge

COSTS AND FUNDING

Based upon information contained within each local authority's IDP and theoretical benchmark modelling where no IDP analysis was undertaken, the following costs and funding have been recorded for Surrey:

Cost = £86,380,000

Funding Gap = £18,500,000*

Costs are set out for each local authority in Section 5.

* (considering both secured and expected funding)

ADULT SOCIAL CARE



Surrey
231
Nursing Homes

Surrey
497
Residential Care Homes

CURRENT SITUATION

From 1 April 2009 all health and social care services in England are registered and regulated by the Care Quality Commission (CQC), whether provided by the NHS, local authorities, private companies or voluntary organisations.

Across Surrey, Residential and Nursing homes are provided for by a mixture of these public and private organisations.

Adult Social Care client groups include: People with learning disabilities; people with mental health needs; people with physical disabilities; and older people (over 65 years).

HEADLINES

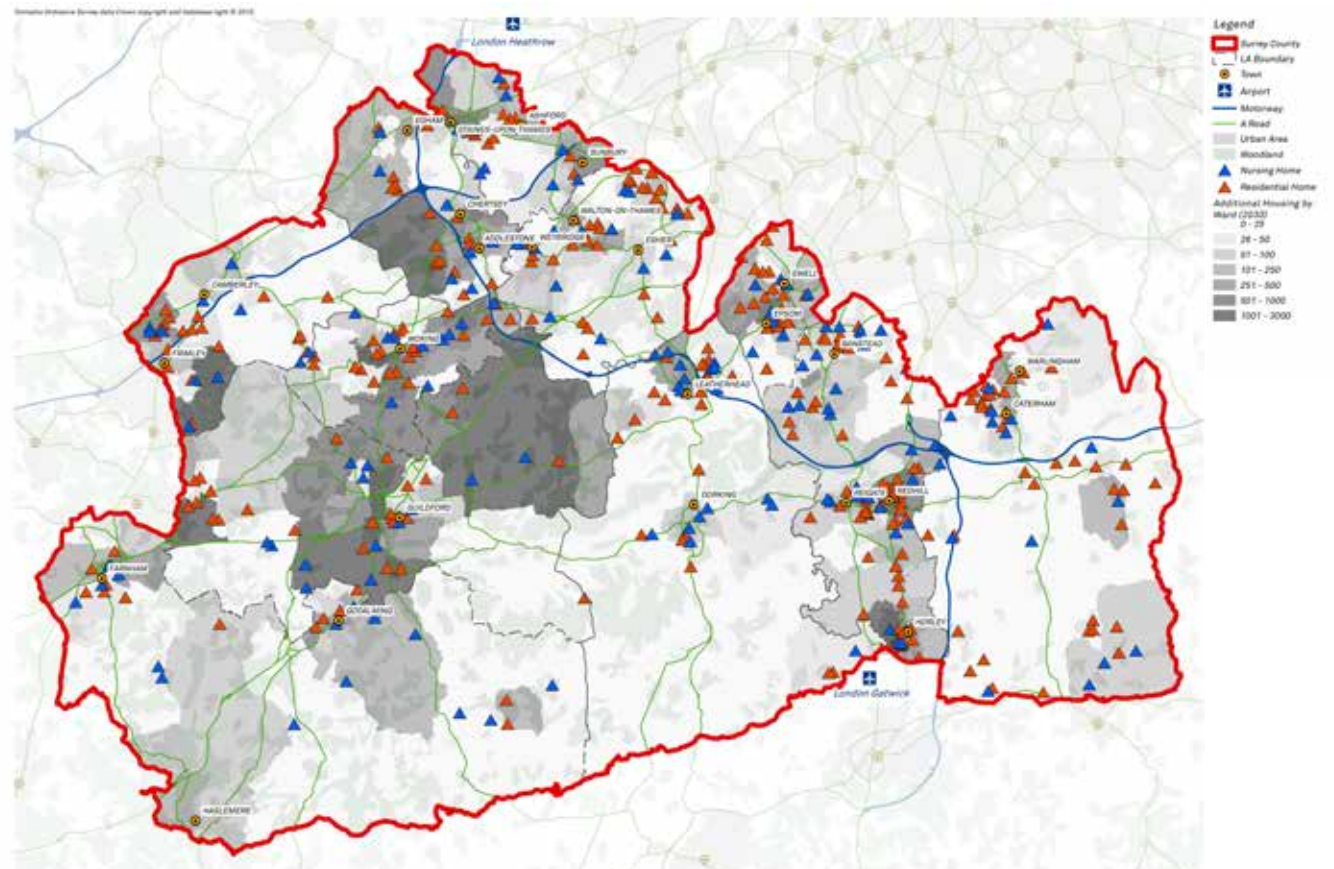
Surrey
-4%
Registered Care Deficit in Bed Requirements

Surrey
-1,955
Bed Deficit in Residential Care

- As of 2014, there were 11,341 registered care providers of Residential Care Homes and Nursing Care Homes.
- Of these; 6,702 were Residential Care Homes and 4,640 were Nursing Care Homes.

Figure 4.11

Social care accommodation against housing growth areas



Source: SCC and CQC Website for location and capacity data 2015


Table 4.7


Social care accommodation & theoretical future need

	NURSING AND RESIDENTIAL CARE		2015-2030 ADDITIONAL REQUIREMENTS		
	NURSING HOMES	RESIDENTIAL CARE	NURSING CARE BEDS	RESIDENTIAL CARE BEDS	EXTRA CARE BEDS
Elmbridge	18	41	190	146	107
Epsom & Ewell	14	43	108	83	63
Guildford	17	33	185	142	107
Mole Valley	25	44	158	122	95
Reigate & Banstead	42	105	245	188	137
Runnymede	21	26	131	101	68
Spelthorne	12	18	135	104	73
Surrey Heath	14	28	169	130	98
Tandridge	20	52	155	119	92
Waverley	34	50	215	166	142
Woking	14	57	147	114	83
SURREY	231	497	1,838	1,415	1,066

Source: CQC Database & AECOM Analysis of future demands using The Housing Learning and Improvement Network (LIN) SHOP TOOL

FUTURE REQUIREMENTS TO MEET GROWTH TO 2030

 **26**
Surrey
Additional Nursing Care Facilities (72 bed)

 **20**
Surrey
Additional Residential Care Facilities (72 bed)

 **14**
Surrey
Additional Extra Care Facilities (77 bed)

EXAMPLE INFRASTRUCTURE PROJECTS PROPOSED

The list below sets out key investments expected to support population growth:

- Redevelopment of Queen Elizabeth House in Englefield Green to provide a 65 bedroom nursing and care home
- Redevelopment of the former Brunel University site to provide (amongst other things) 59 extra care units
- Provision of specialist accommodation for vulnerable young people in Woking.

COSTS AND FUNDING

AECOM has estimated accommodation costs based upon benchmark planning standards and the forecast age specific population forecasts. UK benchmark costs have been applied to those forecasts. This identifies the following costs for Surrey:

Cost = £318,680,000

Funding Gap = £31,870,000*

Costs are set out for each local authority in Section 5.

*(considering both secured and expected funding)



4.5 COMMUNITY

LIBRARIES



Surrey
42
SCC
managed
Libraries

Surrey
10
Community
Partnered
Libraries

Surrey
3
Community
Link
Libraries

CURRENT SITUATION

The nature of a library and what it really means today is changing all the time. The service is no longer about just books as Surrey County Council is increasingly looking at how traditional library buildings are used to ensure that space is used most effectively and to respond to changing service needs, including the impact of digital technology.

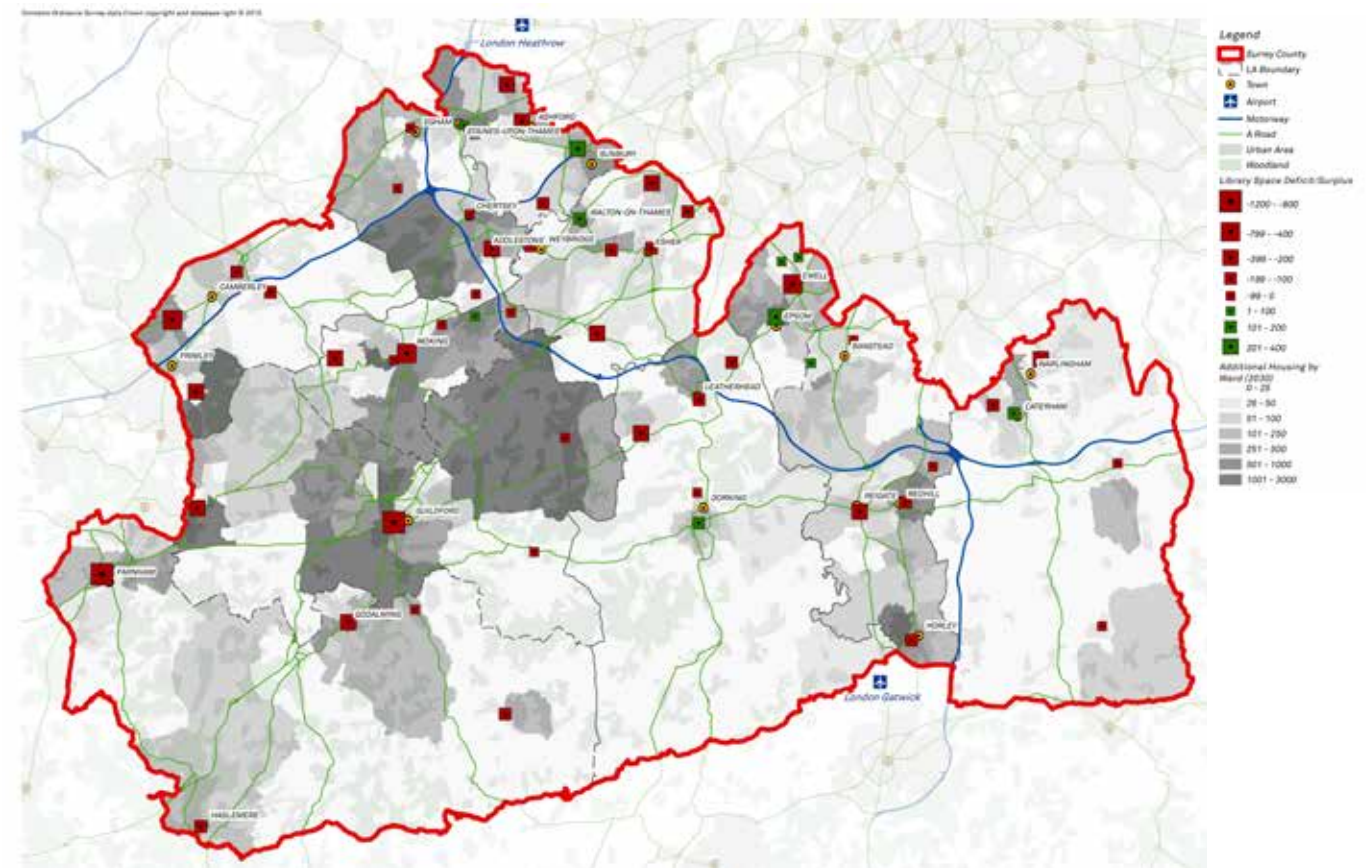
Whilst there has been an active programme of refurbishing libraries over the past 7 years a lot of the libraries in Surrey are still in old buildings in out of town locations and this proves itself to be difficult as the Council strives to deliver a truly modern service.

HEADLINES

- Location of Libraries is a fundamental issue when considering quality of provision. Libraries may not be sited in locations in towns where people congregate.
- Focus around including Library provision alongside the delivery of a wide-range of services at a collective facility.
- Pressure on libraries to downsize to release assets and to reduce library space to accommodate a greater variety of other services integrated into or co-located within the library.

Figure 4.12

Library capacity against housing growth areas



Source: Surrey County Council for location and capacity data 2015

Table 4.8

Library capacity & theoretical future need

	NUMBER OF LIBRARIES	FLOORSPACE(SQM)	SIZE REQUIRED FOR CATCHMENT (SQM)	SUM OF SURPLUS / DEFICIT FLOORSPACE (SQM)	2015-2030 ADDITIONAL LIBRARY SPACE (SQ.M) REQUIREMENT
Elmbridge	7	2,334	3,305	-971	65
Epsom & Ewell	4	2,084	2,123	-39	63
Guildford	4	1,202	2,752	-1,551	508
Mole Valley	6	1,355	1,849	-494	45
Reigate & Banstead	6	2,637	3,311	-674	264
Runnymede	5	1,330	1,904	-574	293
Spelthorne	5	2,110	2,429	-319	52
Surrey Heath	4	862	1,842	-980	79
Tandridge	5	1,116	1,640	-474	21
Waverley	5	1,426	3,028	-1,602	59
Woking	6	2,100	2,859	-759	173
SURREY	57	18,604	27,042	-8,437	1,622

Source: Surrey County Council & AECOM analysis of future demands using benchmark of 25 sq.m per 1,000 people.

headlines on previous page will not match total libraries in table above as headline exclude specialist library provision (i.e music and drama library)

Sum or Surplus / Deficit based upon current population size and application of benchmark of 25 sq.m per 1,000 people.

FUTURE REQUIREMENTS TO MEET GROWTH TO 2030



Surrey

1,622

Sq.m of additional library space required by 2030

Whilst our analysis identifies the need for 1,622 sq.m of additional provision. It is important to recognise the changing nature of library service provision and possibilities for delivering these requirements in new and innovative ways including the shared use of multi functional spaces.

EXAMPLE INFRASTRUCTURE PROJECTS PROPOSED

The list below sets out key library investments expected to support population growth:

- New build community hub in Merstham in 2016
- Relocation of Horley Library in January 2016
- A new Performing Arts Library within the next 3 years

COSTS AND FUNDING

Based upon information contained within each local authority's IDP and theoretical benchmark modelling where no IDP analysis was undertaken, the following costs and funding have been recorded for Surrey:

Cost = £10,730,000

Funding Gap = £8,780,000*

Costs are set out for each local authority in Section 5.

* (considering both secured and expected funding)

YOUTH SERVICES



Surrey

43

Total Number of Youth Centres

Surrey

36

SCC Facilities

Surrey

7

Non SCC Facilities

CURRENT SITUATION

Youth services in Surrey are run by Surrey County Council, either by Surrey Youth Support Services (YSS) or on their behalf under contract with a range of commissioned providers. YSS staff work with partners including health professionals, schools, colleges, police and voluntary organisations so that support can be tailored to each individual.

HEADLINES

Tandridge

763

Fewest hours of service provided March 2014-15

Reigate & Banstead

783

Highest number of clients recorded March 2015

Epsom & Ewell - good provision

0.60

Youth service providers per 1,000 young people

Guildford - poor provision

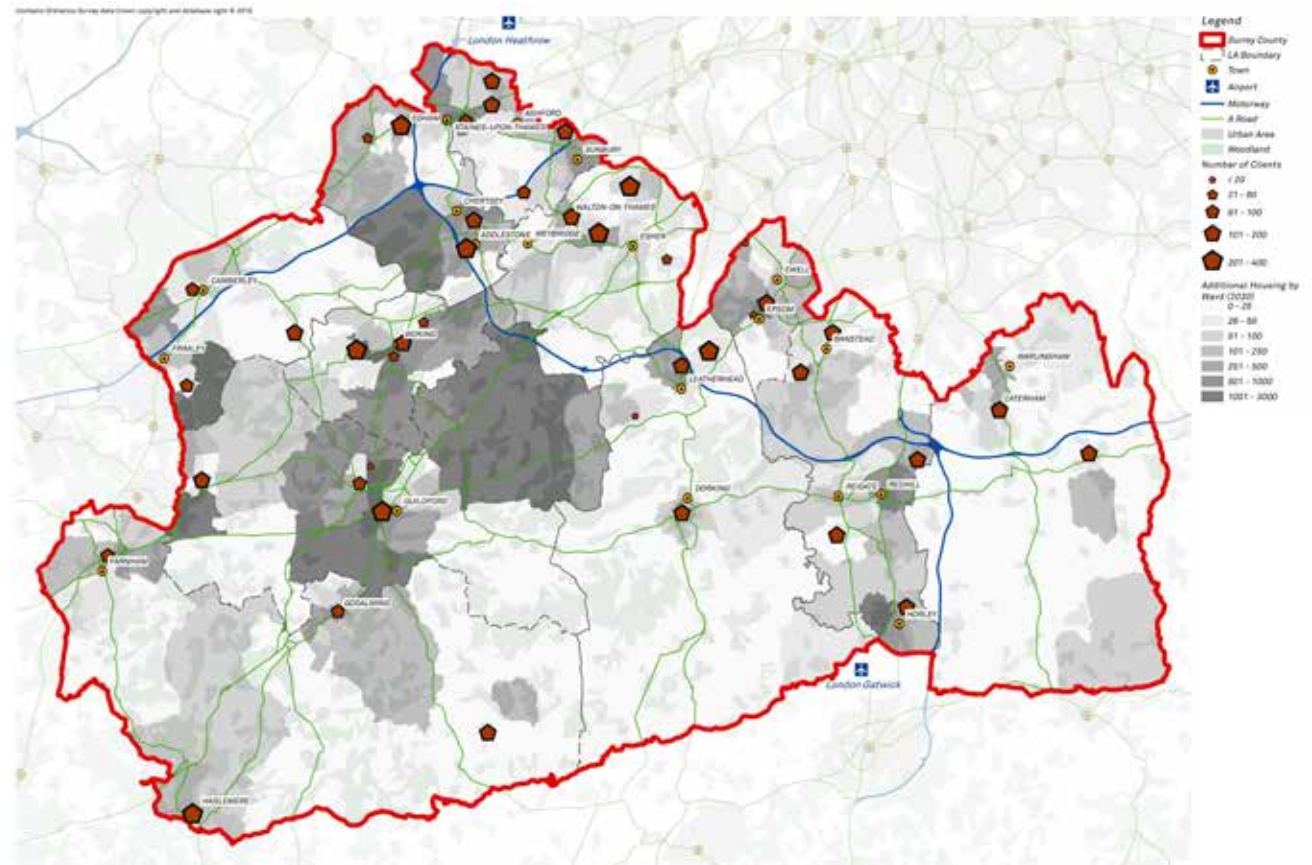
0.33

Youth service providers per 1,000 young people

It is important however to note that some facilities are privately run and accessibility by all may not be possible.

Figure 4.13

Youth service provision against housing growth areas



Source: Surrey County Council for location and capacity data 2015

Table 4.9

Youth services capacity & theoretical future need

	NUMBER OF YOUTH CENTRES	CLIENTS RECORDED - MARCH 2015	HOURS OF DELIVERY - MARCH 2014 - 15	HOURS PER CLIENT	2015-2030 ADDITIONAL YOUTH FACILITY CLIENTS
Elmbridge	5	702	1,174	1.7	27
Epsom & Ewell	3	179	980	5.5	28
Guildford	4	620	1,048	1.7	88
Mole Valley	4	645	1,597	2.5	4
Reigate & Banstead	5	783	2,439	3.1	34
Runnymede	4	601	1,929	3.2	40
Spelthorne	5	620	1,755	2.8	16
Surrey Heath	3	306	1,308	4.3	3
Tandridge	2	327	763	2.3	15
Waverley	5	652	1,144	1.8	14
Woking	3	505	1,297	2.6	23
SURREY	43	5,940	15,434	2.6	292

Source: Surrey County Council Youth Support Services & AECOM analysis of future demands

FUTURE REQUIREMENTS TO MEET GROWTH TO 2030



Surrey

5

additional youth facilities

EXAMPLE INFRASTRUCTURE PROJECTS PROPOSED

The list below sets out youth facility investments expected to support population growth:

- Horley Young People's Centre - £2.7m (recently complete)
- Development of neighbourhood skills centres within the local authorities' youth clubs

COSTS AND FUNDING

Based upon information contained within each local authority's IDP and theoretical benchmark modelling where no IDP analysis was undertaken, the following costs and funding have been recorded for Surrey:

Cost = £3,000,000

Funding Gap = £0*

Costs are set out for each local authority in Section 5.

* (considering both secured and expected funding)

COMMUNITY & INDOOR SPORTS FACILITIES



Community Facilities



Sports Facilities

CURRENT SITUATION

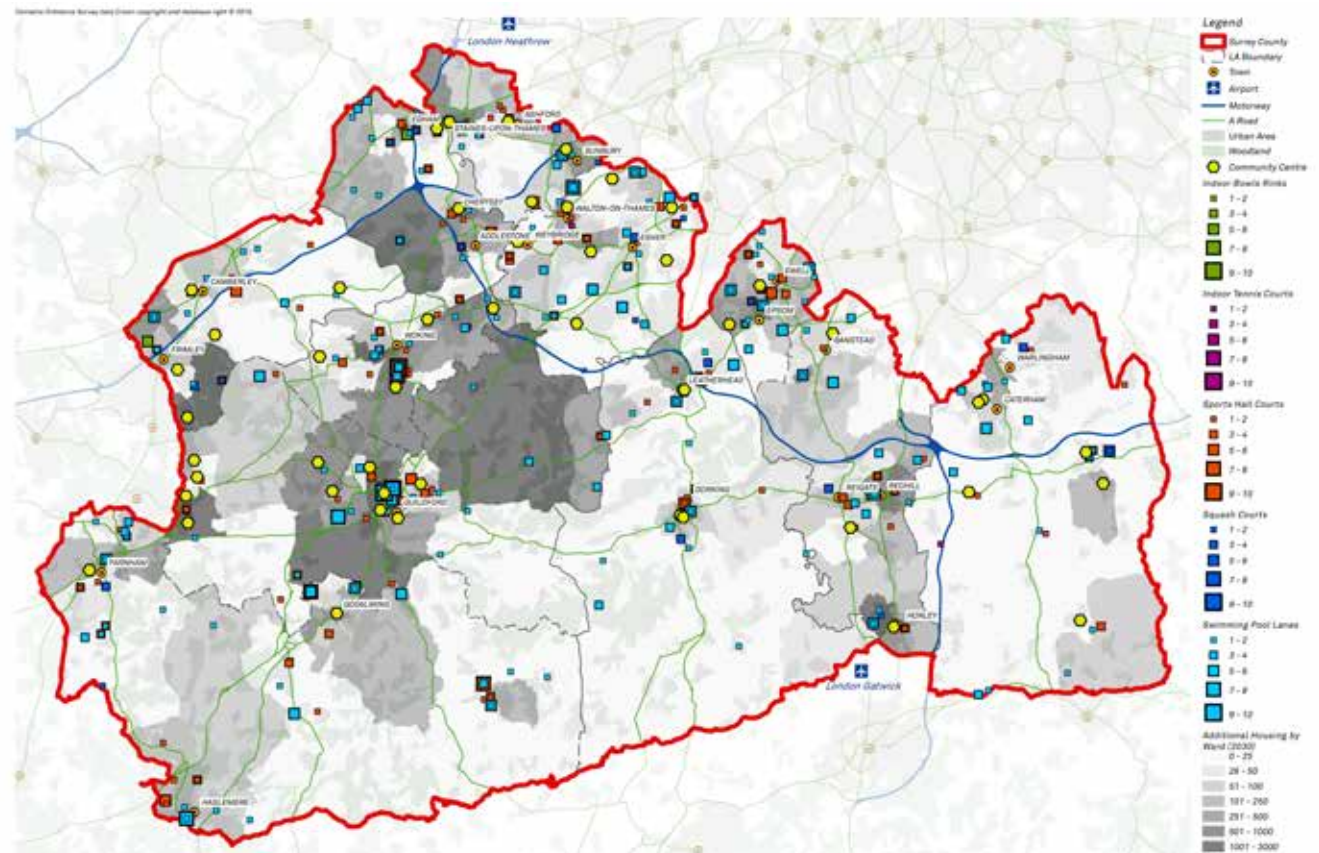
Community and Indoor Sports facilities in Surrey comprise both public and private facilities. Public facilities are provided and funded by the local authorities. This allows for anyone to access the facilities. Private facilities often require membership and payment for the use of those facilities.

HEADLINES

- Spelthorne has the largest gaps in indoor sports provision, with the supply below the Surrey average in 4 of the 5 categories.
- There are gaps in current facility distribution against the focus areas of housing growth. This can be seen in Guildford, Runnymede and Reigate & Banstead.
- Elmbridge and Waverley have relatively strong provision of indoor sports provision where future housing growth is projected.

Figure 4.14

Community & leisure provision against housing growth



Source: Surrey County Council and Sport England Active Places for location and capacity data 2015

Table 4.10

Community and leisure provision

	COMMUNITY CENTRES	SPORTS HALL COURTS	SWIMMING POOL LANES	SQUASH COURTS	GYM STATIONS	INDOOR BOWLS RINKS	INDOOR TENNIS COURTS
Elmbridge	7	62	64	26	1,018	4	6
Epsom & Ewell	2	48	34	16	686	1	2
Guildford	11	81	51	14	785	6	4
Mole Valley	3	51	38	13	299	4	0
Reigate & Banstead	3	59	44	17	581	6	0
Runnymede	2	52	13	9	639	6	4
Spelthorne	4	39	22	7	756	0	0
Surrey Heath	5	34	10	10	666	6	0
Tandridge	6	39	36	12	323	0	3
Waverley	2	90	62	19	969	0	4
Woking	4	26	18	12	604	0	10
SURREY	49	581	392	155	7,326	33	33


Source: Surrey County Council and Sport England Active Places

Table includes all provision recorded by Sport England and does not differentiate between Public and Private access


Community centres presented is limited to those defined specifically as community centres and does not include wider provision of community facilities and halls for hire.

FUTURE REQUIREMENTS TO MEET GROWTH TO 2030

 Surrey
4,217 sqm
new flexible community space

 Surrey
11
new swimming pool lanes

 Surrey
21
new sports courts

 Surrey
3
new indoor bowls rinks

The above infrastructure requirements have been identified based on a combination of those actual planned projects according to the local authorities and further AECOM analysis using Sport England and best practice standards.

EXAMPLE INFRASTRUCTURE PROJECTS PROPOSED

The list below sets out community and leisure facility investments expected to support population growth:

- New leisure centre in Preston / Tadworth
- 2 new community halls in Horley - £15,000,000
- Facility enhancement at Egham Leisure Centre - £7,000,000

COSTS AND FUNDING

Based upon information contained within each local authority's IDP and theoretical benchmark modelling where no IDP analysis was undertaken, the following costs and funding have been recorded for Surrey:

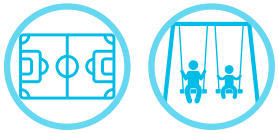
Cost = £59,180,000

Funding Gap = £10,150,000*

Costs are set out for each local authority in Section 5.

*(considering both secured and expected funding)

OUTDOOR SPORTS AND RECREATION



Outdoor Sports & Recreation

Children's Play Space

CURRENT SITUATION

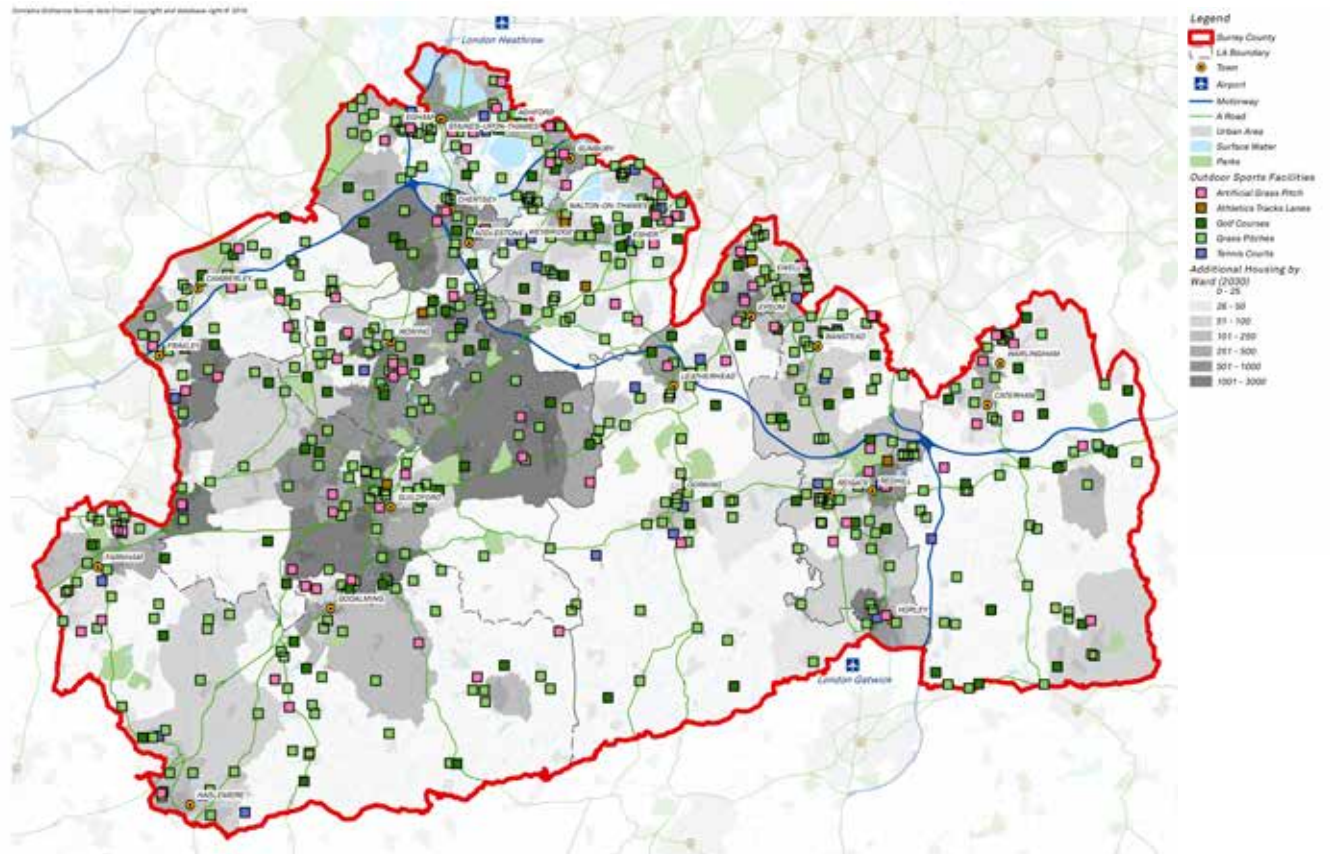
Surrey has a wide range of open spaces, outdoor sports pitches, outdoor sports facilities and children's playgrounds. Outdoor sports and playspace are owned and operated by a mixture of private sector and voluntary organisations and local authorities.

HEADLINES

- There is a significant gap in outdoor sports provision in Reigate & Banstead with capacity below Surrey's average supply to population ratio in all 5 categories.
- Guildford, Mole Valley and Spelthorne also display similar issues with capacity below the average in 4 of the 5 categories.
- The lack of sports provision is a particular concern around Guildford which is due to experience significant growth. However, the growth area of Runnymede is in a strong position to accommodate a larger population with additional capacity in all 5 outdoor sports categories.
- The larger urban centres of Elmbridge and Waverley similarly have strong provision of existing outdoor recreational facilities.

Figure 4.15

Outdoor sports and recreation against housing growth



Source: Surrey County Council and Sport England Active Places for location and capacity data 2015

Table 4.11

Outdoor sports and recreation

	GRASS PITCHES	ARTIFICIAL GRASS PITCH	TENNIS COURTS	ATHLETIC TRACKS LANES	GOLF COURSES
Elmbridge	232	14	92	12	11
Epsom & Ewell	147	7	46	6	5
Guildford	198	11	25	8	11
Mole Valley	112	4	19	0	7
Reigate & Banstead	181	7	46	6	9
Runnymede	130	14	37	8	12
Spelthorne	79	9	28	0	4
Surrey Heath	145	9	24	0	6
Tandridge	175	10	36	0	15
Waverley	229	21	68	6	13
Woking	78	9	51	6	15
SURREY	1,706	115	472	52	108

Source: Surrey County Council and Sport England Active Places

Table includes all provision recorded by Sport England and does not differentiate between Public and Private access

FUTURE REQUIREMENTS TO MEET GROWTH TO 2030



Surrey

2

Artificial Turf Pitches



Surrey

78ha

Playing fields



Surrey

11ha

Children's Play-space

The above infrastructure requirements have been identified based on a combination of those actual planned projects according to the local authorities and further AECOM analysis using Sport England and Fields in Trust best practice standards.

EXAMPLE INFRASTRUCTURE PROJECTS PROPOSED

The list below sets out the outdoor sports and recreation investments expected to support population growth:

- New pitch provision at Woking - £3,190,000
- Multi-purpose outdoor recreation space - £6,000,000
- Horley outdoor Sports provision - £4,500,000

COSTS AND FUNDING

Based upon information contained within each local authority's IDP and theoretical benchmark modelling where no IDP analysis was undertaken, the following costs and funding have been recorded for Surrey:

Cost = £56,850,000

Funding Gap = £20,320,000*

Costs are set out for each local authority in Section 5.

* (considering both secured and expected funding)



4.5 GREEN INFRASTRUCTURE

GREEN INFRASTRUCTURE



Natural Green Space & Strategic Projects



Parkland

CURRENT SITUATION

Surrey's diverse natural and semi natural environment is a valuable asset. In addition to providing the basis for the agricultural sector, supporting biodiversity and providing an attractive character that draws residents, employers and visitors into the county, the environment performs a wider range of functions, such as air quality and climate regulation, flood mitigation and space for recreation which have tangible benefits to society and the economy.

The broader natural environment is supported by a network of more formal green infrastructure assets. Natural England defines GI as a strategically planned and delivered network comprising a broad range of high quality green spaces and other environmental features including natural and semi natural green space, parks and gardens, amenity space, green and blue corridors (verges and rivers) as well as a range of other greenspaces including allotments.

Surrey's assets are spread throughout the county; however there is a greater concentration to the west of the county, with a number of sites designated for their national and international importance for nature conservation, parks, gardens and woodland.

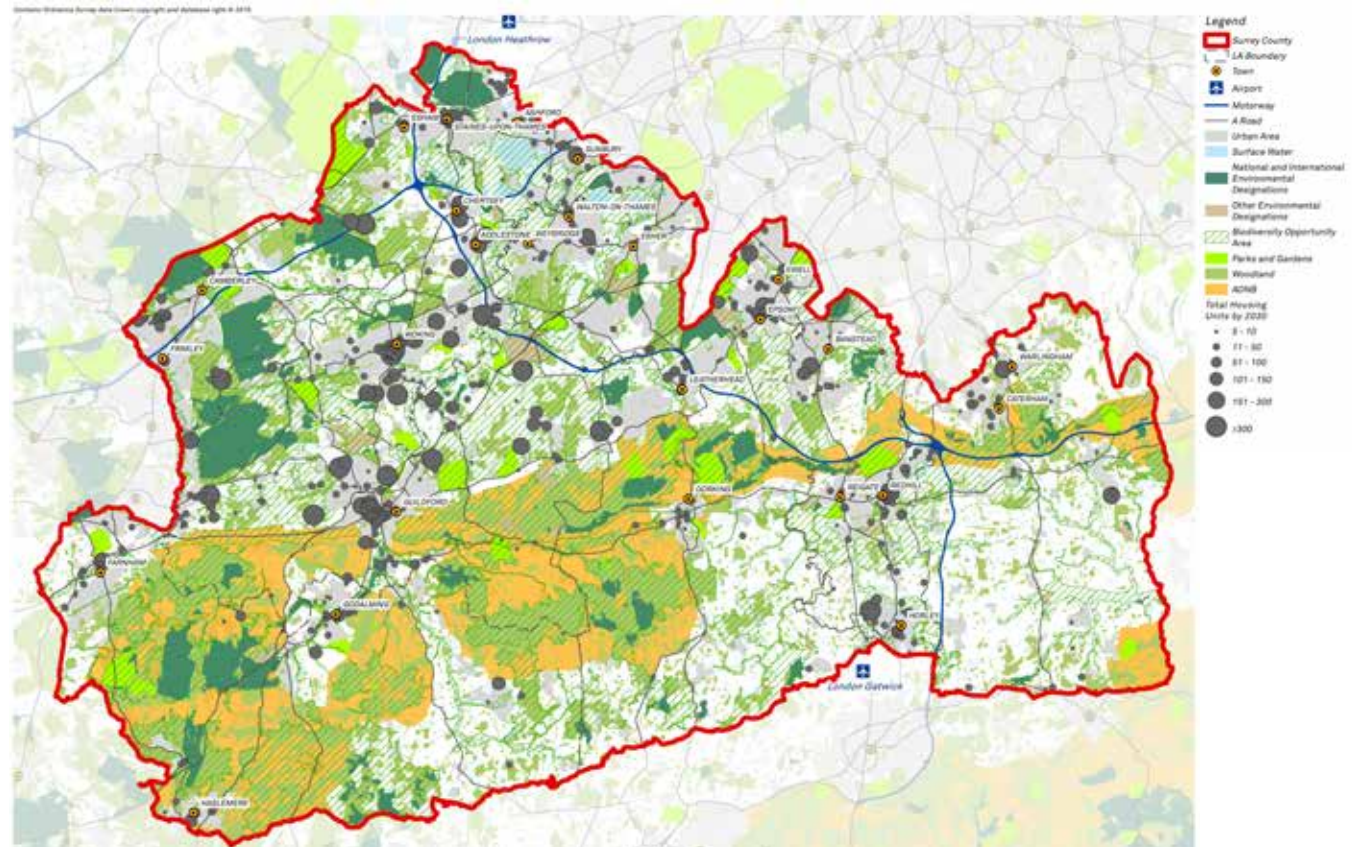
HEADLINES

- AONB make up 43,260ha (26% of Surrey land area) - Kent Downs, Surrey Hills, High Weald
- Woodland makes up 33% of the land area of Surrey
- 52 Parks and Gardens in Surrey (4,120ha)

- Over 12,309 ha of Surrey have received National and International designations (not including AONB, County or National Parks, Woodland or common land)
- Strategic green infrastructure provision such as Epsom Downs, Horton Country Park Provide a strategic role beyond the borough boundaries in which they are located and is an example of shared infrastructure with a wider catchment

Figure 4.16

Green infrastructure & proposed housing sites



Source: Surrey County Council, Surrey Nature Partnership, Historic England, Natural England, OS Meridian, Forestry Commission

Table 4.12

Green infrastructure provision

GI TYPE	AREA (HA)
AONB	43,260
National and International Designations	12,310
Parks & Gardens	4,120
Surface Water	3,270
Woodland	55,094
Woodland	94,665
Other Environmental Designations	2,241
TOTAL	120,295

GREEN INFRASTRUCTURE AND THE NATURAL ENVIRONMENT

The NPPF identifies the planning system as having an environmental role that contributes to protection and enhancement of the natural environment. It seeks to establish coherent, ecological networks that are more resilient to current and future pressures while recognising the ‘wider benefits’ ecosystems services can have. SCC and Surrey Nature Partnership (SNP) support this ambition and are determined that development should deliver a net benefit to biodiversity.

GI delivery to support growth will be a product of both increased provision of dedicated space, as well as enhancing the quality of existing sites and supporting the functionality of the wider environment. SNP, SCC and partners are keen for the environmental assets that underpin the value derived from GI to be considered as natural capital. As such, the benefits of growth can be considered alongside the impacts on the natural capital assets and investment into the natural environment can be targeted to help leverage the value derived from these assets.

SNP is leading the development of a Natural Capital Investment Strategy (NCIS) for Surrey. It is based on

ensuring the appropriate and sustainable use of Surrey’s natural capital assets, thereby securing the services which flow from it, through high quality, locally embedded decision-making. The NCIS will showcase how local natural capital, a key element of infrastructure, can create practical economic opportunities, deliver on broader sustainability objectives, promote good health and quality of life as well as inform ways of working and policy for key stakeholders.

To support this, SNP and SCC have identified a series of Biodiversity Opportunity Areas (BOAs), and associated guidance notes, that provide a spatial framework to support the development of local GI strategies and direct investment into the natural environment where it can deliver most benefit. Within this, series of sites have also been identified on a more detailed Habitat Creation Register that could be enhanced to provide GI that helps mitigate the impacts of development, potentially through developer contributions as part of a future biodiversity offsetting policy.

SUITABLE ALTERNATIVE NATURAL GREEN SPACE




Suitable Alternative Natural Green Spaces (SANGs) are green open spaces provided and managed to mitigate the harmful effects of new development on protected bird habitats. SANGs represent an important element of infrastructure in their own right as well as a facilitator for further housing development. The cost of delivering the SANGs needed to support future housing development will be covered by developer contributions (currently S106 planning obligations and in future, by a combination of S106 and CIL).

EXAMPLE SPECIFIC PROJECTS IDENTIFIED

A large number of Green Infrastructure schemes have been identified within the local authority Infrastructure Delivery Plans. Delivering multiple benefits from GI are also central to delivering other strategic projects, such as those identified in river Catchment Plans, and within future development proposals. These cover new natural and semi-natural green space, amenity green space, parks and gardens, and allotments. Example projects include:

- Maintenance and enhancement of Hogsmill Local Nature Reserve - Epsom & Ewell - £650K
- SANG at Chantry Woods in Guildford - £7.3m
- Horley Riverside Green Chain - Reigate & Banstead - £2.5m
- Hawley Meadows & Blackwater Valley Park SANG (31ha) - £7.6m
- Farnham Park SANG - £2m

FUTURE REQUIREMENTS TO MEET GROWTH TO 2030

-  **65ha**
Suitable Alternative Natural Green Space
-  **26ha**
New Parkland
-  **13ha**
Allotments

The above infrastructure requirements have been identified based on a combination of those actual planned projects according to the local authorities and further AECOM analysis using Natural England and Fields in Trust best practice standards.

COSTS AND FUNDING

Based upon information contained within each local authority’s IDP and theoretical benchmark modelling where no IDP analysis was undertaken, the following costs and funding have been recorded for Surrey:

Cost = £35,770,000

Funding Gap = £9,090,000*

Costs are set out for each local authority in Section 5
* (considering both secured and expected funding)



4.6 UTILITIES

ENERGY



ELECTRICITY

- UKPN and SSE provide electricity network distribution services in Surrey.
- UKPN's South Eastern Power Networks PLC (SPN) electricity network supplied from Chessington 275/132kV, Laleham 275/132kV and West Weybridge 275/132kV Grid Supply Points (GSPs) covers the Surrey study area. These have an aggregate demand of 759.9MW (Winter-W) and 519MW (Summer-S) across 10x132kV grid substations and 34x33kV primary substations.
- The aggregate firm capacity attributed to the three GSPs is 1,797MW (W) and 1,588MW (S) while aggregate load demand is projected to reach 878.2MW (W) and 601.3MW (S) by 2023.

Current Capacity issues

- UKPN note in the Chessington/Laleham/West Weybridge Regional Development Plan (RDP) (dated June 2015) that future load demand and network growth in the RDP area is likely to be influenced by future Gatwick development and new residential development proposed in Surrey and surrounding areas up to 2027.
- SSE Long Term Development Statement (LTDS), 2015 suggests that there are no constraint areas for accepting new generation or load, however, background fault levels at most voltages are generally high.

FUTURE REQUIREMENTS

Impacts of growth on supply

- UKPN estimate that the proposed new housing developments and supporting amenities will require approximately 150MW electricity supply demand over the period, which UKPN note is technically available from grid supply capacity. Future major works identified include Kingston Grid transformers' replacement, Guildford Grid reinforcement, Chertsey primary 33kV reinforcement and Brookwood primary 33kV reinforcement
- GBC have highlighted the need to reinforce from the Dorking Circuit to support the University of Surrey Research Park.

Summary of plans to support growth

Major works currently at feasibility study stage or under construction include the following:

- Brookwood Primary & EHV route - HV Switchgear / ITC / 33kV UGC
- West Weybridge 33kV switchgear replacement
- Chertsey ITC and HV switchgear replacement
- West Weybridge to Chertsey 33kV underground cables (being replaced as 33kV)
- Weybridge HV Switchgear replacement and ITC
- Weybridge Dynamic Transformer Rating
- West Weybridge to Guildford 132kV cable

Table 4.13

UKPN Long Term Development Strategy (fully funded)

LOCAL AUTHORITY	REINFORCEMENTS & ASSET REPLACEMENT PROJECTS TO 2023	FUNDED INVESTMENT
Elmbridge	6	£5,983,170
Epsom & Ewell	4	£6,519,461
Guildford	11	£29,825,665
Mole Valley	7	£8,799,712
R & Banstead	3	£2,610,729
Runnymede	3	£2,959,205
Spelthorne	0	0
Surrey Heath	0	0
Tandridge	2	£3,324,533
Waverley	0	0
Woking	8	£14,585,204
Surrey	44	£74,607,679

Source: UKPN SPN Regional Development Plan - Chessington/Laleham / West Weybridge Version 3 June 2015

GAS SUPPLY

Gas is transmitted through a National Transmission System (NTS), in which it is then supplied to towns and villages through Local Distribution Zones (LDZ). The Gas Distribution Network Operator for Surrey is Southern Gas Networks (SGN).

CURRENT SITUATION

- SGN has a duty to extend or improve the National Transmission System (NTS), where necessary, to ensure an adequate and effective network for the transportation of gas. No specific upgrades have been identified within the county but future works may be required to respond to the wider demand for gas.
- No Current Capacity issues have been identified

FUTURE REQUIREMENTS

Impacts of growth on supply

- SGN forecast a small decrease in annual and peak day demands over the 2014-2024 period (albeit a small increase is expected in 2014-2015 due to economic recovery) due to increased efficiencies and renewable incentives.

Summary of plans to support growth

- Installation of infrastructure on a speculative basis to serve potential development areas is not supported by regulator OFGEM.
- Reinforcement projects for the LDZs are planned for on a reactive basis, Network reinforcement is determined on an application by application basis when new loads connect to the network, rather than planned for in advance.
- Agreements need to be reached with developers prior to investment in new infrastructure being made.
- It cannot be assumed that the existing network has sufficient capacity to supply all proposed development proposals across Surrey. It can however be assumed that the necessary capacity will be developed on a reactive basis by the gas Distribution Network Operator.

COST OF CONNECTING THE GROWTH SITES

UKPN strategic investments to 2023 have been taken into account but no strategic Gas Network investment data has been made available to this study.

AECOM are considering the whole cost of utilities and have therefore also considered the cost of connecting the planned housing and employment sites to the existing network.

Per dwelling and commercial floorspace benchmark energy connection costs have been applied to the growth forecasts and based on these assumptions, AECOM estimates the following costs associated with energy provision to support growth across Surrey to 2030

Cost = £169,720,000

Funding Gap = £0*

It is assumed that these costs will be borne by the developer and service providers. Costing caveats apply to all AECOM estimates presented within this document. See Costing assumptions at end of document

** (considering both secured and expected funding)*

BROADBAND



BROADBAND DELIVERY UK (BDUK) - SUPERFAST BROADBAND PROGRAMME

Broadband Delivery UK (BDUK), part of the Department for Culture, Media and Sport, have set a national target of 95% provision of superfast broadband (speeds of 24Mbps or more) to all UK premises with universal basic broadband (speeds of at least 2Mbps).

The programme is being delivered in three phases:

- Phase 1 aims to provide superfast broadband to 90% of premises in the UK
- Phase 2 will seek to further extend coverage to 95% of the UK
- Phase 3 will test options to roll out superfast broadband beyond 95%.

Whilst this represents the current BDUK targets for all areas, Surrey County Council has implemented its own Superfast Surrey Programme with different contractual targets.

CURRENT SITUATION IN SURREY

In 2012, SCC signed a multi-million contract with BT to build on the existing and planned commercial rollouts of the fibre broadband network in order to address the issue of premises in Surrey without any fibre broadband provision.

The key aims of the programme were to enable:

- Of those premises identified in 2012 as not having or not planned to have access to fibre broadband, at least 98.6% of those premises were to be connected to the fibre network.
- 93.9% of premises connected to the fibre network as part of the Superfast Surrey project to be able to access minimum download speeds of 15Mbps

In the past two years, more than 84,000 premises, mostly located in the more difficult to reach and rural areas of Surrey, have been covered by the fibre network as part of the Superfast Surrey Broadband Programme.

SCC is currently undertaking an Open Market Review (OMR) to identify all Surrey premises that are still unable to access Next Generation Access (NGA) broadband download speeds of 15Mbps or above with a view to defining the legal baseline of a potential new intervention area.

The first stage of the OMR, which involved requesting current and future broadband coverage information from existing infrastructure providers has finished and the methodology and outcomes of the analysis have been shared with Broadband Delivery UK (BDUK). Prior to progressing to the next stage in the OMR process, SCC must receive confirmation from BDUK of the European Commission's State Aid Funding re-negotiation. BDUK is responsible for negotiations with the European Commission, the outcome of which is now not anticipated until early 2016.

COST OF CONNECTING THE GROWTH SITES

Per dwelling and commercial floorspace benchmark communication connection costs have been applied to the growth forecasts and based on these assumptions, AECOM estimates the following costs associated with connecting new dwellings and commercial development to the existing broadband network:

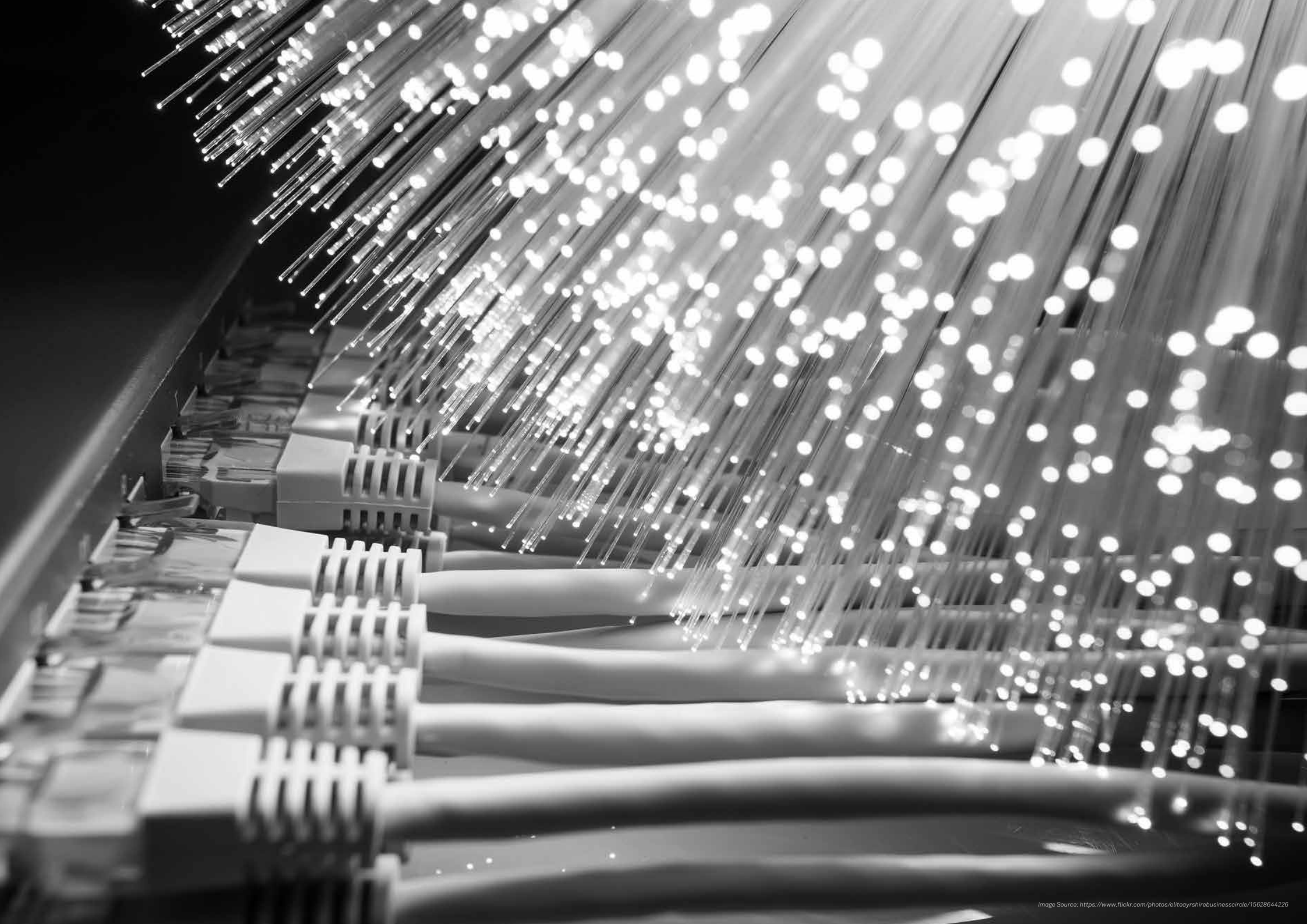
Cost = £15,760,000

Funding Gap = £0*

It should be noted that the costs set out above include only the developer funded connection costs for new housing and commercial development.

An assumption, as set out in section 6.3, has been made that all new development costs will be met by the developer in order to meet the market demand for broadband ready properties.

** (considering both secured and expected funding)*



WATER & WASTE WATER



CURRENT SITUATION

Several Water Only (WO) companies operate in Surrey; Sutton & East Surrey Water, South East Water and Veolia Water. Thames Water and Southern Water operate as Water and Sewerage Companies (WaSC).

- All water companies have prepared Water Resource Management Plans (WRMPs) for 2015 to 2040. These are updated every five years with the current review completed in 2014. These seek to accommodate the potential increase in demand from new development, manage the existing supply of water and take account of likely future changes due to climate change.

Table 4.14

Water Supply and Waste Providers

	VW	SEW	TW	SESW
Elmbridge	W		W	W
Epsom & Ewell	W		W	
Guildford	W	W	W	W
Mole Valley			W	W
Reigate & Banstead				W
Runnymede	W			
Spelthorne	W		W	
Surrey Heath	W	W		
Tandridge			W	W
Waverley		W	W	
Woking	W			

VW - VEOLIA WATER

SEW - SOUTH EAST WATER / TW - THAMES WATER

SESW - SUTTON & EAST SURREY WATER

W - PROVIDER

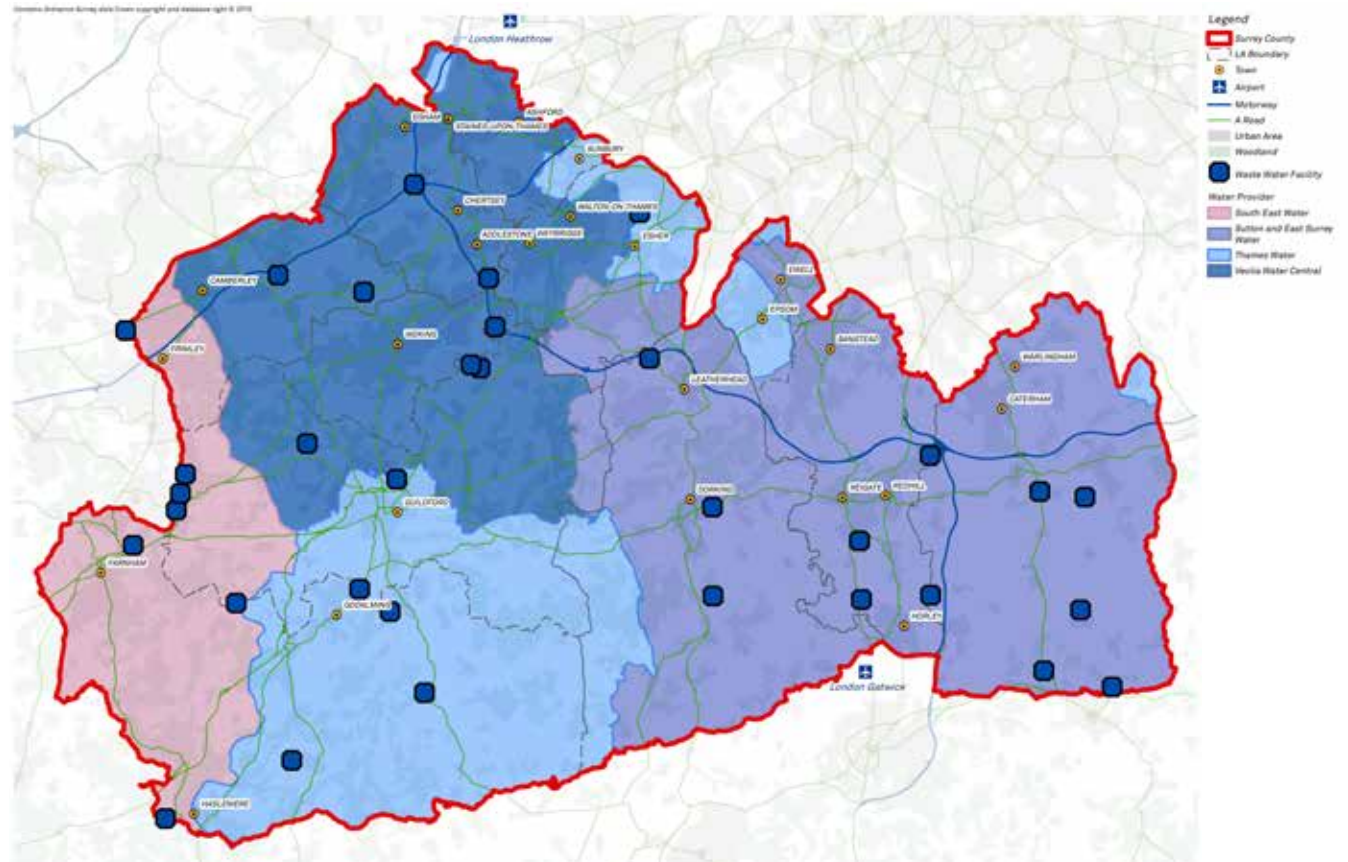
- Thames Water report that 80% of London's potable water is supplied from surface waters of the River Thames and the River Lee, via reservoirs, with the remaining 20% coming from groundwater.
- 30% of Thames Valley potable water comes from surface waters and 70% from groundwater.
- Southern Water's Sussex North Water Resource Zone (WRZ) which includes parts of Surrey has dry year

demands typically around 60 ML/d. The WRZ's own internal sources are supplemented by a bulk import from Portsmouth Water of 15 ML/d. However, the WRZ also provides a supply of 5.4 ML/d from Weir Wood to South East Water.

- There are over 30 Wastewater Treatment Works (WwTW) within the county

Figure 4.17

Water companies & waste water treatment works



Source: DEFRA 2012

Table 4.15

Water Supply Provider Plans

PROVIDER	INFRASTRUCTURE INVESTMENT PLANNED	TIME FRAME
Affinity Water	Reductions in network leakage	2015-2020
	Universal metering programme;	2015-2020
	Implementation of water efficiency	2015-2020
	Increased water abstraction;	2015-2020
	Increase in bulk transfer of water.	2015-2020
South East Water	Developing groundwater source at Maytham Farm	2015-2020
	Developing a water re-use scheme at Aylesford (37.5 ML/d)	2020-2030
	Building a new reservoir at Broad Oak (13.5 ML/d)	2030-2035
	Developing six water transfer schemes to share water with adjoining areas	2020-2040
	Creation of 3 new WRZ transfers.	-
Southern Water	Additional leakage reduction required over the planning period.	-
	Water reuse scheme to commence	2027-2028
	Two desalination schemes	2027-2028
Sutton & East Surrey Water	Selective Metering across East Sutton & Surrey	2015-2020
	Increase Water Treatment Works capacity	2021-2030
	Leakage reduction measures	2015-2020
Thames Water	Commencement of 'full' metering programmes to households (70% of households by 2025)	2015-2020
	New groundwater schemes providing additional water supply	2015-2020
	Promotion of water efficiency	2015-2020
	Rollout innovative tariffs to promote water efficiency	2020 +
	Further development of small groundwater schemes	2020 +
	Larger scale projects to secure long-term resilience including 150 ML/d wastewater re-use scheme	2020 +

Current Capacity issues

- Various WO and WaSCs have identified shortfalls within various WRZs.
- TWU Guildford WRZ: Average day peak week (ADPW) deficit of 0.1 ML/d in 2021/22, increasing to 3.8 ML/d in 2039/40.
- TWU London WRZ: A dry year annual average (DYAA) deficit of 59 ML/d in 2014/15, increasing to 416 ML/d in 2039/40.

FUTURE REQUIREMENTS

Impacts of growth on supply

- Network capacity is likely to be an issue at locations such as the Guildford-Woking-Staines corridor where large scale development is being proposed.
- Merstham and Mogden WwTW already identified as requiring upgrading to meet future demand.

Water Supply - Water Resource Management Plans

All five water companies have prepared Water Resource Management Plans (WRMPs) for 2015 to 2040. These are updated every five years with the current review completed in 2014. These seek to accommodate the potential increase in demand from new development, manage the existing supply of water and take account of likely future changes due to climate change.

Key actions to 2030 as highlighted in each plan are shown in Table 4.15.

Catchment Plans

Catchment Plans (CP) are in place or in preparation for the improvement of the Wey, Mole, Eden, Loddon, Arun & Rother, Colne and London (Hogsmill & Wandle) catchments. Projects under these action plans include Water Framework Directive targets to improve the ecological status of waterbodies that are not currently good by 2027 through a programme addressing in-channel habitat restoration, diffuse and point source pollution and barriers to fish passage.

Summary of Water Company Plans to Support Growth

- Replacement of lead pipes in parts of Thames Ditton and Elmbridge.
- Extension of bulk transfer schemes proposed between various water companies.
- Network enhancements (if required) to accommodate Blackwell Farm development.
- Network enhancements (if required) to accommodate Princess Royal Barracks development in Surrey Heath.
- Network enhancements (if required) to accommodate former Wisley Airfield development.
- Upgrades to Merstham WwTW, Mogden WwTW, Old Woking WwTW, Hogsmill WwTW, Guildford WwTW, Loxwood WwTW.
- Network enhancements (if required) to accommodate large scale developments such as Blackwell Farm, Wisley Airfield and Gosden Hill Farm.

COST OF CONNECTING THE GROWTH SITES

Per dwelling and commercial floorspace benchmark water supply and waste connection costs have been applied to the growth forecasts and based on these assumptions, AECOM estimates the following costs associated with provision to support growth across Surrey to 2030:

Cost = £116,590,000

Funding Gap = £0*

These costs are assumed funded by the developer and service providers.

* (considering both secured and expected funding)

WASTE



Surrey

145,000

tonnes of household waste brought to CRCs (2013/14)

Surrey

408,000

tonnes of waste collected by LAs (2013/14)

Surrey

52%

recycled, reused or composted (2013/14)

CURRENT SITUATION

Surrey County Council, in its role as the Waste Disposal Authority, provides 15 community recycling centres (CRCs) around the county where residents can recycle and dispose of their household waste. These complement the municipal waste collection services arranged by the local authorities from the kerbside and local recycling banks.

The 15 CRCs in Surrey are operated by SITA Surrey Ltd on behalf of Surrey County Council. The County Council is in the process of considering changes to the CRC service in order to achieve savings and maintain this important service to residents. Four of the busier CRCs at Epsom, Guildford, Leatherhead and Shepperton also contain waste transfer stations (WTS). These accept commercial & industrial (C&I) waste which is chargeable and also function as a drop off point for some district collections of residual household waste and recyclable materials prior to bulking and onward transfer for management elsewhere.

Some of the other facilities managing municipal waste in Surrey include Ash Vale WTS, Earlswood Materials Bulking Facility (MBF), Reigate Road Materials Recovery Facility (MRF) and Patteson Court Landfill near Redhill.

- Ash Vale WTS is partly operating as an overflow facility to relieve pressure on Guildford WTS for the receipt, storage and transfer of residual municipal waste sourced from district waste collections in Guildford and Surrey Heath.
- Earlswood MBF is used for the bulking, storage and onward transfer of district collections of residual

household waste, recyclable materials and food waste from Reigate & Banstead and Tandridge.

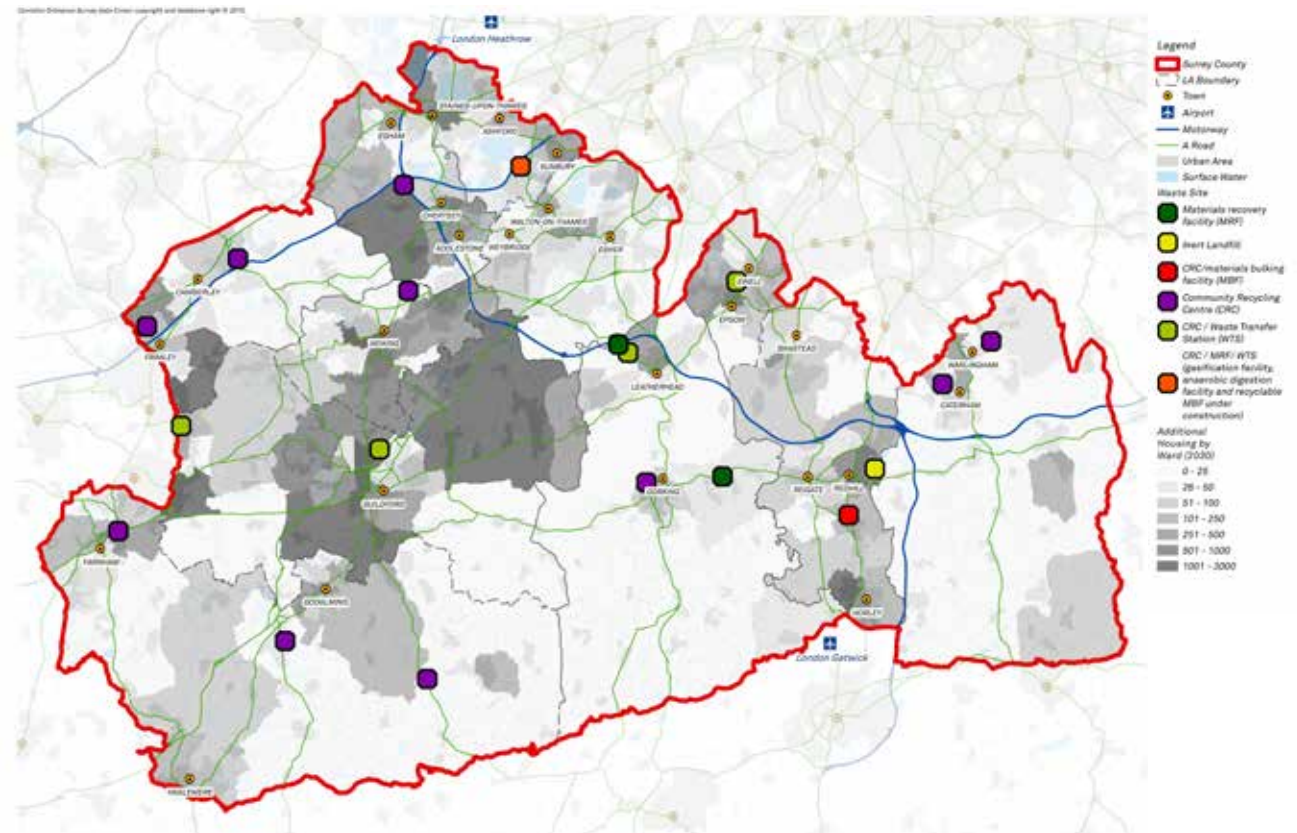
- Reigate Road MRF has planning permission for the receipt, bulking up and transfer of municipal waste as a contingency measure for when Leatherhead WTS is at full capacity and given there was no municipal waste transfer facility within Reigate & Banstead prior to the recent development of Earlswood MBF.
- Patteson Court Landfill is the only non-inert landfill remaining in Surrey and is required to be restored by 2030. The landfill receives around 500,000 tpa of

primarily C&I waste and inert waste, and also some municipal waste. In 2014/15, 34,351 tonnes of municipal waste arising in Surrey were landfilled at Patteson Court. Reducing waste to landfill remains a priority although much of the waste deposited at Patteson Court is imported from outside the county.

This Study captures the main municipal waste sites including WTSs, MRFs, MBFs and CRCs. These are the facilities that bear the initial impact of housing growth.

Figure 4.18

Waste processing capacity against housing growth



Source: Surrey County Council

HEADLINES

- Surrey remains reliant on facilities outside the county for the treatment of residual municipal waste and the reprocessing of recyclable materials. The development of an Eco Park at Charlton Lane, Shepperton will partly address this issue by providing a more environmentally sustainable and cost effective means of treating the residual municipal waste produced in the north of the county, as well as some waste from local businesses.
- Surrey sends a relatively large volume of its commercial & industrial waste to landfill due to the proximity and availability of significant landfill capacity at Patteson Court, Redhill.
- In 2014, 164,176 tonnes of both household and C&I waste were landfilled at Patteson Court, of which 87,735 tonnes arose in Surrey and 76,443 tonnes were imported.
- The amount of waste deposited at transfer sites in Surrey increased from 615,000 tonnes in 2013 to 692,000 tonnes in 2014. This comprised 616,000 tonnes of household, commercial and industrial and CRC waste and 53,000 tonnes of hazardous waste.
- The proportion of Surrey's municipal waste sent to landfill decreased slightly from 11% in 2013/14 to 6% in 2014/15.
- Planning permission has been granted for two new Anaerobic Digestion facilities for the treatment of commercial food waste at Trumps Farm, Egham and Dunsfold Park, Cranleigh. The 48,500 tpa capacity facility at Trumps Farm has been built and is operational. The 25,000 tpa capacity facility at Dunsfold Park has yet to be developed.
- During the Summer 2015, the County Council consulted on options on the future of CRCs. These included charging for non-household waste, reducing opening hours, closing CRCs on the least busy days and the full closure of some CRCs. The aim of the review is to make savings while maintaining this important service to residents.

- The Surrey Waste Plan 2008 seeks to facilitate a 60% rate of recycling and composting for municipal waste by 2025 and the revised Joint Municipal Waste Management Strategy (2015) includes a target to recycle and recover 70% of household waste by 2019/20.

Key Sites Receiving Municipal Waste:

- The 15 CRCs which received 144,000 tonnes of household waste in 2014/15
- Epsom WTS which can manage around 120,000 tonnes per annum (tpa) including some C&I waste
- Leatherhead WTS which can manage at least 30,000 tpa including some C&I waste
- Guildford WTS which can manage 180,000 tpa including some C&I waste
- Shepperton WTS which can manage 120,000 tpa including around 32,000 tpa of C&I waste
- Shepperton MRF which can manage 30,000 tpa including around 12,000 tpa of internal transfer from Shepperton CRC
- Grundons MRF, Leatherhead which can manage 40,000 tpa including some municipal waste
- Earlswood MBF which can manage 110,000 tpa of municipal waste
- Ash Vale WTS which manages 75,000 tpa of municipal, C&I and construction & demolition (C&D) waste
- Reigate Road MRF which can manage 45,000 tpa of municipal, C&I and C&D waste
- Patteson Court Landfill which had a remaining voidspace at the end of 2014 of 5,526,000 cubic metres

FUTURE REQUIREMENTS TO MEET GROWTH TO 2030

The following projects are designed to enhance existing waste management infrastructure in the county:

- Work on the construction of an Eco Park at Charlton Lane, Shepperton commenced in Summer 2015 and is expected to take around two years to complete. This will comprise a gasification facility for the treatment of around 44,710 tpa of primarily residual municipal waste from north Surrey; an anaerobic digestion facility for the treatment of up to 40,000 tpa of food waste mainly from homes around Surrey, and also some businesses; a 42,750 tpa capacity MBF for the receipt, storage, bulking and onward transfer of recyclable materials collected from homes and CRCs, and the retention of the existing 25,000 tpa capacity CRC. The Eco Park will replace the existing MRF and WTS at Charlton Lane.
- As part of the Slyfield Area Regeneration Project (SARP), SITA Surrey, working on behalf of the County Council, has plans to relocate Guildford CRC on Moorfield Road. The intention is to provide a larger more modern facility with more recycling containers and parking bays than can be accommodated on the current site. This will free up space on the current site to improve the existing WTS enabling Surrey districts to collect more materials from the kerbside."
- A review of the Surrey Waste Plan 2008 is due to commence in 2016.

COSTS AND FUNDING

Based upon information within each local authority's IDP, the following costs and funding have been identified:

Cost = £1,820,000

Funding Gap = £310,000*

Costs are set out for each local authority in Section 5

* (considering both secured and expected funding)

4.7 FLOOD PROTECTION

FLOODING



CURRENT SITUATION

There is a high risk of flooding in Surrey from fluvial sources as it has several large rivers running through its boundaries.

The highest fluvial flood risk is to the north along the River Thames and the River Wey. It is anticipated that the highest population growth in the county will be in Guildford and the second highest is projected to be in Runnymede, where both local authorities are affected by these rivers. Approximately £5.88million is to be invested in Flood and Surface Water Alleviation Schemes in Guildford and its surrounding area to help mitigate the risk of fluvial and surface water flooding. A further investment in the £300million River Thames Scheme in the vicinity of the River Thames is also planned to mitigate flood risk across this part of Surrey.

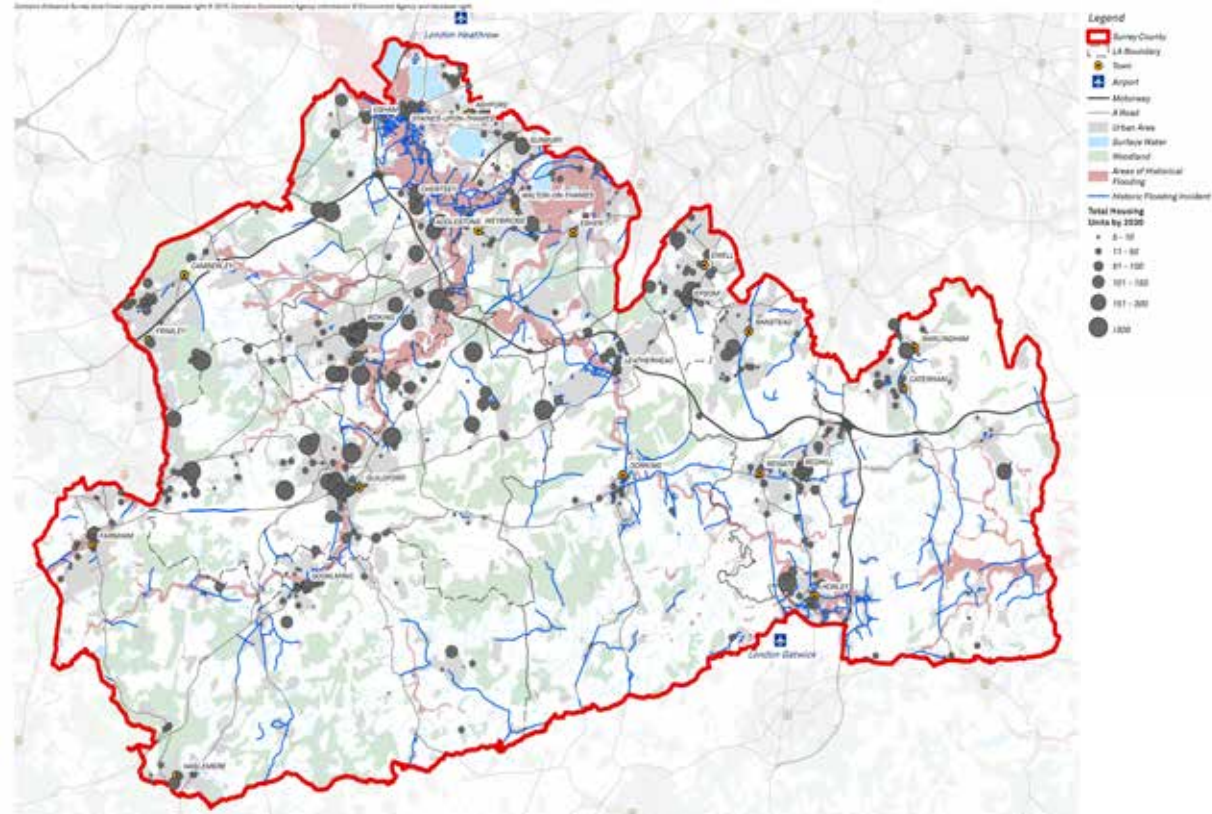
Horley has historically been affected by flooding and much of its outskirts are classified as Flood Zone 2 or 3, influenced by the River Mole and Burstow Stream. It is planned that approximately £21.8million will be invested in this area to reduce the risk of flooding in Horley and its surrounding area. This is primarily through investment in the Upper Mole Flood Alleviation scheme. Furthermore, two additional schemes (i.e. Horley Flood Relief Scheme and the Smallfield Alleviation Scheme) are scheduled to be implemented in the area to help reduce the risk of flooding.

It should be noted that in addition to the fluvial risk, Reigate and Redhill are highlighted in the Surrey Preliminary Flood Risk Assessment to be among the five highest risk areas for surface water flooding in the county. The planned Redhill Alleviation Scheme should help reduce this risk but as high population growth is projected in this area, further investment may be required.

Other areas which are highlighted to be at a high risk of surface water flooding include Woking and Byfleet and Epsom and Ewell.

Figure 4.19

Historical flooding and proposed housing sites



Source: Environment Agency

The River Thames Scheme

A programme of projects and investment to reduce flood risk in communities near Heathrow, including: Datchet, Wraysbury, Egham, Staines, Chertsey, Shepperton, Weybridge, Sunbury, Molesey, Thames Ditton, Kingston and Teddington.

The River Thames between Datchet and Teddington has the largest area of developed floodplain in England without flood defences. Over 15,000 homes and businesses within the area are at risk from flooding.

The scheme consists of:

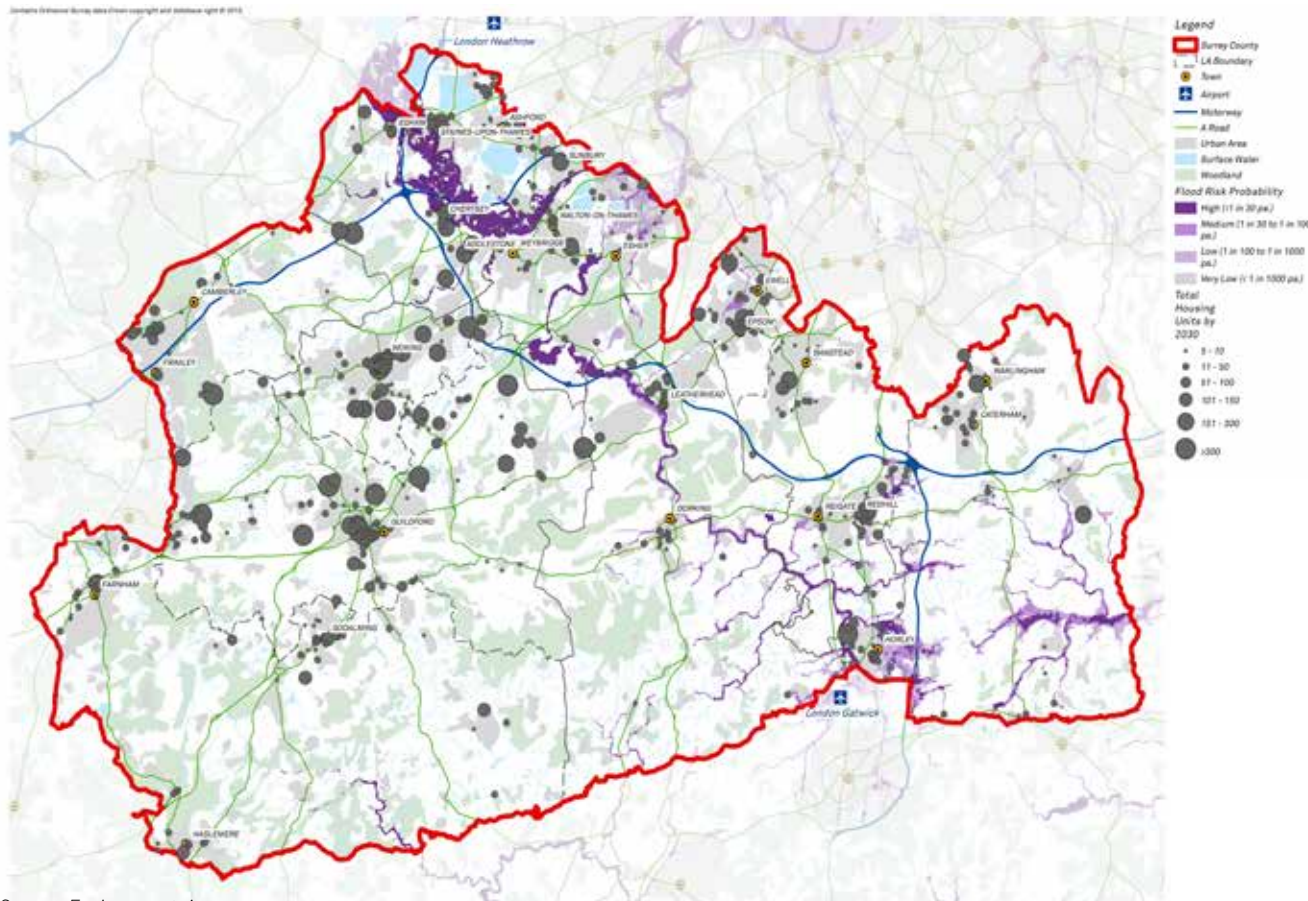
- Large scale engineering work to construct a new flood channel between 30 to 60 metres wide and 17 kilometres long, built in 3 sections:
 - Section 1: Datchet to Hythe End flood channel
 - Section 2: Egham Hythe to Chertsey flood channel
 - Section 3: Laleham to Shepperton flood channel
- Improvements to 3 of the existing weirs on the River Thames

- Installation of property level protection for up to 1,200 homes to make them more resistant to flooding
- Improved flood incident response plans
- Creation of over 40 hectares of biodiversity action plan habitat

The scheme will affect Surrey county as a whole but with particular benefits for Elmbridge, Runnymede and Spelthorne.

Figure 4.20

Risk of flooding and proposed housing sites



Source: Environment Agency

FUTURE REQUIREMENTS TO MEET GROWTH TO 2030

The following projects represent examples of key investment identified within each authority's IDP and from Surrey County Council and the Environment Agency

- River Thames Scheme (see text to the left)
- Upper Mole Flood Alleviation
- The Woking Initial Assessment
- Byfleet flood alleviation scheme
- River Thames - Property Level Protection
- Hoe Valley FA and WFD scheme
- Caterham Bourne Flood Alleviation scheme
- Redhill Brook upstream storage investigations
- Leatherhead and Middle Mole Flood Alleviation scheme

COSTS AND FUNDING

Based upon information received from SCC and the Environment Agency, the following costs and funding have been identified:

Cost = £394,870,000

Funding Gap = £327,030,000*

Costs are set out for each Local Authority in Section 5

* (considering both secured and expected funding)

4.8 EMERGENCY SERVICES

EMERGENCY SERVICES



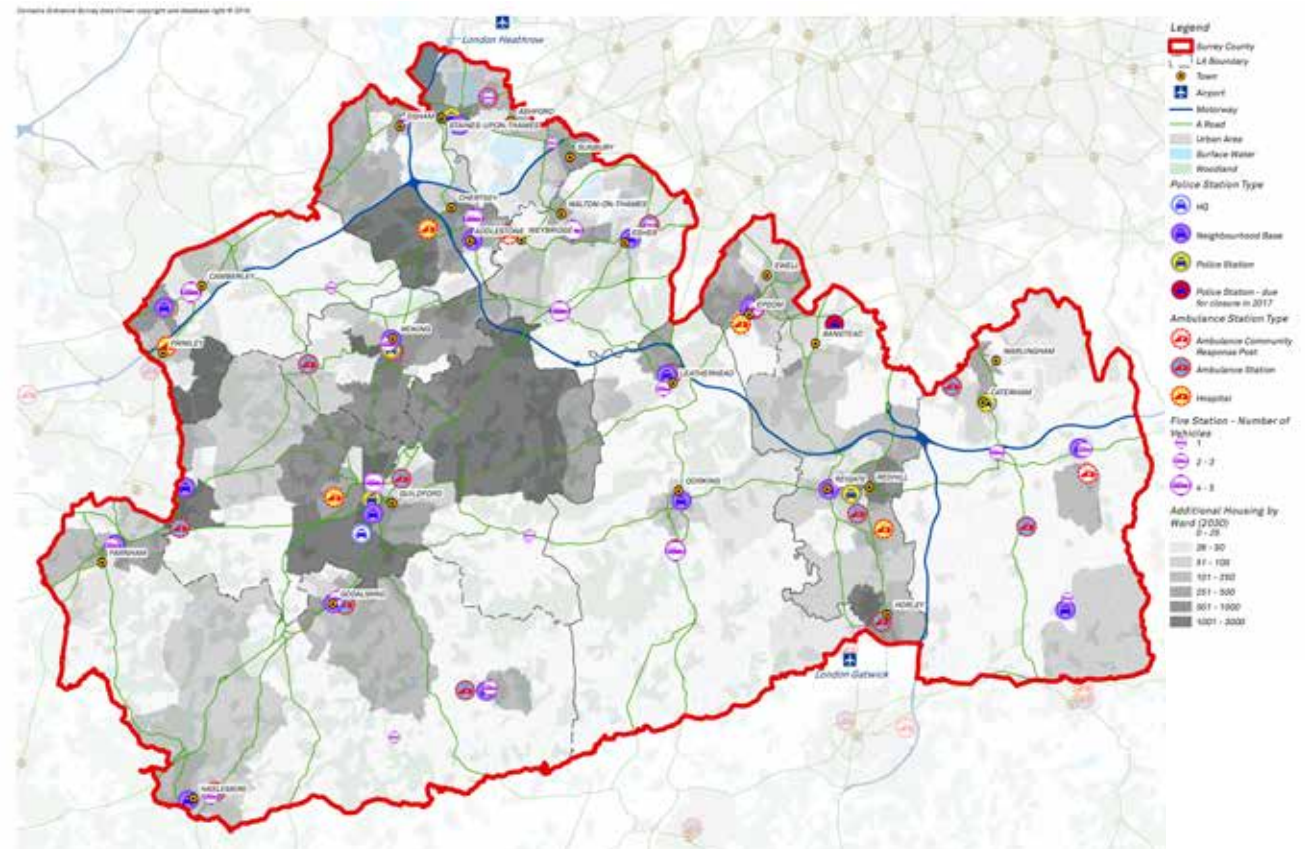
SURREY POLICE SERVICES

Surrey is policed by Surrey Police, with their headquarters located at Mount Browne just outside Guildford - accommodating the Chief Officer team, support services (ICT, HR, Training, Finance, Communications, Professional Standards etc), dog training function, the force contact, control and dispatch centre, forensics and other operational functions that provide a force-wide service e.g. the Economic Crime Unit, central intelligence hub and Serious and Organised Crime Unit. Additional centralised resources such as the Major Crime Team and Collision Investigation Unit are accommodated at Woking police station. Local Policing is delivered through 3 geographic Basic Command Units (BCUs) located at; Guildford PS, Staines PS and Reigate PS. The vast majority of response, investigative and intelligence resources for each BCU work out of these main divisional hubs.

Currently neither the Mount Browne nor Woking sites are considered fit for modern needs with old, inefficient buildings and severe parking issues. Moving forward, a replacement with a single modern HQ and potential co-location with other Blue-Light services could be a viable option.

Figure 4.21

Emergency services facilities against housing growth



Source: Surrey County Council, Surrey Police website, South East Coast Ambulance Service NHS Foundation Trust website.

Table 4.16

Emergency service capacity

	POLICE SERVICES			FIRE SERVICES		AMBULANCE SERVICES		
	NEIGHBOURHOOD BASE	POLICE STATION	OTHER POLICE SERVICES	FIRE STATIONS	FIRE STATION VEHICLES	COMMUNITY RESPONSE POST	AMBULANCE STATION	HOSPITAL
Elmbridge	1	0	4	3	9	1	2	0
Epsom & Ewell	1	0	0	1	1	0	1	1
Guildford	2	2**	2	2	5	0	2	1
Mole Valley	2	0	0	2	6	0	2	0
Reigate & Banstead	1	3	3	3	3	0	2	1
Runnymede	1	0	2	2	6	0	0	1
Spelthorne	1	1	2	2	2	0	1	0
Surrey Heath	1	1	1	2	5	0	0	1
Tandridge	2	1	1	3	6	1	2	0
Waverley	4	0	0	5	11	0	3	0
Woking	1	1	3	1	3	0	2	0
SURREY	17	9	18	26	57	2	17	5

Source: AECOM desk-based research with Surrey Police Input, **Surrey Police HQ in Guildford

SURREY FIRE SERVICES

Surrey Fire and Rescue Service is a statutory service provided by Surrey County Council. There are currently 26 (permanent and temporary) stations across the county. Similar to the police services, many fire facilities are becoming old and unfit for purpose. A modernisation of some facilities such as Waverley Fire Station are included in Surrey's Replacement of Fire Stations Programme. Guildford has recently opened a new fire station adjacent to the original site.

AMBULANCE SERVICES

Ambulance services are run by South East Coast Ambulance Service NHS Foundation Trust. This is one of twelve ambulance trusts working across England. Within Surrey there are 24 Ambulance stations, community response posts and hospitals where ambulances are located.

FUTURE REQUIREMENTS TO MEET GROWTH TO 2030

There are 32 Emergency Service projects identified within the local authority Infrastructure Delivery Plans. These cover new and expanded facilities for each service type in relation to growth requirements across Surrey. Projects include:

- Rationalisation of Police Estate in Woking
- Replacement of Chertsey Ambulance Station in Runnymede and redevelopment of Epsom Ambulance Station, moving to a new model of provision involving a fleet operation.
- 'Make Ready' ambulance sites to improve efficiencies in Reigate & Banstead and possible ambulance depot location in Godalming.
- New replacement fire station at Epsom to be built and funded by developers
- 2 fire stations to close in Spelthorne and reprovided through a new station (including a reduction of 1 appliance).
- New Woking fire station being developed to assist with the town's development.
- Joint shared premises planned for Fire and ambulance services at Horse Shoe Site in Banstead.

COSTS AND FUNDING

Based upon information contained within each local authority's IDP the following costs and funding have been recorded:

Cost = £36,560,000

Funding Gap = £1,360,000

Costs are set out for each local authority area in Section 5

* (considering both secured and expected funding)

Table 5.1

Project List Source

		Key Source: LA IDP Project Schedule	Key Source: Surrey County Council	Key Source: AECOM Benchmark Modelling	Additional Sources
Transport	Motorways	Yes	Yes		Highways England RBS Local Transport Strategy Forward Programmes Surrey Future Congestion programme Surrey Rail Strategy Wessex Route Study
	Highways	Yes	Yes		
	Public Transport	Yes	Yes		
	Rail	Yes	Yes		
	Other Strategic	Yes	Yes		
Education	Primary Education	Yes	Yes		
	Secondary Education	Yes	Yes		
	AE / FE / HE	Yes		Yes	FE and HE Providers
	Early Years	Yes	Yes	Yes	
Health and Social Care	Primary Healthcare	Yes		Yes	
	Acute Healthcare	Yes		Yes	
	Mental Healthcare	Yes		Yes	
	Adult Social Services	Yes	Yes	Yes	
Community and Recreation	Libraries	Yes	Yes	Yes	
	Youth Services	Yes		Yes	
	Community Facilities	Yes		Yes	
	Sports Facilities	Yes		Yes	
	Open Space & Recreation	Yes		Yes	
Green Infrastructure	Yes	Yes	Yes	Surrey Nature Partnership	
Utilities & Waste	Energy (Electricity & Gas)	Yes		Yes	Service Provider Investment Plans
	Water and Sewage	Yes		Yes	Service Provider Investment Plans
	Waste	Yes	Yes		
	Broadband	Yes	Yes	Yes	Broadband Provider Plans
Flood Defences	Yes	Yes		Environment Agency	
Emergency Services	Yes	Yes			

Table 5.2

Local Authority Project Schedule Source Documents

Authority	LA IDP Schedule sourced from
Elmbridge	Infrastructure Delivery Plan (April 2012)
Epsom & Ewell	Infrastructure Delivery Plan (April 2013)
Guildford	Draft Local Plan - Appendix B - Infrastructure Schedule (July 2014)
Mole Valley	Infrastructure Delivery Plan (May 2015)
Reigate & Banstead	Infrastructure Delivery Plan Addendum (March 2015)
Runnymede	Infrastructure Delivery Plan (February 2013)
Spelthorne	Infrastructure Delivery Plan (February 2014)
Surrey Heath	Infrastructure Delivery Plan (February 2013) + Infrastructure Delivery Supplementary Planning Document (July 2014)
Tandridge	Infrastructure Delivery Schedule Update (November 2013)
Waverley	Infrastructure Delivery Plan (August 2012) + Infrastructure Update (September 2014)
Woking	Approach to Monitoring and Delivery - Infrastructure Delivery (February 2012)

Technical Note on Local Authority figures on following pages:

As stated in Section 3 of the report all the population figures presented on the following pages represent the outputs of the SCC PopGroup Model Population forecasts, based upon housing trajectories presented within this report, which have been produced to inform this study. Refer to Study Parameters in Section 1 of this report for a full explanation of the inputs, assumptions and exclusions related to the infrastructure costs and funding presented on the following pages.

5.1 ELMBRIDGE

2,861
new homes
(+5%)

1,018
new people
(+1%)

to 2030

INFRASTRUCTURE HIGHLIGHTS

- **A3 between Esher and M25 Junction 10 traffic congestion**
- **Current trends indicate that the A3 from Hook to Guildford is likely to be more highly congested.**
- **South West Mainline capacity increases planned for peak AM times requires station platform lengthening.**
- **Need for Secondary school places.**
- **Brooklands College Weybridge Campus in need of refurbishment / replacement.**
- **Weylands Treatment Works in Hersham allocated as potential site for expansion of waste processing.**
- **Development site mitigation expected to be sufficient to limit changes to flood risk**

Total Infrastructure Costs: **£224,240,000**

Total Secured Funding: **£8,620,000**

Total Expected Funding: **£54,610,000**

Total Funding Gap: **£161,020,000**

Funding as % of Costs: **28%**

TRANSPORT



- Motorways
- Highways
- Public transport
- Rail
- Other transport

EDUCATION



- Primary education
- Secondary education
- AE / FE / HE
- Early Year facilities

HEALTH



- Primary healthcare
- Acute healthcare
- Mental healthcare

COMMUNITY



- Adult social services
- Libraries
- Youth services
- Community centres

GREEN INFRASTRUCTURE



- Sports facilities
- Outdoor sport & Rec
- Green infrastructure

UTILITIES

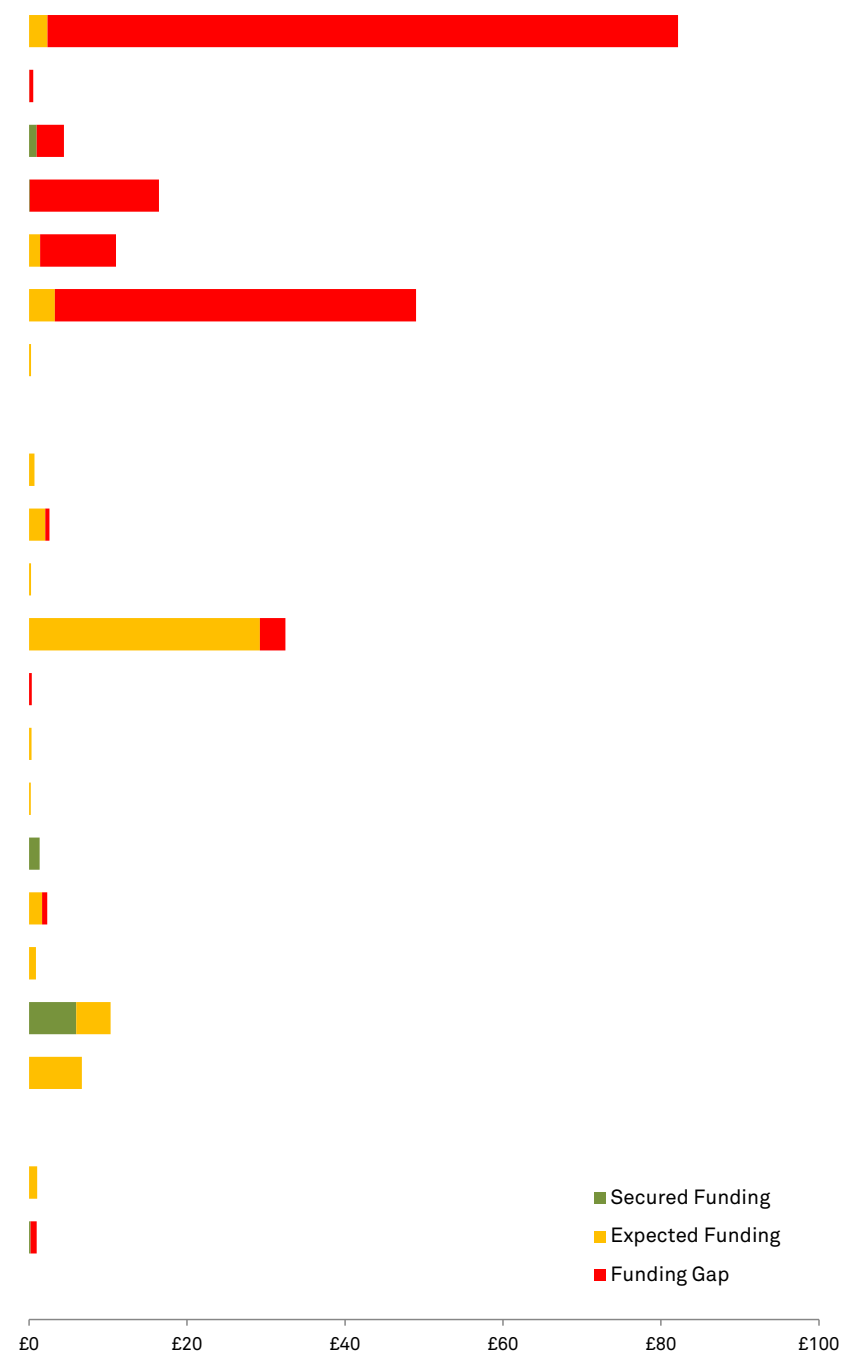


- Electricity & Gas
- Water & Sewage
- Waste
- Broadband

FLOOD DEFENCES



- Flood defences
- Emergency Services



SUMMARY OF INFRASTRUCTURE PROJECT COSTS AND FUNDING GAPS (2015-2030)

Millions

MAJOR HOUSING DEVELOPMENT

- Rydens Enterprise School & 6th Form College
- Stompond Lane Sports Ground
- Knowle Hill Park, Cobham
- Weybridge House, Weybridge

FLOOD DEFENCES

- River Thames Scheme

EDUCATION PROJECTS

- 1FE primary expansion in Walton area
- Up to 6FE secondary expansion
- Expansion at Rydens Enterprise School

COMMUNITY INFRASTRUCTURE PROJECTS

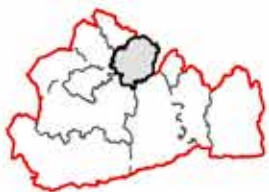
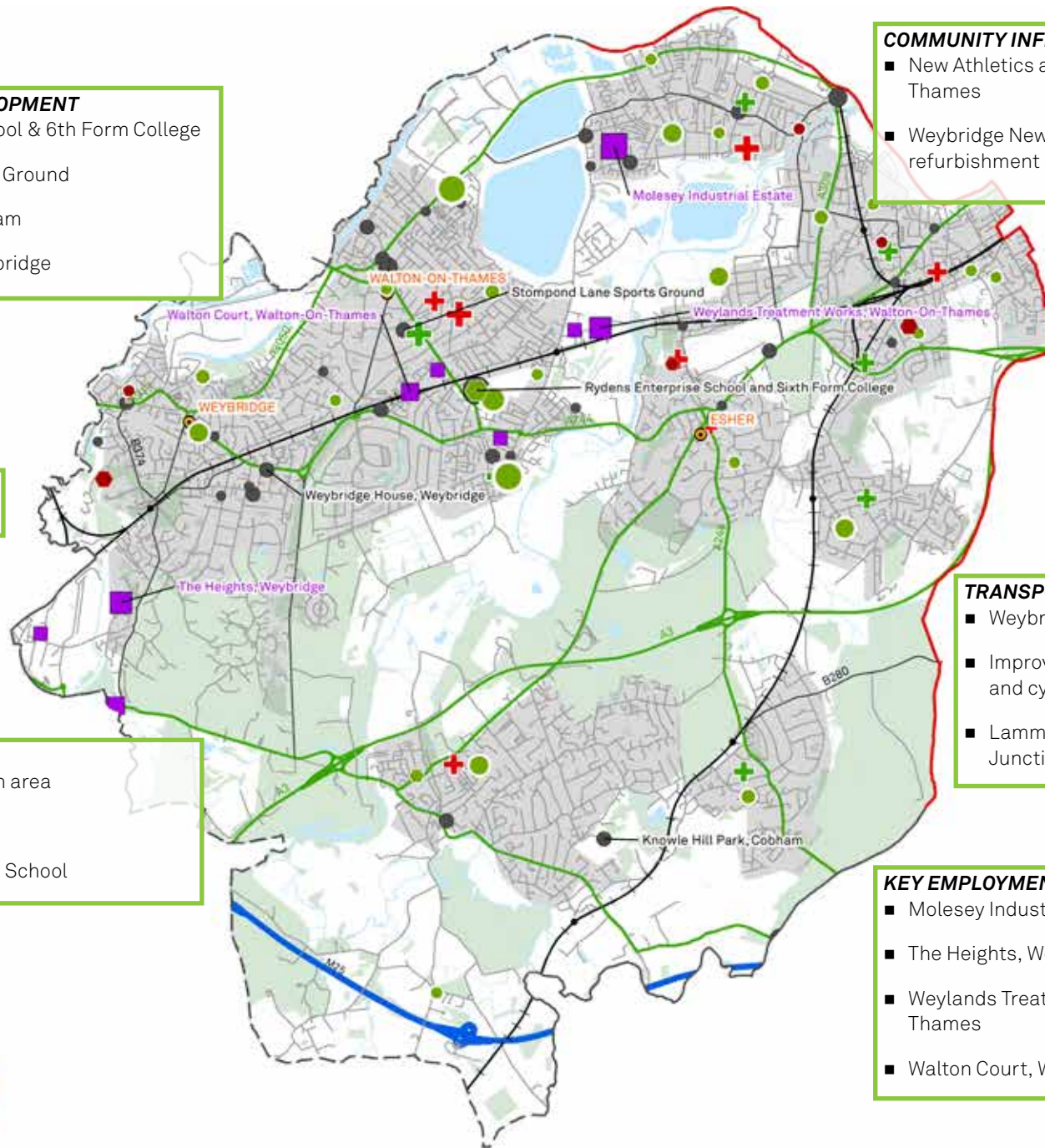
- New Athletics and football stadium in Walton on Thames
- Weybridge New Library, Molesey Library refurbishment and Hersham Library redevelopment

TRANSPORT PROJECTS

- Weybridge Rail Station Access Improvements
- Improvements to Blundell Lane pedestrian and cycle accessibility
- Lammas Lane/More Lane/ Church Lane Junction Improvements

KEY EMPLOYMENT SITES WITH CAPACITY

- Molesey Industrial Estate
- The Heights, Weybridge
- Weylands Treatment Works, Walton-On-Thames
- Walton Court, Walton-On-Thames



SUMMARY OF GROWTH + INFRASTRUCTURE ISSUES IN ELMBRIDGE

Refer to Universal Legend at start of Chapter 5 to interpret Map icons

Projects Note - Any Strategic Projects Listed in Table 5.3 and affecting this local authority are not included in local costs and funding on facing page.

5.2 EPSOM AND EWELL

2,057
new homes
(+6%)

1,495
new people
(+2%)

to 2030

INFRASTRUCTURE HIGHLIGHTS

- Infrastructure investment required in urban centres (Epsom Town centre and Ewell Village)
- Existing rail network will require enhancements to support development growth
- Upgrades to existing water and wastewater networks may be required to support new development

Total Infrastructure Costs: **£124,970,000**

Total Secured Funding: **£12,690,000**

Total Expected Funding: **£36,090,000**

Total Funding Gap: **£76,180,000**

Funding as % of Costs: **39%**

TRANSPORT



- Motorways
- Highways
- Public transport
- Rail
- Other transport

EDUCATION



- Primary education
- Secondary education
- AE / FE / HE
- Early Year facilities

HEALTH



- Primary healthcare
- Acute healthcare
- Mental healthcare

COMMUNITY



- Adult social services
- Libraries
- Youth services
- Community centres

GREEN INFRASTRUCTURE



- Sports facilities
- Outdoor sport & Rec
- Green infrastructure

UTILITIES

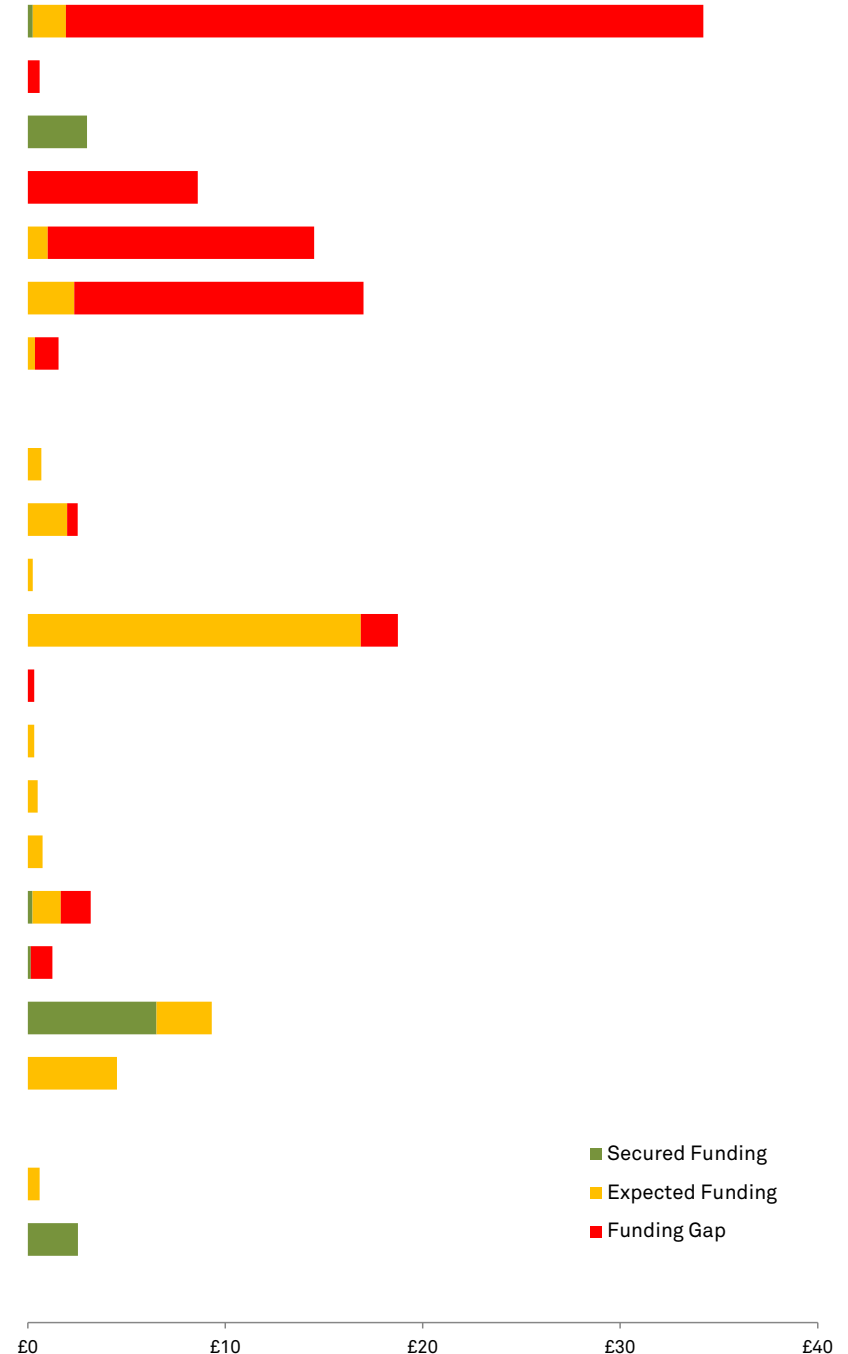


- Electricity & Gas
- Water & Sewage
- Waste

FLOOD DEFENCES



- Broadband
- Flood defences
- Emergency Services



SUMMARY OF INFRASTRUCTURE PROJECT COSTS AND FUNDING GAPS (2015-2030)

Millions

MAJOR HOUSING DEVELOPMENT

- The Utilities Site
- Land at Epsom & Ewell High School
- Remaining West Park Sites
- Depot Road & Upper High Street Site

KEY EMPLOYMENT SITES WITH CAPACITY

- Longmead and Nonsuch Employment Sites
- Woodcote Grove, Ashley road, Epsom
- Epsom General Hospital
- Utilities Site, East Street, Epsom Town Centre

COMMUNITY INFRASTRUCTURE PROJECTS

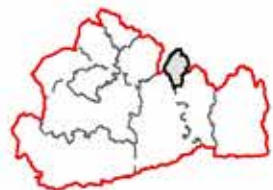
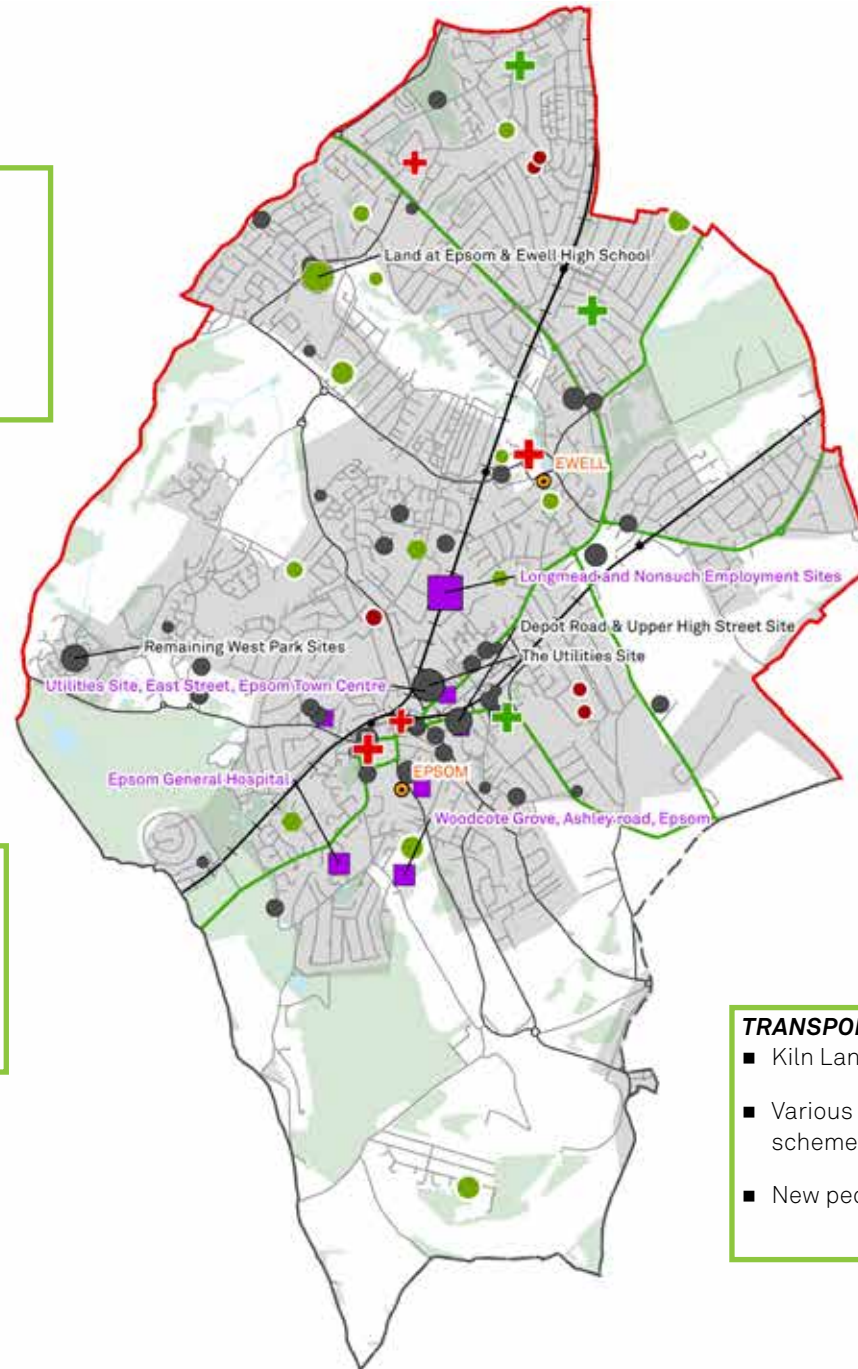
- Epsom Library and Ewell Library refurbishment
- Refurbishment of Alexander Recreation Ground

EDUCATION PROJECTS

- School reorganisation in Ewell, including expansion of two infant and one junior school to three primary schools
- 3FE secondary expansion at Epsom & Ewell High School

TRANSPORT PROJECTS

- Kiln Lane Link
- Various Epsom Town Centre transport schemes
- New pedestrian/cycle bridge Station Avenue



SUMMARY OF GROWTH + INFRASTRUCTURE ISSUES IN EPSOM & EWELL

Refer to Universal Legend at start of Chapter 5 to interpret Map icons

Projects Note - Any Strategic Projects Listed in Table 5.3 and affecting this local authority are not included in local costs and funding on facing page.

5.3 GUILDFORD

9,300
new homes
(+16%)

20,301
new people
(+14%)

to 2030

INFRASTRUCTURE HIGHLIGHTS

- A3 road deficient in quality and capacity.
- Guildford town centre gyratory
- Vehicular demand on Local Road network approaches or exceeds capacity of some links and junctions.
- Traffic congestion affects bus route efficiency which is also limited in village areas.
- Scope to improve pedestrian & cyclist provision.
- Capacity issues on current rail infrastructure.
- Strategic Flood Risk Assessment identifies increased long term flood risk to some areas of Guildford Town.
- Shortage of primary school places (currently being addressed) and surplus provision of secondary places
- Authority wide library provision insufficient for population.

Total Infrastructure Costs: **£1,162,040,000**

Total Secured Funding: **£75,800,000**

Total Expected Funding: **£568,220,000**

Total Funding Gap: **£518,020,000**

Funding as % of Costs: **55%**

TRANSPORT



- Motorways
- Highways
- Public transport
- Rail
- Other transport

EDUCATION



- Primary education
- Secondary education
- AE / FE / HE
- Early Year facilities

HEALTH



- Primary healthcare
- Acute healthcare
- Mental healthcare

COMMUNITY



- Adult social services
- Libraries
- Youth services
- Community centres

GREEN INFRASTRUCTURE



- Sports facilities
- Outdoor sport & Rec
- Green infrastructure

UTILITIES

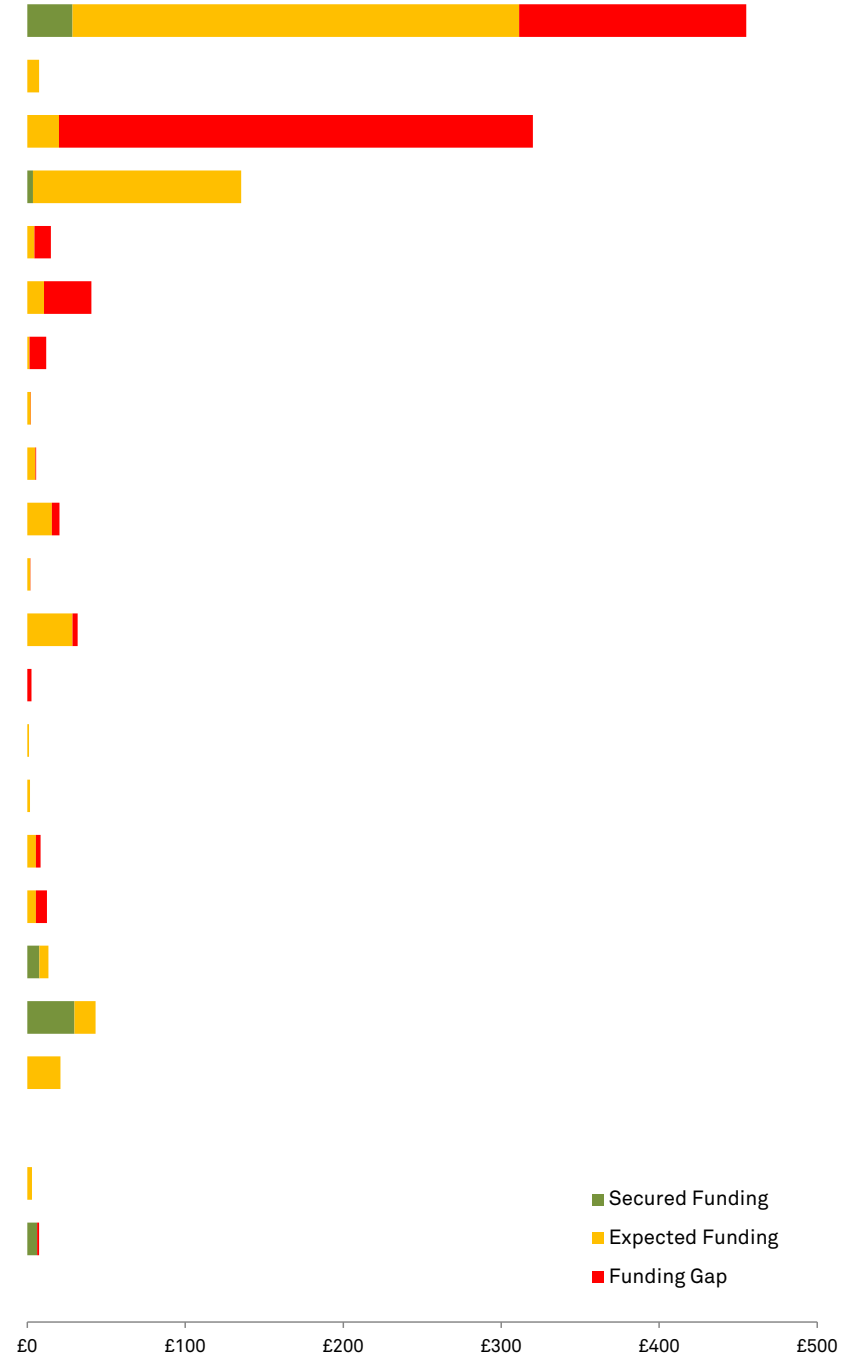


- Electricity & Gas
- Water & Sewage
- Waste
- Broadband

FLOOD DEFENCES



- Flood defences
- Emergency Services



SUMMARY OF INFRASTRUCTURE PROJECT COSTS AND FUNDING GAPS (2015-2030)

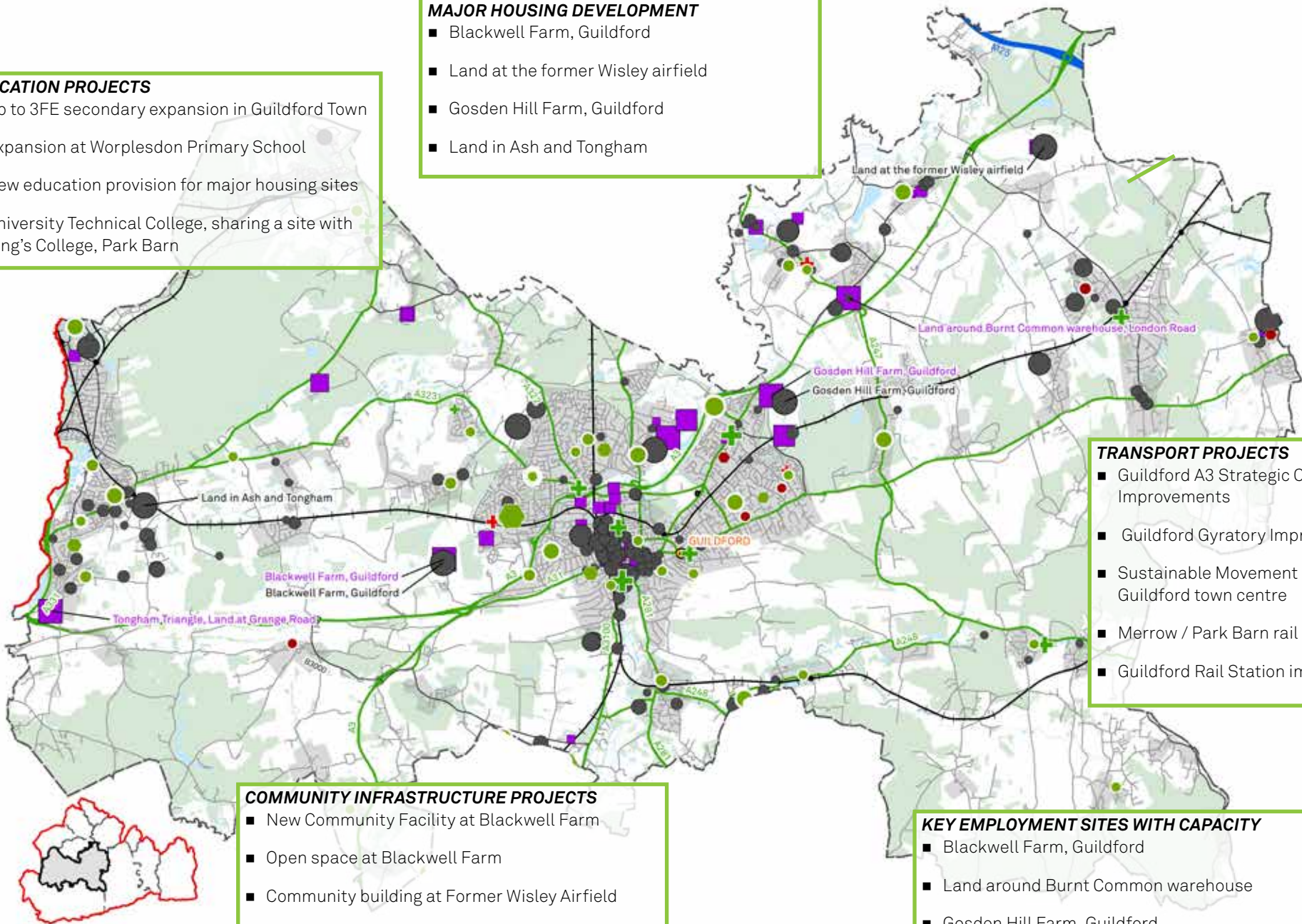
- MAJOR HOUSING DEVELOPMENT**
- Blackwell Farm, Guildford
 - Land at the former Wisley airfield
 - Gosden Hill Farm, Guildford
 - Land in Ash and Tongham

- EDUCATION PROJECTS**
- Up to 3FE secondary expansion in Guildford Town
 - Expansion at Worplesdon Primary School
 - New education provision for major housing sites
 - University Technical College, sharing a site with King's College, Park Barn

- TRANSPORT PROJECTS**
- Guildford A3 Strategic Corridor Improvements
 - Guildford Gyratory Improvements
 - Sustainable Movement Corridor through Guildford town centre
 - Meroo / Park Barn rail stations
 - Guildford Rail Station improvements

- COMMUNITY INFRASTRUCTURE PROJECTS**
- New Community Facility at Blackwell Farm
 - Open space at Blackwell Farm
 - Community building at Former Wisley Airfield
 - New Guildford Library

- KEY EMPLOYMENT SITES WITH CAPACITY**
- Blackwell Farm, Guildford
 - Land around Burnt Common warehouse
 - Gosden Hill Farm, Guildford



SUMMARY OF GROWTH + INFRASTRUCTURE ISSUES IN GUILDFORD

Refer to Universal Legend at start of Chapter 5 to interpret Map icons

Projects Note - Any Strategic Projects Listed in Table 5.3 and affecting this local authority are not included in local costs and funding on facing page.

5.4 MOLE VALLEY

2,820
new homes
(+7%)

1,814
new people
(+2%)

to 2030

INFRASTRUCTURE HIGHLIGHTS

- Very high car ownership among Mole Valley Residents
- Significant increases predicted in AM Peak traffic levels on Mole Valley Local Road Network - from Mole Valley development but also neighbouring areas
- A need for an improvement for bus priority schemes and measures to improve journey reliability
- Deepdene Station improvements identified
- Cycling levels in Mole Valley are high with associated investment requirements
- Need for flood improvements along the river Mole

Total Infrastructure Costs: **£122,160,000**

Total Secured Funding: **£29,420,000**

Total Expected Funding: **£46,950,000**

Total Funding Gap: **£45,790,000**

Funding as % of Costs: **63%**

TRANSPORT



Motorways

Highways

Public transport

Rail

Other transport

EDUCATION



Primary education

Secondary education

AE / FE / HE

Early Year facilities

HEALTH



Primary healthcare

Acute healthcare

Mental healthcare

COMMUNITY



Adult social services

Libraries

Youth services

Community centres

GREEN INFRASTRUCTURE



Sports facilities

Outdoor sport & Rec

Green infrastructure

UTILITIES



Electricity & Gas

Water & Sewage

Waste

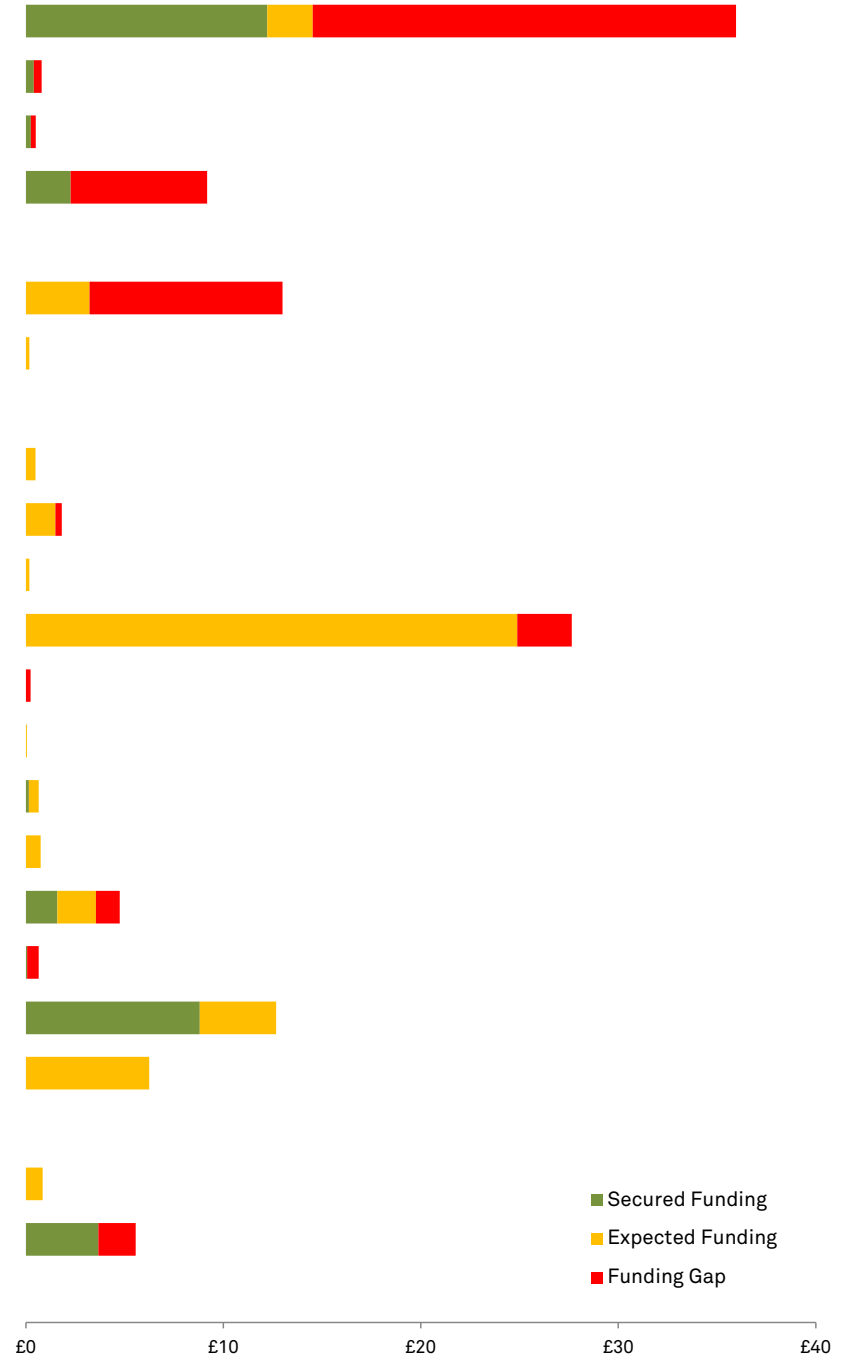
Broadband

FLOOD DEFENCES



Flood defences

Emergency Services



SUMMARY OF INFRASTRUCTURE PROJECT COSTS AND FUNDING GAPS (2015-2030)

Millions

MAJOR HOUSING DEVELOPMENT

- Land at Therfield School, Leatherhead
- Middlemead, Bookham
- QEF, Leatherhead
- Randalls Road / Cleeve Road, Leatherhead

TRANSPORT PROJECTS

- M25 Junction 9 bottleneck relief
- Various Leatherhead Congestion improvements
- Highways Improvements on A24 Capel

KEY EMPLOYMENT SITES WITH CAPACITY

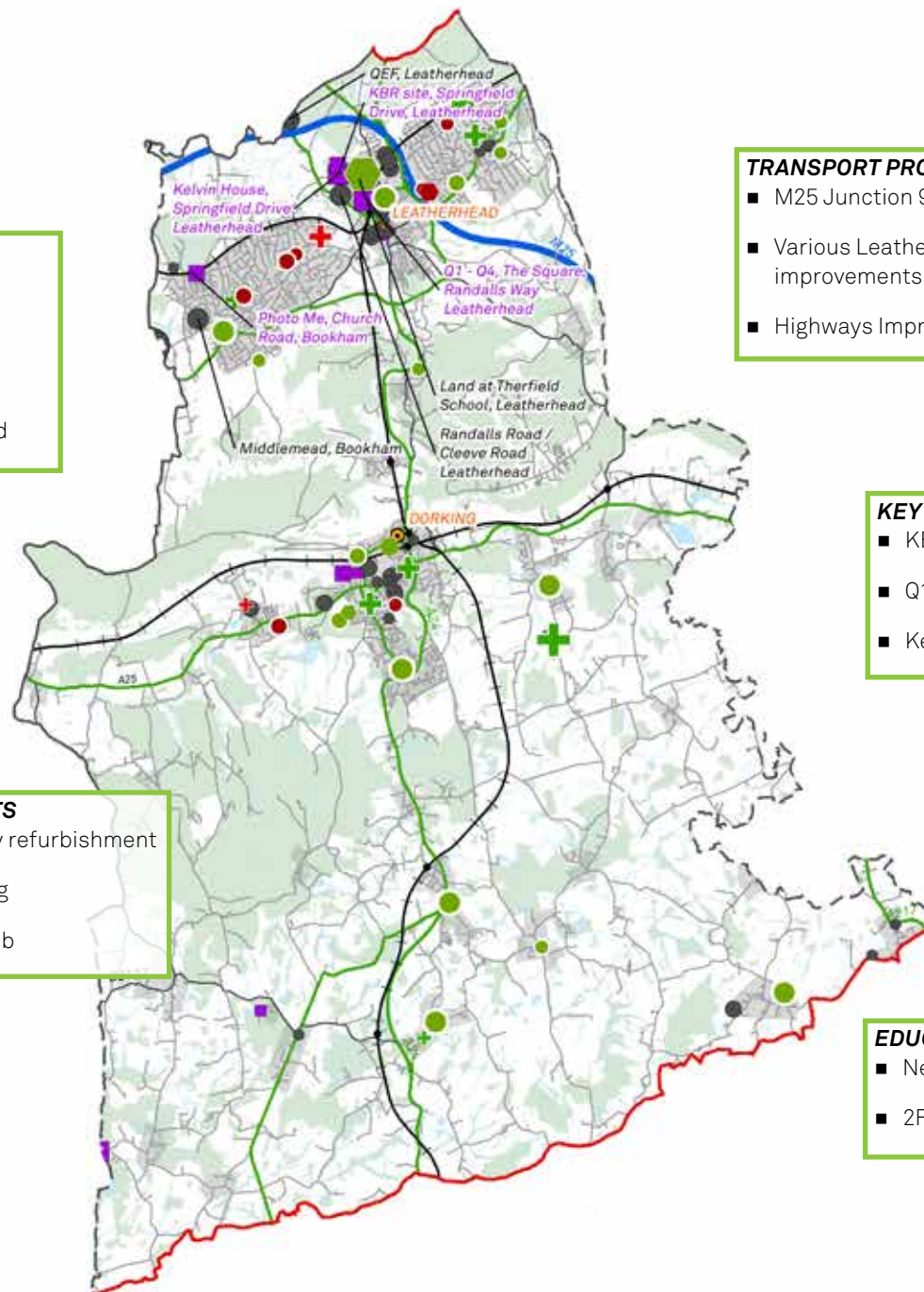
- KBR site, Springfield Drive, Leatherhead
- Q1 - Q4, The Square, Randalls Way
- Kelvin House, Springfield Drive, Leatherhead

COMMUNITY INFRASTRUCTURE PROJECTS

- Ashtead Library and Leatherhead Library refurbishment
- Meadowbank Recreation Ground, Dorking
- Improve facilities at Ashtead Football Club

EDUCATION PROJECTS

- New early years provision in Beare Green Ward
- 2FE secondary school expansion



SUMMARY OF GROWTH + INFRASTRUCTURE ISSUES IN MOLE VALLEY

Refer to Universal Legend at start of Chapter 5 to interpret Map icons

Projects Note - Any Strategic Projects Listed in Table 5.3 and affecting this local authority are not included in local costs and funding on facing page.

5.5 REIGATE AND BANSTEAD

7,571
new homes
(+13%)

10,547
new people
(+7%)

to 2030

INFRASTRUCTURE HIGHLIGHTS

- Capacity issues on London to Brighton Rail route.
- Majority of congestion forecast on roads and junctions within Redhill town centre and up to Reigate.
- Flood management measures required at large sites to prevent flooding downstream in Redhill Town Centre and around Horley / Burstow Stream.
- Reception year and total primary school places limited across authority
- Surplus secondary school places will not continue
- Shortfall in outdoor sports and children's playspace
- Shortfall in Extra Care housing across the authority

Total Infrastructure Costs: **£290,790,000**

Total Secured Funding: **£81,650,000**

Total Expected Funding: **£111,190,000**

Total Funding Gap: **£97,950,000**

Funding as % of Costs: **66%**

TRANSPORT



- Motorways
- Highways
- Public transport
- Rail
- Other transport

EDUCATION



- Primary education
- Secondary education
- AE / FE / HE
- Early Year facilities

HEALTH



- Primary healthcare
- Acute healthcare
- Mental healthcare

COMMUNITY



- Adult social services
- Libraries
- Youth services

GREEN INFRASTRUCTURE



- Community centres
- Sports facilities
- Outdoor sport & Rec
- Green infrastructure

UTILITIES

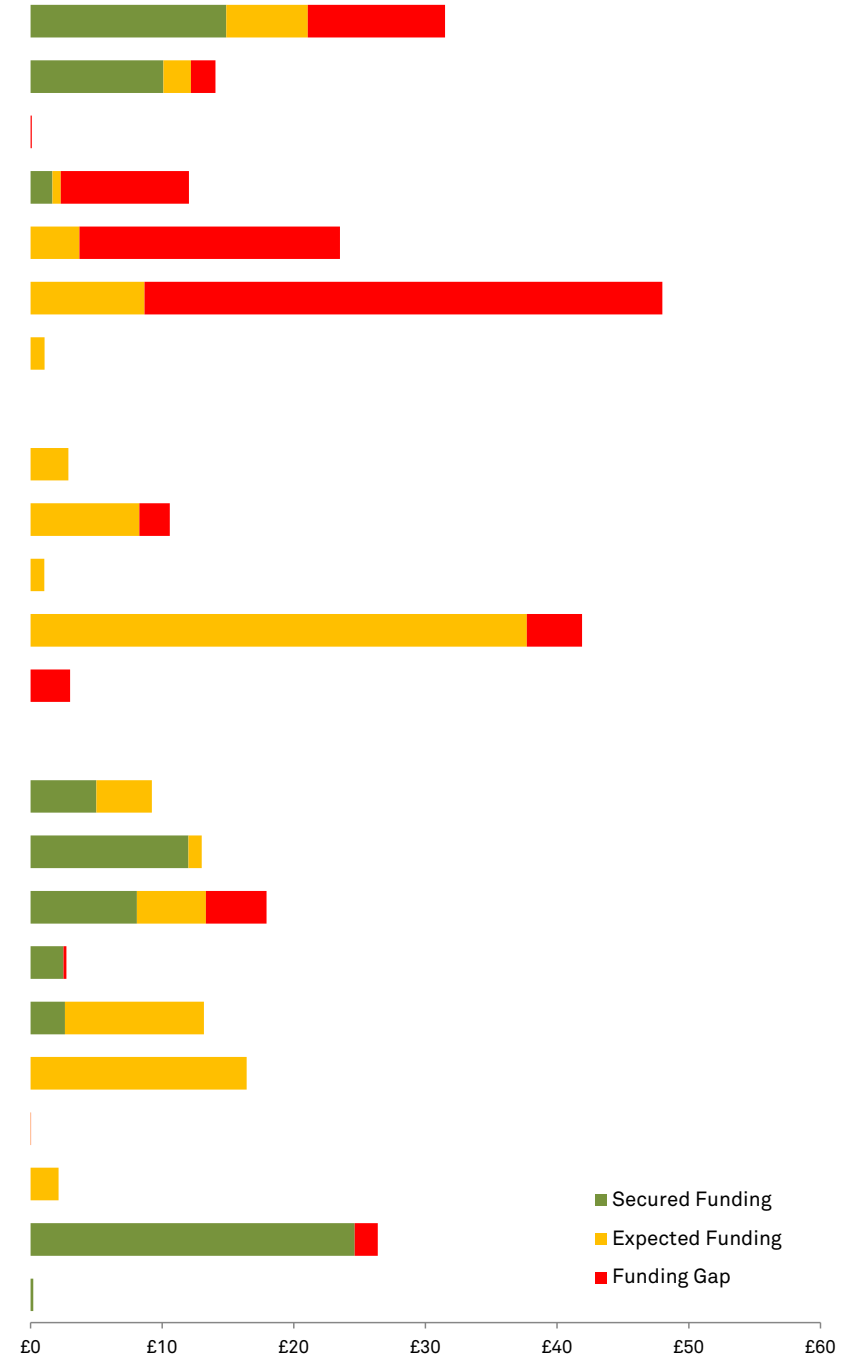


- Electricity & Gas
- Water & Sewage
- Waste
- Broadband

FLOOD DEFENCES



- Flood defences
- Emergency Services



SUMMARY OF INFRASTRUCTURE PROJECT COSTS AND FUNDING GAPS (2015-2030)

Millions

MAJOR HOUSING DEVELOPMENT

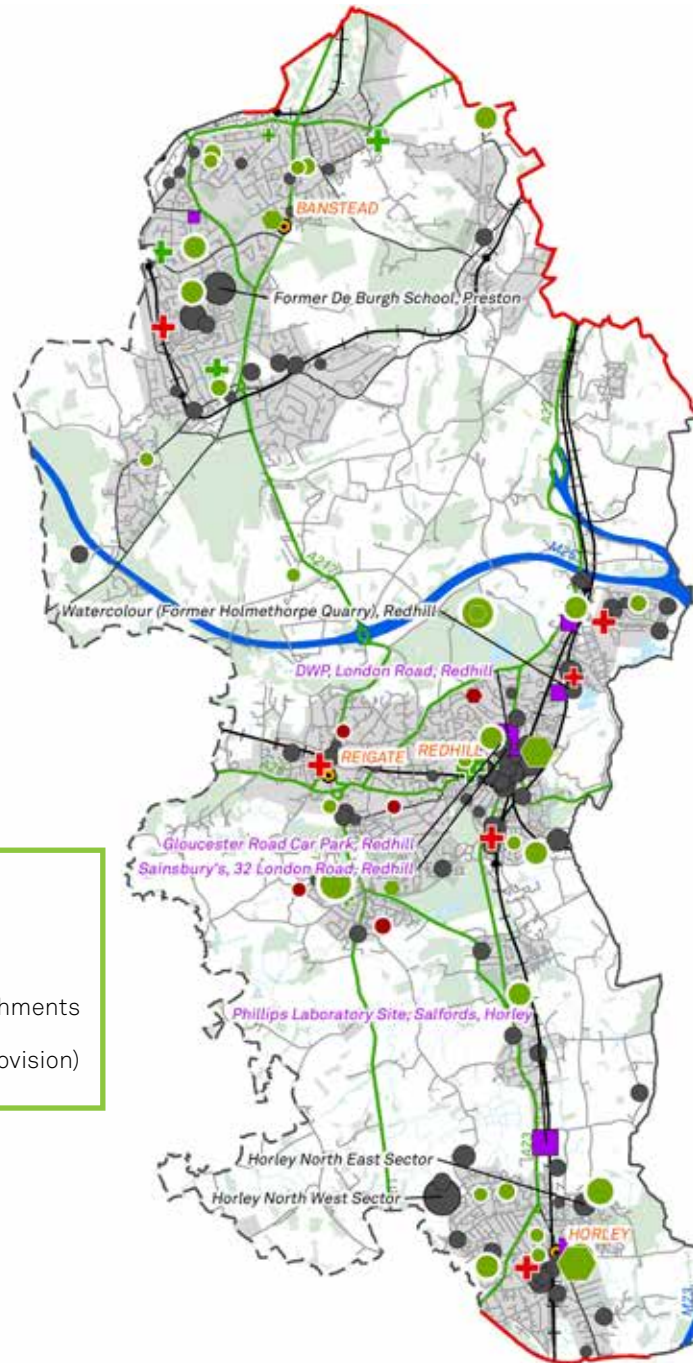
- 500-700 homes in East Redhill / Merstham
- 500-700 homes in South / South West Reigate
- 200 homes around Horley

EDUCATION PROJECTS

- New early years education provision in Horley
- 2FE primary expansion in Redhill and Reigate
- 6FE new secondary school in Reigate & Redhill area

COMMUNITY INFRASTRUCTURE PROJECTS

- Horley NE and NW Provision of two community halls
- Merstham Community hub
- New Horley Library. Reigate and Redhill library refurbishments
- Preston regeneration (leisure centre and community provision)



TRANSPORT PROJECTS

- Horley NE and NW New access routes and junction improvements
- Reigate Road Network Improvements
- Improvements are needed at A23/ M23 Hooley Junction to alleviate congestion and improve connections to Gatwick.
- Package of works to A217

KEY EMPLOYMENT SITES WITH CAPACITY

- Phillips Laboratory Site, Salfords, Horley
- Sainsbury's, 32 London Road, Redhill
- DWP, London Road, Redhill
- Gloucester Road Car Park, Redhill

SUMMARY OF GROWTH + INFRASTRUCTURE ISSUES IN REIGATE & BANSTEAD

Refer to Universal Legend at start of Chapter 5 to interpret Map icons

Projects Note - Any Strategic Projects Listed in Table 5.3 and affecting this local authority are not included in local costs and funding on facing page.

5.6 RUNNYMEDE

6,104
new homes
(+18%)

11,726
new people
(+14%)

to 2030

INFRASTRUCTURE HIGHLIGHTS

- Current surplus capacity in secondary school places.
- Local growth expected to put additional increases on the Strategic Road Network through Runnymede.
- Local road network expected to experience increased peak time congestion
- Existing rail and bus service efficiencies likely to be impacted on by Runnymede growth proposals
- Primary healthcare facility capacity issues in areas such as Virginia Water, Ottershaw, Staines and Egham
- Existing communications infrastructure at capacity
- Improvements to Chertsey Sewage Works required to support growth. Investment planned by Thames Water.
- Significant Flood risk infrastructure investment required across authority.

Total Infrastructure Costs: **£163,140,000**

Total Secured Funding: **£5,280,000**

Total Expected Funding: **£96,170,000**

Total Funding Gap: **£61,680,000**

Funding as % of Costs: **62%**

TRANSPORT



- Motorways
- Highways
- Public transport
- Rail
- Other transport

EDUCATION



- Primary education
- Secondary education
- AE / FE / HE
- Early Year facilities

HEALTH



- Primary healthcare
- Acute healthcare
- Mental healthcare

COMMUNITY



- Adult social services
- Libraries
- Youth services
- Community centres

GREEN INFRASTRUCTURE



- Sports facilities
- Outdoor sport & Rec
- Green infrastructure

UTILITIES

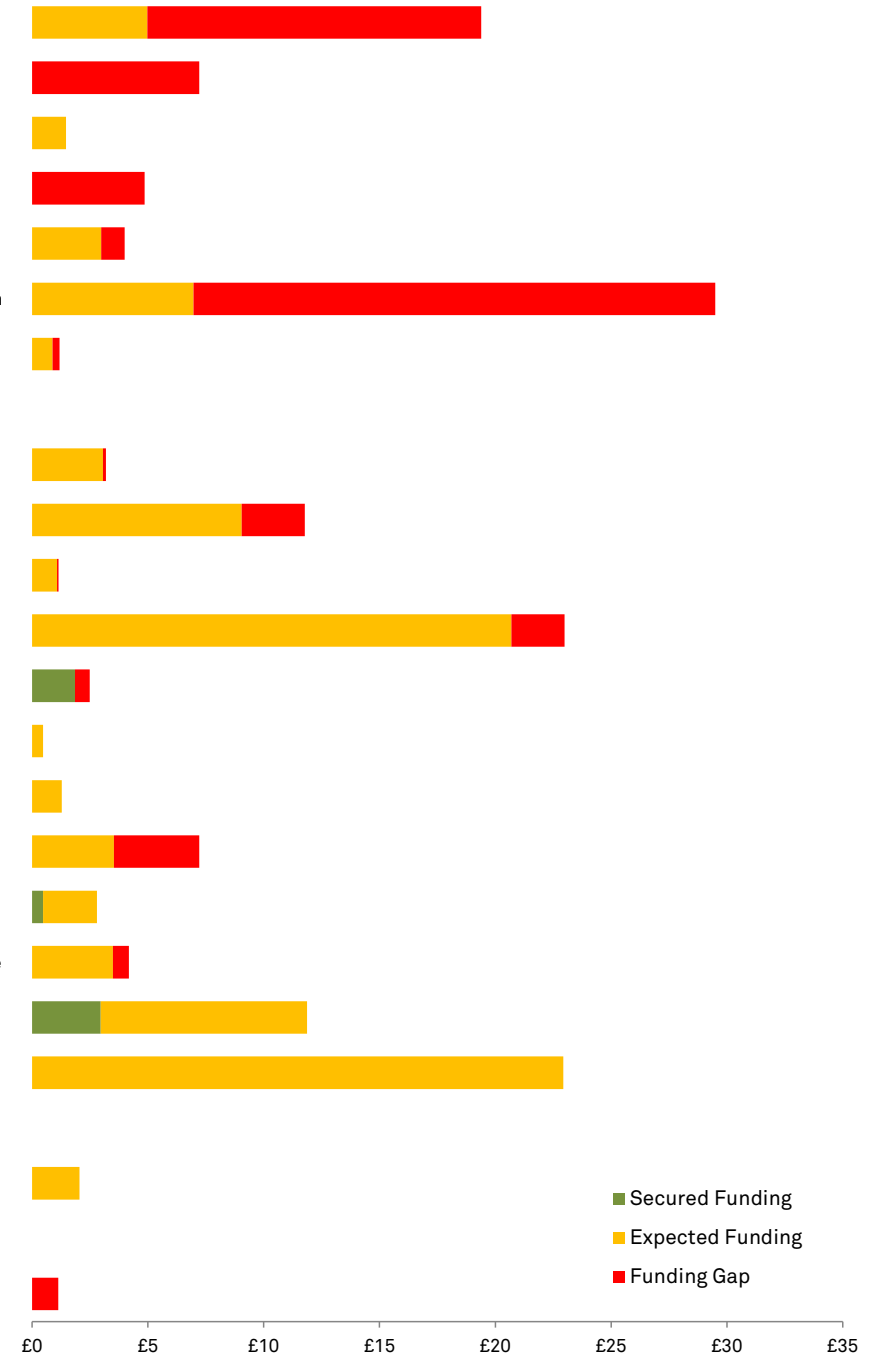


- Electricity & Gas
- Water & Sewage
- Waste
- Broadband

FLOOD DEFENCES



- Flood defences
- Emergency Services



SUMMARY OF INFRASTRUCTURE PROJECT COSTS AND FUNDING GAPS (2015-2030)

Millions

MAJOR HOUSING DEVELOPMENT

- Former DERA Site (North)
- Town Centre redevelopment proposals
- Franklands Drive, Addlestone
- Aviator Park, Addlestone

FLOOD DEFENCES

- River Thames Scheme

EDUCATION PROJECTS

- 1FE primary expansion
- Provision of a new secondary school at the Runnymede Centre on Chertsey Road
- Expansion at the Royal Holloway University Campus, Egham

COMMUNITY INFRASTRUCTURE PROJECTS

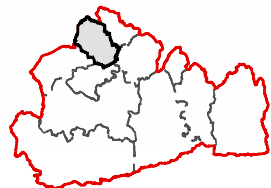
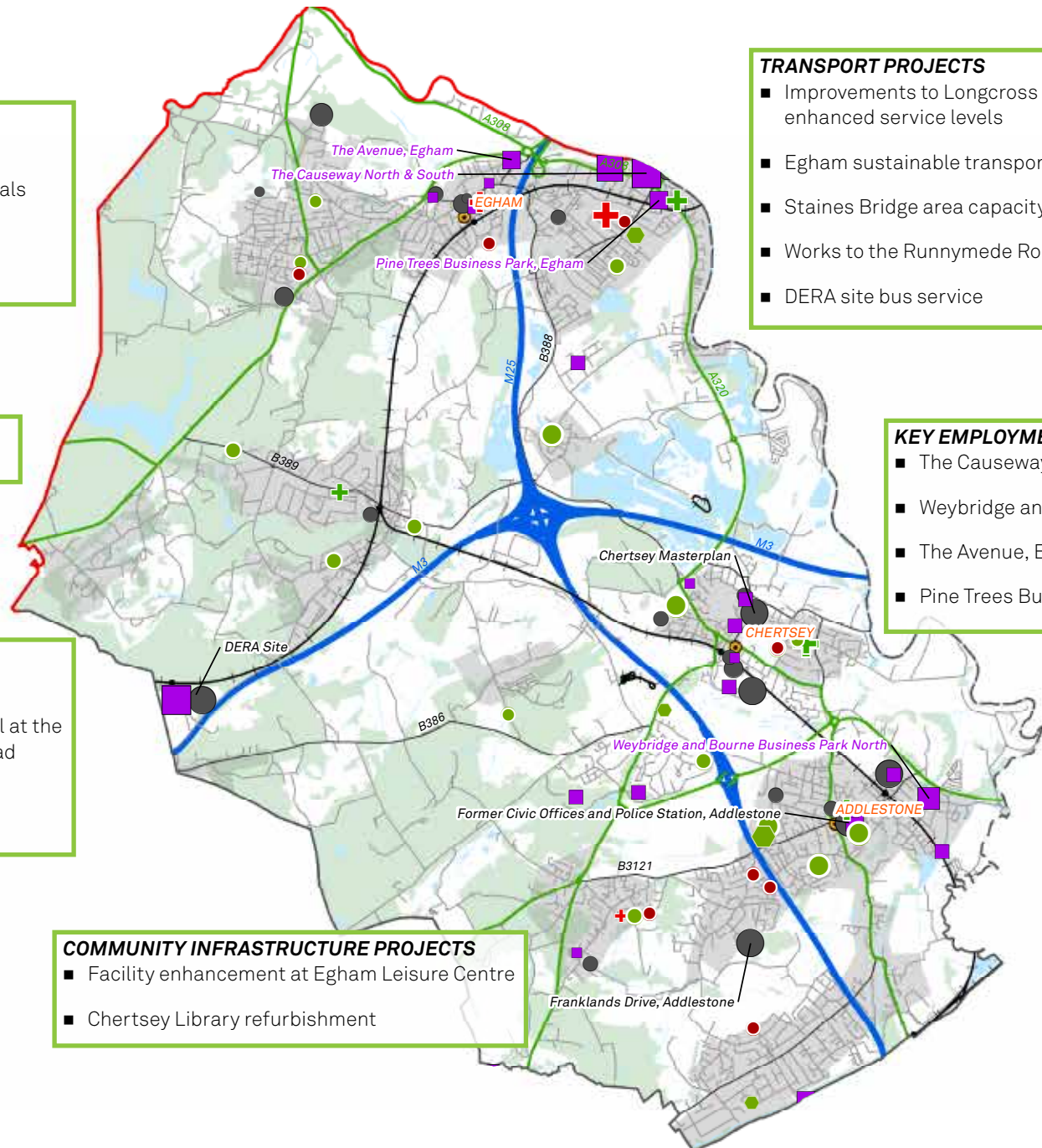
- Facility enhancement at Egham Leisure Centre
- Chertsey Library refurbishment

TRANSPORT PROJECTS

- Improvements to Longcross Rail Station and enhanced service levels
- Egham sustainable transport package
- Staines Bridge area capacity
- Works to the Runnymede Roundabout
- DERA site bus service

KEY EMPLOYMENT SITES WITH CAPACITY

- The Causeway North & South
- Weybridge and Bourne Business Park North
- The Avenue, Egham
- Pine Trees Business Park, Egham



SUMMARY OF GROWTH + INFRASTRUCTURE ISSUES IN RUNNYMEDE

Refer to Universal Legend at start of Chapter 5 to interpret Map icons

Projects Note - Any Strategic Projects Listed in Table 5.3 and affecting this local authority are not included in local costs and funding on facing page.

5.7 SPELTHORNE

3,028
new homes
(+7%)

1,756
new people
(+2%)

to 2030

INFRASTRUCTURE HIGHLIGHTS

- Heathrow Airport is located immediately to the north of the Borough with significant influence on the area and a potential for future expansion
- Local growth expected to put additional increases on the Strategic Road Network through Spelthorne.
- Proximity to the River Thames means significant area is at risk from flooding, with Staines and Shepperton being the worst affected areas.
- Capacity pressures on existing early year facilities and primary schools
- Capacity pressures on existing primary healthcare facilities.

Total Infrastructure Costs: **£102,630,000**

Total Secured Funding: **£350,000**

Total Expected Funding: **£49,250,000**

Total Funding Gap: **£53,030,000**

Funding as % of Costs: **48%**

TRANSPORT



Motorways

Highways

Public transport

Rail

Other transport

EDUCATION



Primary education

Secondary education

AE / FE / HE

Early Year facilities

HEALTH



Primary healthcare

Acute healthcare

Mental healthcare

COMMUNITY



Adult social services

Libraries

Youth services

Community centres

GREEN INFRASTRUCTURE



Sports facilities

Outdoor sport & Rec

Green infrastructure

UTILITIES



Electricity & Gas

Water & Sewage

Waste

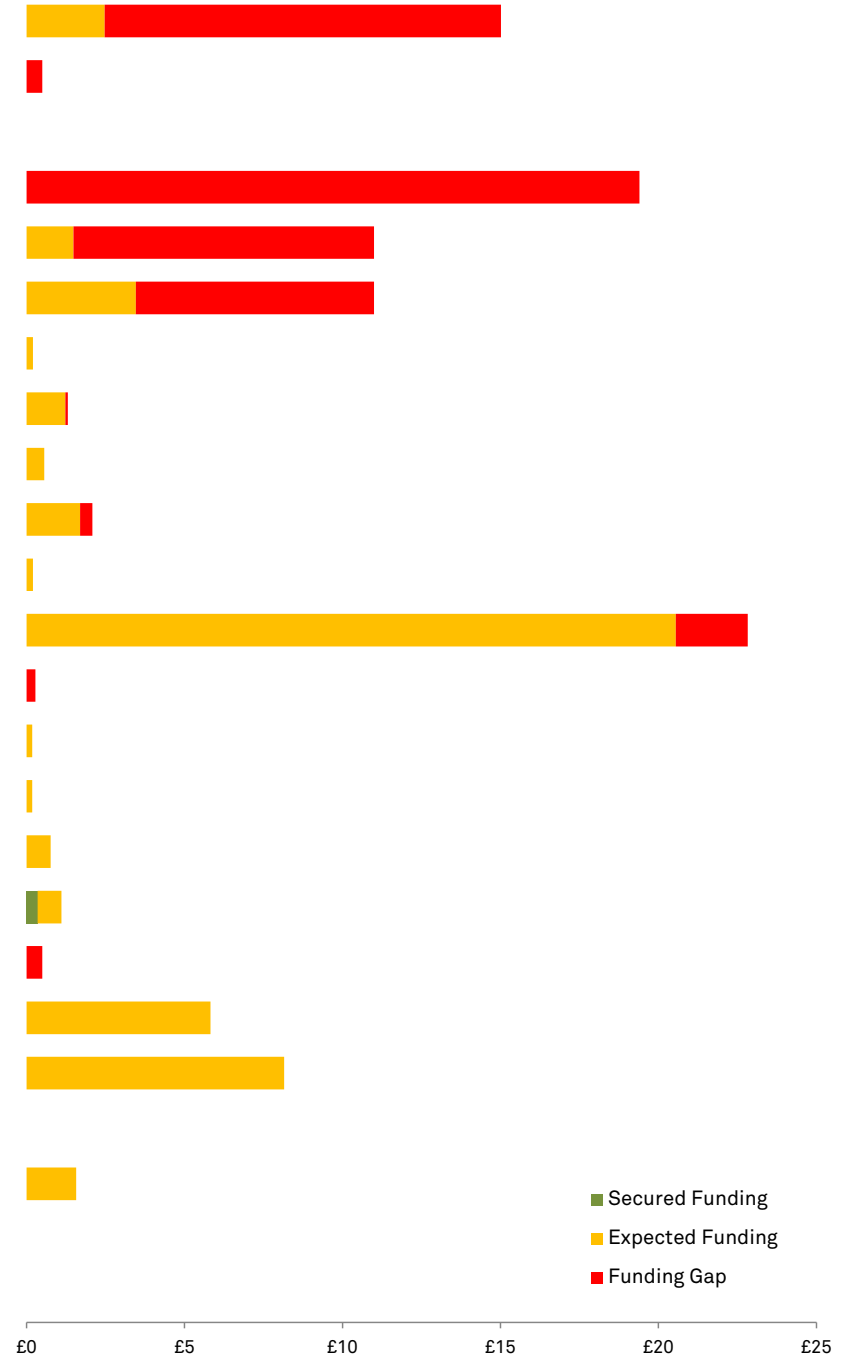
Broadband

FLOOD DEFENCES



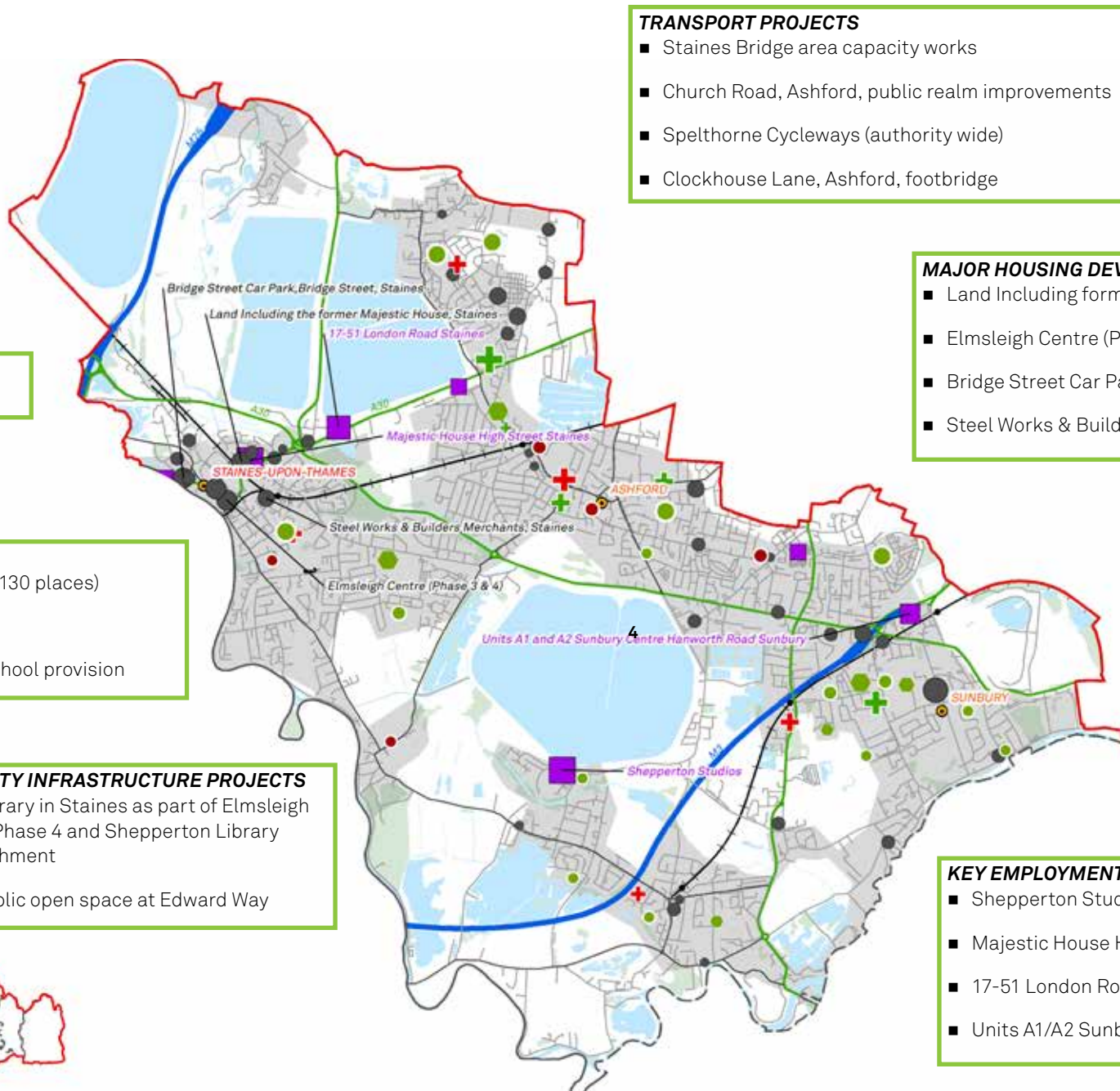
Flood defences

Emergency Services



SUMMARY OF INFRASTRUCTURE PROJECT COSTS AND FUNDING GAPS (2015-2030)

Millions



- TRANSPORT PROJECTS**
- Staines Bridge area capacity works
 - Church Road, Ashford, public realm improvements
 - Spelthorne Cycleways (authority wide)
 - Clockhouse Lane, Ashford, footbridge

- MAJOR HOUSING DEVELOPMENT**
- Land Including former Majestic House, Staines
 - Elmsleigh Centre (Phase 3 & 4)
 - Bridge Street Car Park, Bridge Street, Staines
 - Steel Works & Builders Merchants, Staines

- FLOOD DEFENCES**
- River Thames Scheme

- EDUCATION PROJECTS**
- New early years provision (130 places)
 - 2FE primary expansion
 - Expansion of secondary school provision

- COMMUNITY INFRASTRUCTURE PROJECTS**
- New Library in Staines as part of Elmsleigh Centre Phase 4 and Shepperton Library refurbishment
 - New public open space at Edward Way

- KEY EMPLOYMENT SITES WITH CAPACITY**
- Shepperton Studios
 - Majestic House High Street Staines
 - 17-51 London Road Staines
 - Units A1/A2 Sunbury Centre Hanworth Road



SUMMARY OF GROWTH + INFRASTRUCTURE ISSUES IN SPELTHORNE

Refer to Universal Legend at start of Chapter 5 to interpret Map icons

Projects Note - Any Strategic Projects Listed in Table 5.3 and affecting this local authority are not included in local costs and funding on facing page.

5.8 SURREY HEATH

2,807
new homes
(+8%)

3,156
new people
(+4%)

to 2030

INFRASTRUCTURE HIGHLIGHTS

- Possible capacity issues at the M3 junction 3 approaches (both north and south) with investment required to alleviate pressure.
- Area around Deepcut barracks will see increased traffic flows with requirement for highway improvements.
- Deficit in existing primary healthcare facilities across the authority.
- Deficit in existing library provision across the authority
- Notable increase in indoor sport facilities (particularly swimming pools) required to meet standards.

Total Infrastructure Costs: **£243,100,000**

Total Secured Funding: **£114,310,000**

Total Expected Funding: **£62,420,000**

Total Funding Gap: **£66,380,000**

Funding as % of Costs: **73%**

TRANSPORT



- Motorways
- Highways
- Public transport
- Rail
- Other transport

EDUCATION



- Primary education
- Secondary education
- AE / FE / HE
- Early Year facilities

HEALTH



- Primary healthcare
- Acute healthcare
- Mental healthcare

COMMUNITY



- Adult social services
- Libraries
- Youth services
- Community centres

GREEN INFRASTRUCTURE



- Sports facilities
- Outdoor sport & Rec
- Green infrastructure

UTILITIES

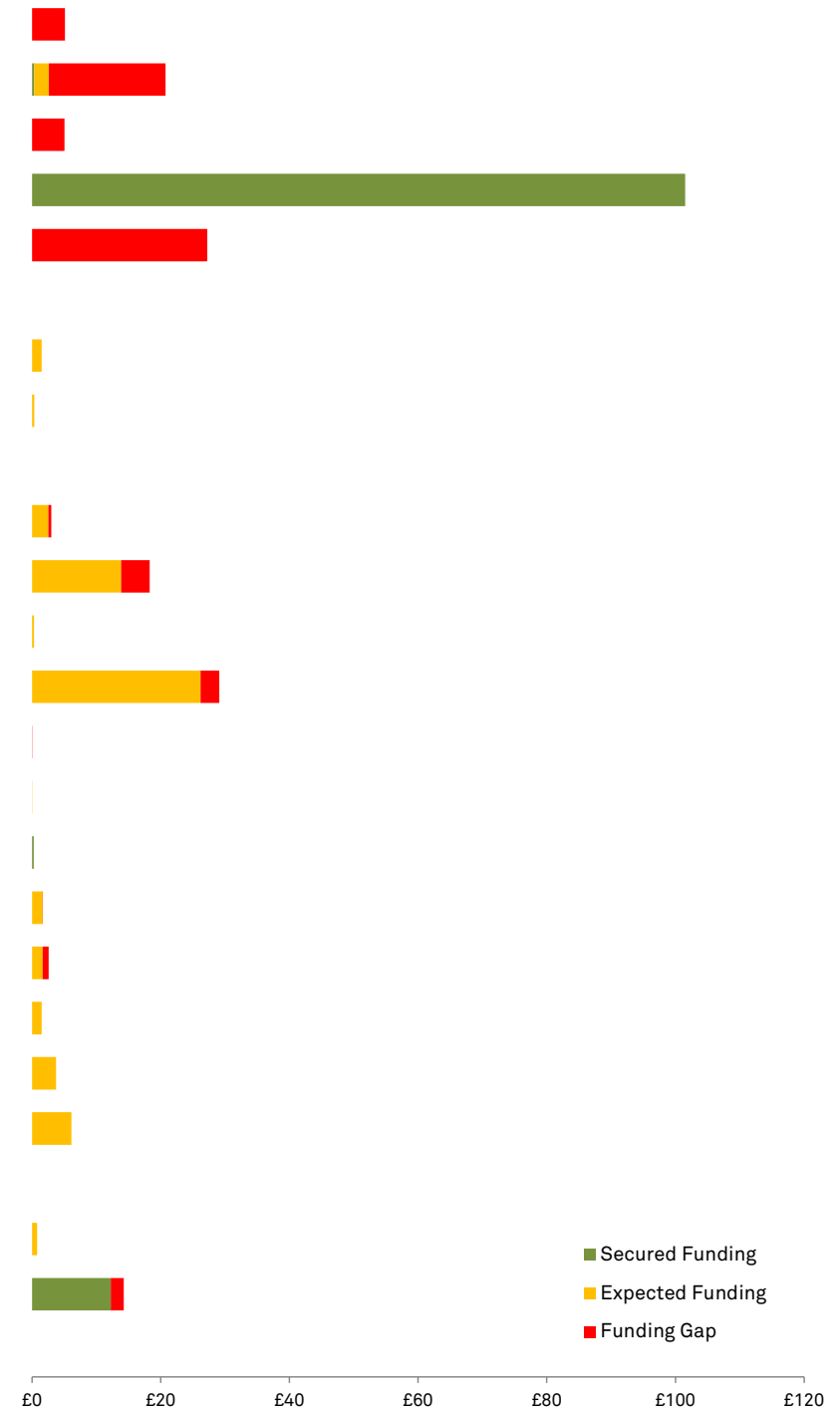


- Electricity & Gas
- Water & Sewage
- Waste
- Broadband

FLOOD DEFENCES



- Flood defences
- Emergency Services



SUMMARY OF INFRASTRUCTURE PROJECT COSTS AND FUNDING GAPS (2015-2030)

Millions

5.9 TANDRIDGE

2,375
new homes
(+7%)

0
new people (refer to section 3.1)
(+0%)

to 2030

INFRASTRUCTURE HIGHLIGHTS

- Relatively low levels of periodic traffic problems on local road network (morning and evening during school term time).
- Oxted health centre identified need for a satellite facility to relieve pressure on existing services.
- First Community Health and Care run a range of community services in the authority (inc. Caterham Dene Hospital).
- A number of indoor sport facilities required in urban areas of Caterham, Oxted and Whyteleafe to meet the demands of population.
- Relocation of Caterham Valley library into Soper Hall.
- Increase need for elderly care accommodation
- Existing Cemetery at capacity with potential for extension of Cemetery in Caterham.

Total Infrastructure Costs: **£76,780,000**

Total Secured Funding: **£7,430,000**

Total Expected Funding: **£42,920,000**

Total Funding Gap: **£26,430,000**

Funding as % of Costs: **66%**

TRANSPORT



- Motorways
- Highways
- Public transport
- Rail
- Other transport

EDUCATION



- Primary education
- Secondary education
- AE / FE / HE
- Early Year facilities

HEALTH



- Primary healthcare
- Acute healthcare
- Mental healthcare

COMMUNITY



- Adult social services
- Libraries
- Youth services
- Community centres

GREEN INFRASTRUCTURE



- Sports facilities
- Outdoor sport & Rec
- Green infrastructure

UTILITIES

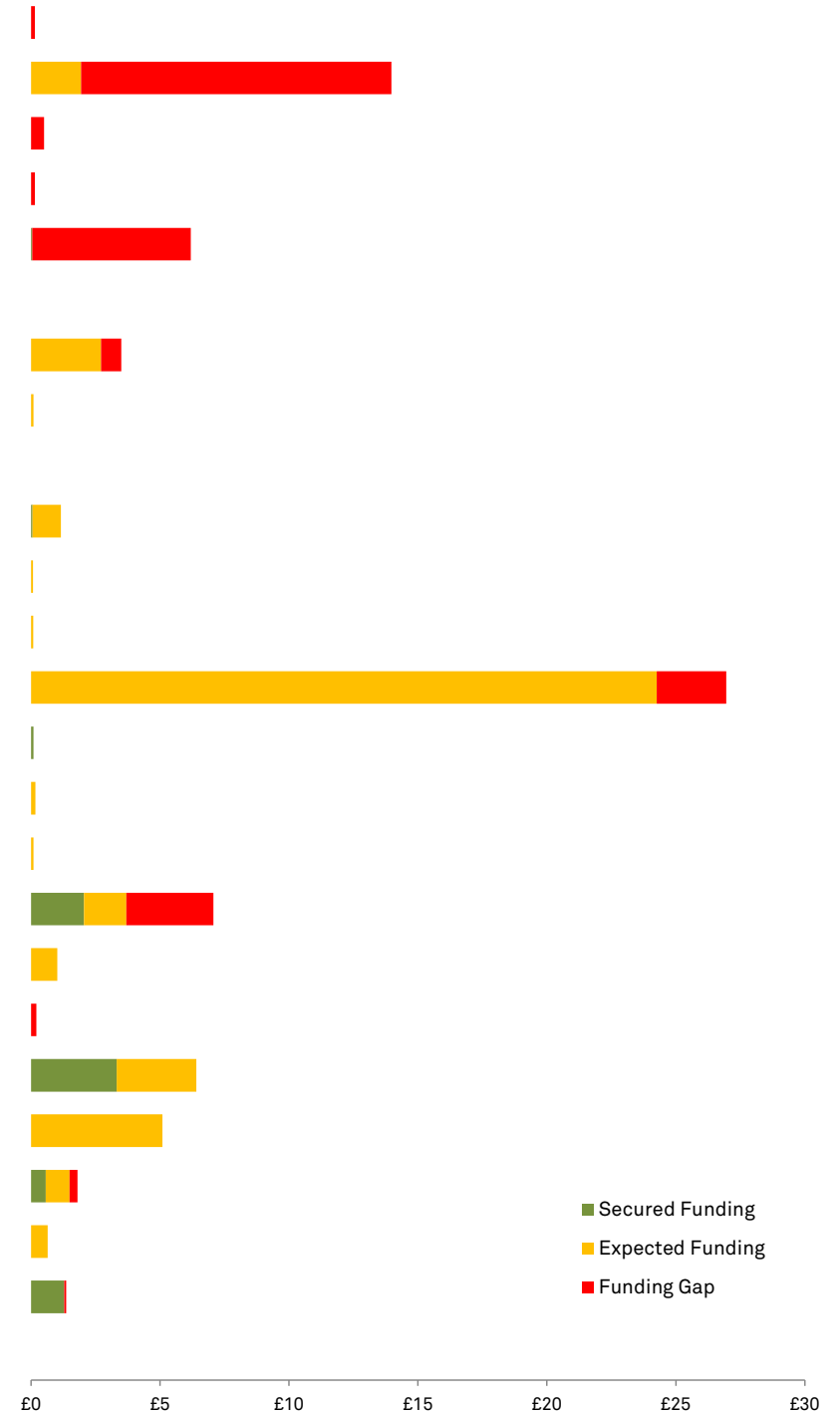


- Electricity & Gas
- Water & Sewage
- Waste
- Broadband

FLOOD DEFENCES



- Flood defences
- Emergency Services



SUMMARY OF INFRASTRUCTURE PROJECT COSTS AND FUNDING GAPS (2015-2030)

Millions

MAJOR HOUSING DEVELOPMENT

- Fairview Industrial Estate, Oxted South
- Former East Wing, Whyteleafe House
- Oaklands, Coulsdon Road, Caterham
- Gadoline House + former Old Barn petrol station

EDUCATION PROJECTS

- 0.5FE expansion in Oxted area

COMMUNITY INFRASTRUCTURE PROJECTS

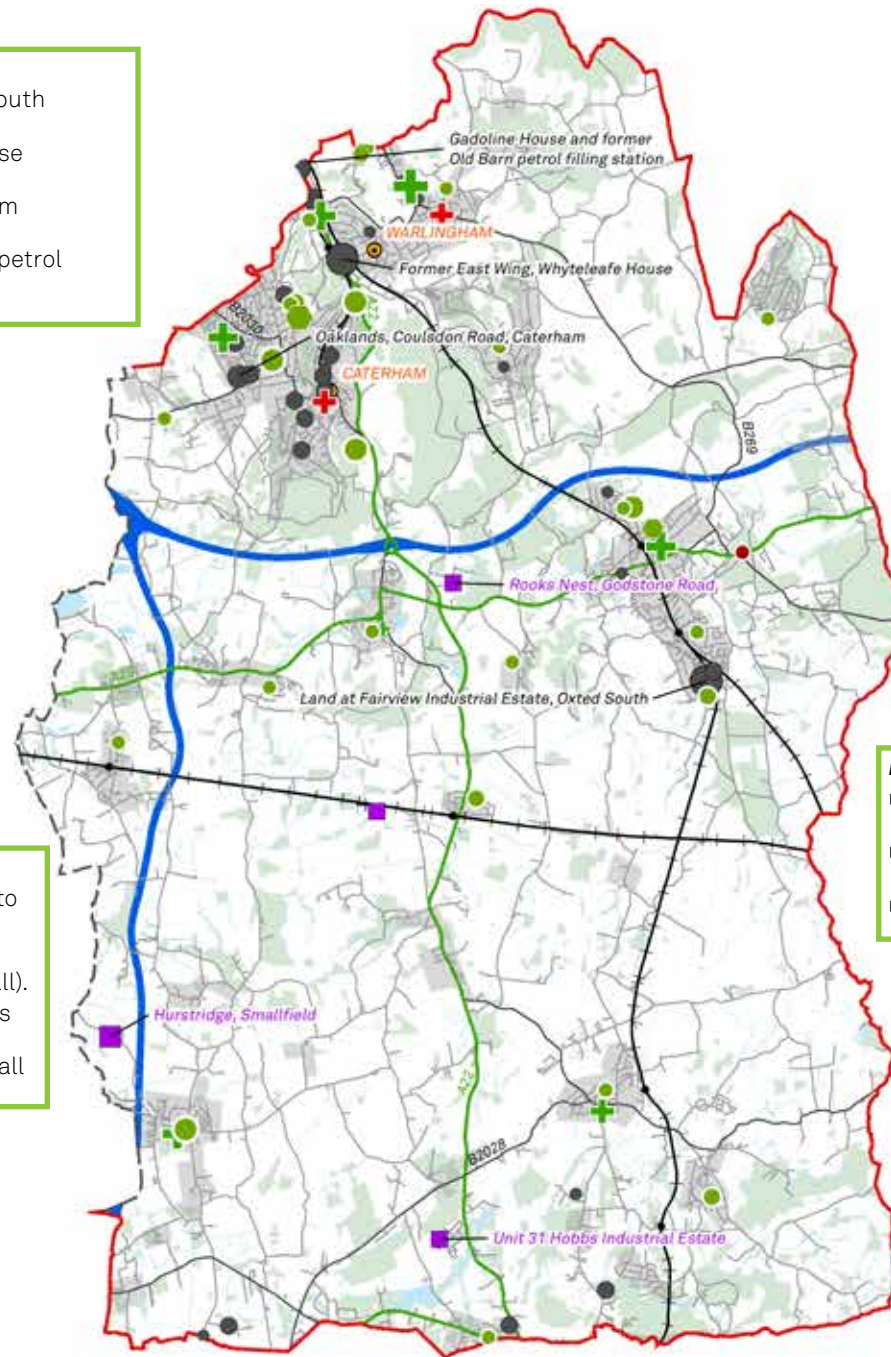
- Expansion of Caterham Hill community facility to include sports facilities
- Caterham Valley Library relocation (to Soper Hall). Caterham Hill and Oxted Library refurbishments
- Provision of leisure facilities within the Soper Hall

TRANSPORT PROJECTS

- A22 Wapses Lodge Roundabout
- New cycleways at: A264, A22 (South of Godstone) and Crawley Down Road

KEY EMPLOYMENT SITES WITH CAPACITY

- Hurstridge, Smallfield
- Unit 31 Hobbs Industrial Estate
- Rooks Nest, Godstone Road



SUMMARY OF GROWTH + INFRASTRUCTURE ISSUES IN TANDRIDGE

Refer to Universal Legend at start of Chapter 5 to interpret Map icons

Projects Note - Any Strategic Projects Listed in Table 5.3 and affecting this local authority are not included in local costs and funding on facing page.

5.10 WAVERLEY

3,750
new homes
(+7%)

2,374
new people
(+2%)

to 2030

INFRASTRUCTURE HIGHLIGHTS

- A325 and A31 corridors in and around Farnham Town Centre sensitive to additional traffic from major sites.
- Majority of communities have indicated a requirement for improved bus services
- A large number of potential cycle schemes have been identified for the authority.
- A need for increased capacity at existing waste management sites to support growth
- University for the Creative Arts have significant expansion plans including estate remodelling.

Total Infrastructure Costs: **£127,970,000**

Total Secured Funding: **£540,000**

Total Expected Funding: **£66,260,000**

Total Funding Gap: **£61,160,000**

Funding as % of Costs: **52%**

TRANSPORT



- Motorways
- Highways
- Public transport
- Rail
- Other transport

EDUCATION



- Primary education
- Secondary education
- AE / FE / HE
- Early Year facilities

HEALTH



- Primary healthcare
- Acute healthcare
- Mental healthcare

COMMUNITY



- Adult social services
- Libraries
- Youth services
- Community centres

GREEN INFRASTRUCTURE



- Sports facilities
- Outdoor sport & Rec
- Green infrastructure

UTILITIES

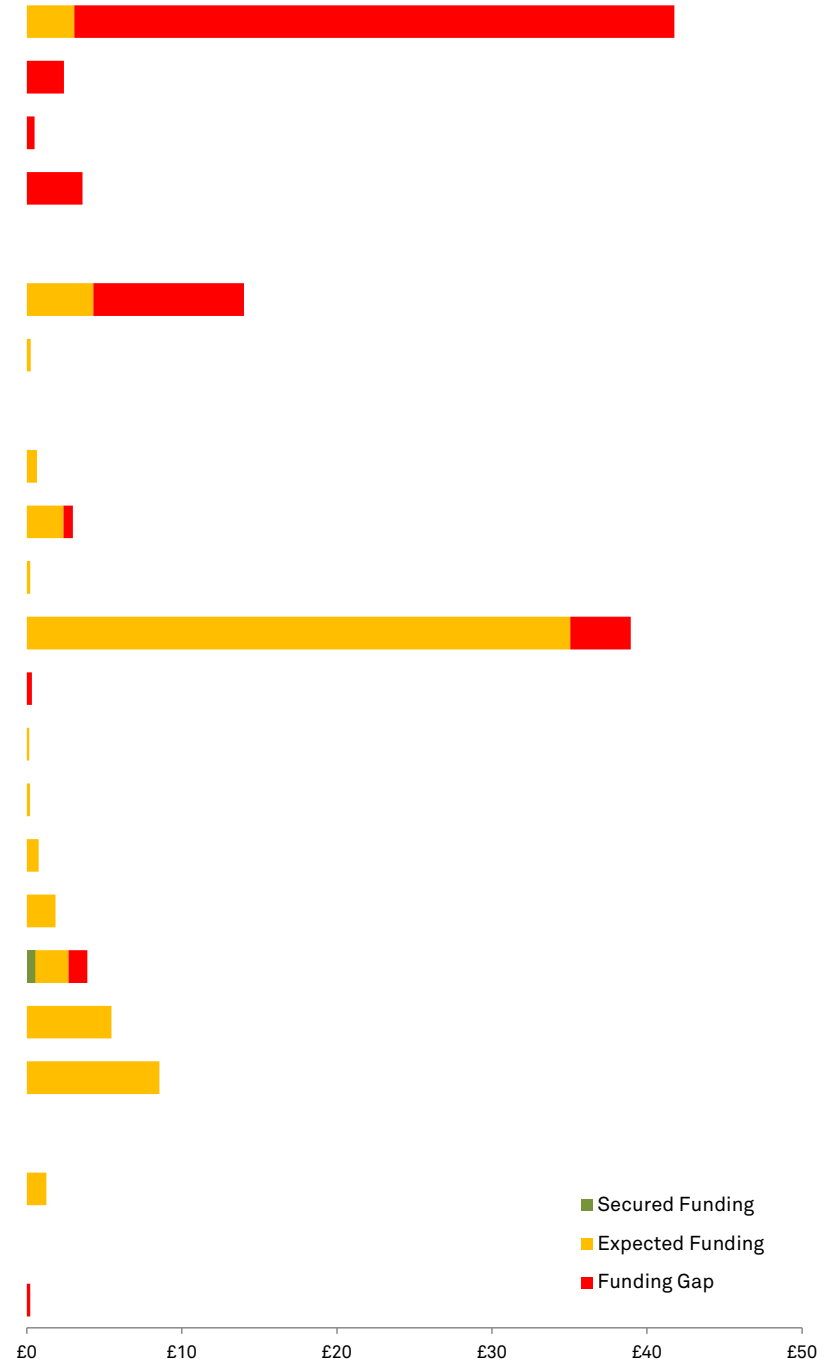


- Electricity & Gas
- Water & Sewage
- Waste

FLOOD DEFENCES

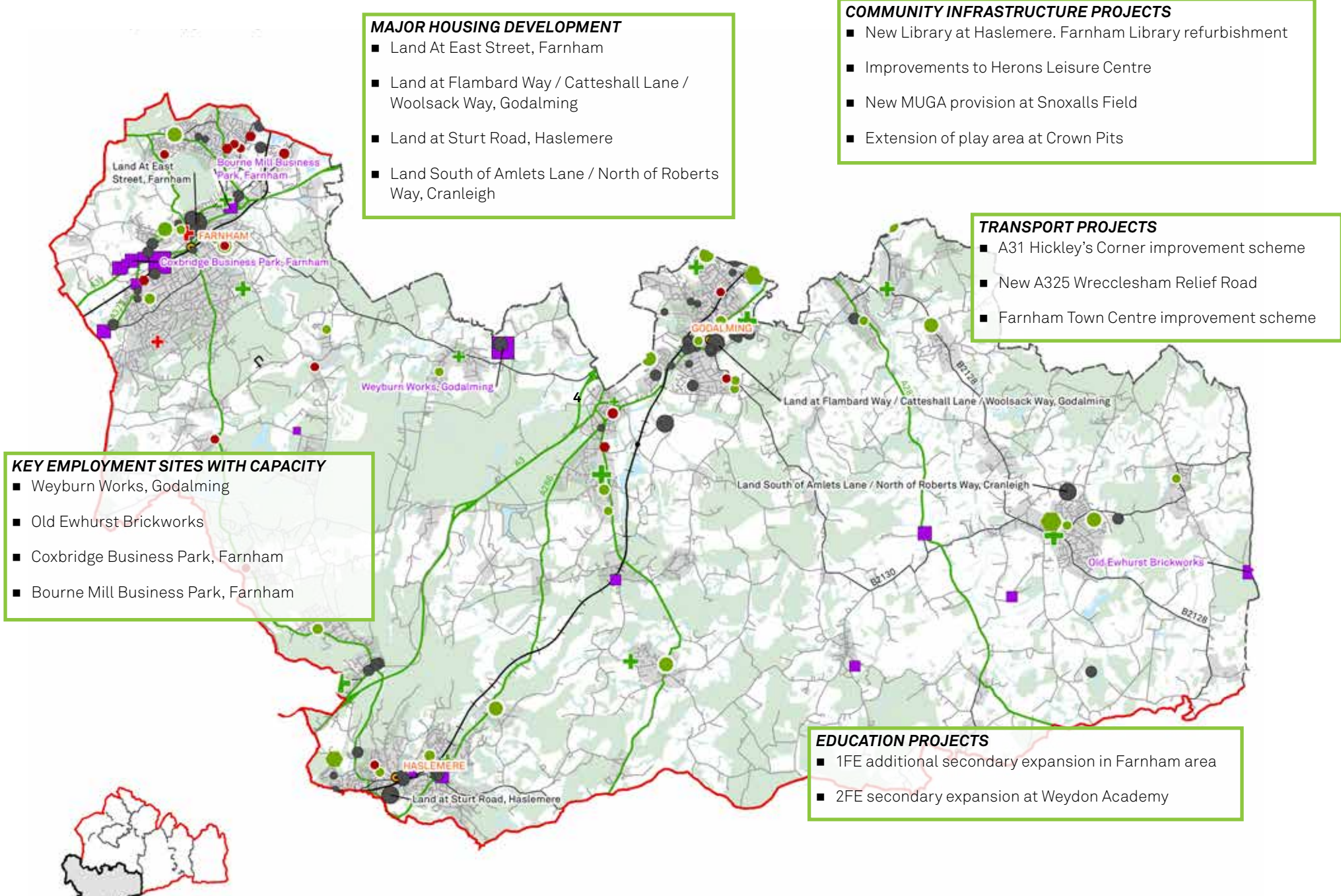


- Broadband
- Flood defences
- Emergency Services



SUMMARY OF INFRASTRUCTURE PROJECT COSTS AND FUNDING GAPS (2015-2030)

Millions



SUMMARY OF GROWTH + INFRASTRUCTURE ISSUES IN WAVERLEY

Refer to Universal Legend at start of Chapter 5 to interpret Map icons

Projects Note - Any Strategic Projects Listed in Table 5.3 and affecting this local authority are not included in local costs and funding on facing page.

5.11 WOKING

4,380
new homes
(+11%)

6,937
new people
(+7%)

to 2030

INFRASTRUCTURE HIGHLIGHTS

- Mainline from Woking at capacity during peak times limiting development capacity
- Byfleet area suffers from lower public accessibility to GPs, town centres and secondary schools when compared to the rest of the urban area.
- Notable pressures on primary and secondary school places at present and during plan period.
- Investment in college buildings required to bring up to standard and maintain usability.
- Additional waste facilities not likely to be required based on reductions in local waste arisings.
- Current library provision below standards required.
- Notable flood Risk from River Wey and surface water sources with lack of formal flood defences in authority.

Total Infrastructure Costs: **£320,190,000**

Total Secured Funding: **£54,210,000**

Total Expected Funding: **£97,790,000**

Total Funding Gap: **£168,190,000**

Funding as % of Costs: **47%**

TRANSPORT



- Motorways
- Highways
- Public transport
- Rail
- Other transport

EDUCATION



- Primary education
- Secondary education
- AE / FE / HE
- Early Year facilities

HEALTH



- Primary healthcare
- Acute healthcare
- Mental healthcare

COMMUNITY



- Adult social services
- Libraries
- Youth services
- Community centres

GREEN INFRASTRUCTURE



- Sports facilities
- Outdoor sport & Rec
- Green infrastructure

UTILITIES

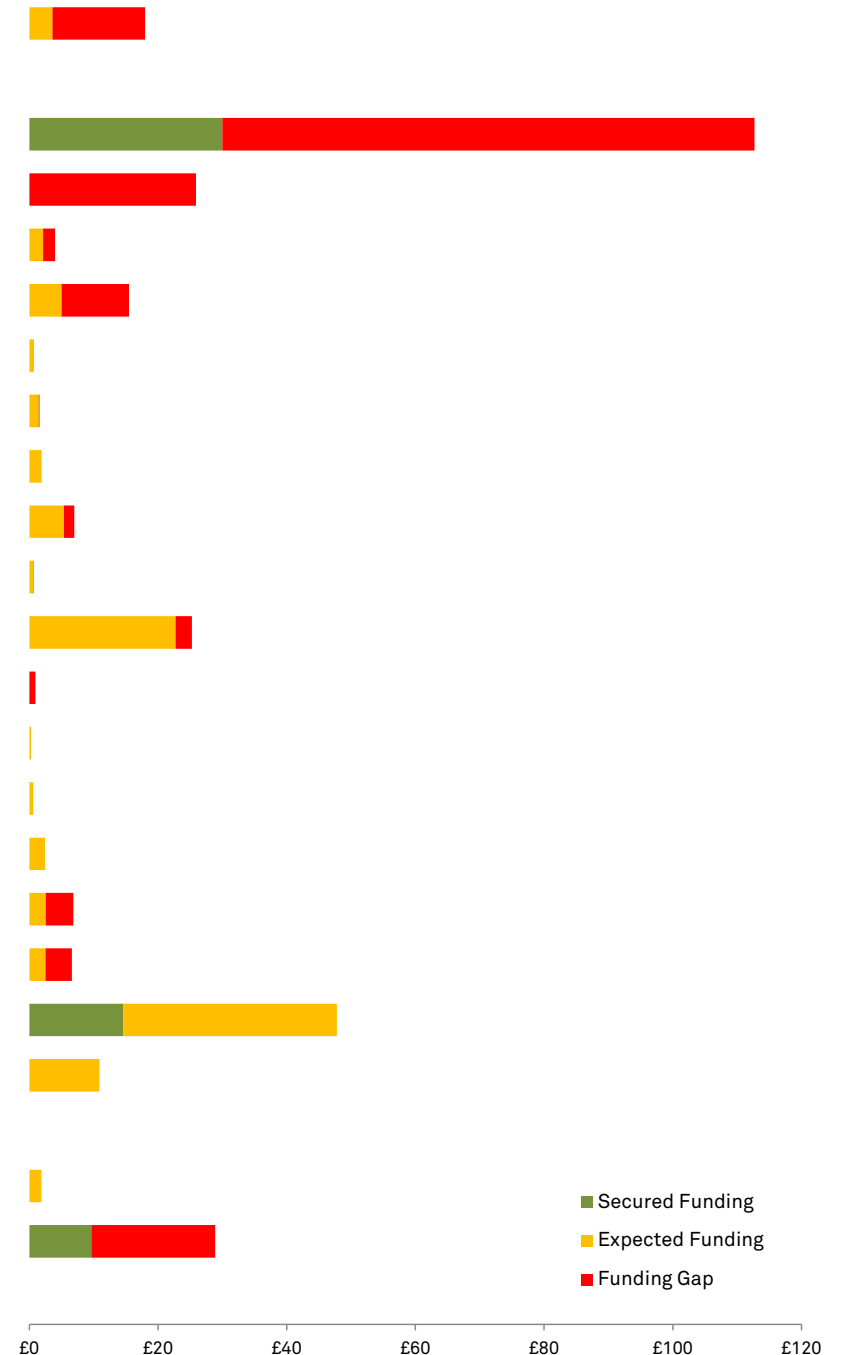


- Electricity & Gas
- Water & Sewage
- Waste
- Broadband

FLOOD DEFENCES



- Flood defences
- Emergency Services



SUMMARY OF INFRASTRUCTURE PROJECT COSTS AND FUNDING GAPS (2015-2030)

Millions

MAJOR HOUSING DEVELOPMENT

- 2,000 homes in Woking Town Centre
- Regeneration of the Sheerwater Estate
- 550 units on sites to be released from the Green Belt

TRANSPORT PROJECTS

- Woking Flyover' railway grade separation at Woking junction
- Restoration of Camberly-Woking direct rail
- Victoria Arch improvements

COMMUNITY INFRASTRUCTURE PROJECTS

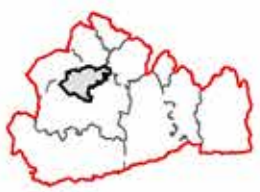
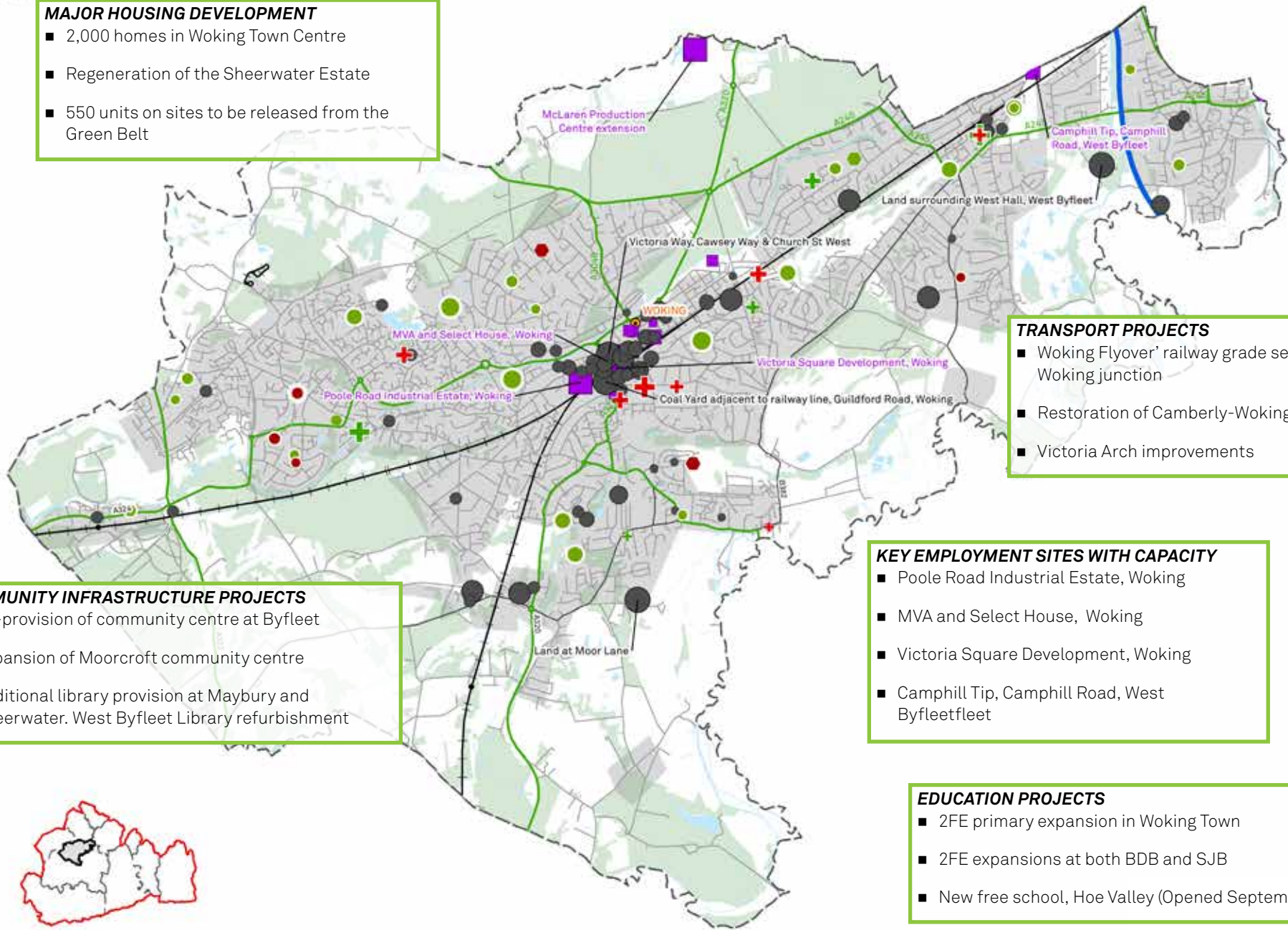
- Re-provision of community centre at Byfleet
- Expansion of Moorcroft community centre
- Additional library provision at Maybury and Sheerwater. West Byfleet Library refurbishment

KEY EMPLOYMENT SITES WITH CAPACITY

- Poole Road Industrial Estate, Woking
- MVA and Select House, Woking
- Victoria Square Development, Woking
- Camphill Tip, Camphill Road, West Byfleet

EDUCATION PROJECTS

- 2FE primary expansion in Woking Town
- 2FE expansions at both BDB and SJB
- New free school, Hoe Valley (Opened September 2015)



SUMMARY OF GROWTH + INFRASTRUCTURE ISSUES IN WOKING

Refer to Universal Legend at start of Chapter 5 to interpret Map icons

Projects Note - Any Strategic Projects Listed in Table 5.3 and affecting this local authority are not included in local costs and funding on facing page.

5.12 PROJECTS ADDRESSING MULTIPLE LOCAL AUTHORITIES

STRATEGIC PROJECTS

A number of important infrastructure projects have been identified as necessary to support housing and economic growth across Surrey and not specifically within the limitations of local authority. These are primarily confined to transport projects, utilities, waste and flood defences.

It should also be noted that the Infrastructure study has identified theoretical increases in demand for services such as Acute hospital beds at the local authority level, and whilst these have been presented as need at a local level, it is acknowledged that this provision is likely to be delivered at a strategic level serving a number of local authorities.

Total Infrastructure Costs: £2,410,470,000

Total Secured Funding: £543,470,000

Total Expected Funding: £n.a

Total Funding Gap: £1,867,000,000

% of Infrastructure Funded: 23%

Table 5.3

Strategic Infrastructure Projects

Project Type	Project Details	Cost	Funding
Highways	A3 interim improvements	tbc	tbc
	Proposed Guildford A3 Strategic Corridor Improvements	£300,000,000	tbc
	A31 Hickley's Corner Underpass	£87,000,000	tbc
Motorways	M3 Junction 2 to 4a Smart Motorway	£183,000,000	£183,000,000
	A23/M23 Hooley interchange Junction improvement	£38,000,000	£38,000,000
	A3/M25 Junction 10 Wisley interchange improvements	£175,000,000	£175,000,000
	M25 Junction 9 Leatherhead interchange	£10,000,000	£5,000,000
Rail	Crossrail 2 Proposed Regional Route	tbc	tbc
	Proposed North Downs Line Improvements	£100,000,000	tbc
	Southern Rail Access to Heathrow	£975,000,000	tbc
	Southwest Main Line Rail capacity improvements	tbc	tbc
	Woking Flyover at Woking junction	£100,000,000	tbc
Public Transport	Guildford priority bus corridors	tbc	tbc
Flood Defences	River Thames Scheme	£300,000,000	tbc
	River Thames - Property Level Protection	£7,470,000	£7,470,000
Emergency Services	Replacement programme for Fire Stations	£35,000,000	£35,000,000
FE / HE	Growth on campus at RHUL	£100,000,000	£100,000,000
	Growth of campus at Surrey University	tbc	tbc
Total Surrey		£2,410,470,000	£543,470,000



06



DELIVERY AND FUNDING

FUNDING IS THE BIGGEST RISK TO DELIVERING INFRASTRUCTURE. AS THIS DOCUMENT HIGHLIGHTS, THERE ARE PRESENTLY SIGNIFICANT GAPS IN FUNDING OF ALL TYPES OF INFRASTRUCTURE ACROSS THE COUNTY. WITH THE SHAPE AND LEVEL OF PUBLIC SECTOR FUNDING VERY DIFFICULT TO PREDICT SURREY LOCAL AUTHORITIES AND THEIR INFRASTRUCTURE DELIVERY PARTNERS FACE SIGNIFICANT FUNDING CHALLENGES TO ENSURE THE DELIVERY OF INFRASTRUCTURE TO SUPPORT EXISTING AND FUTURE RESIDENTS.

In light of this funding challenge delivery partners must explore every potential avenue of funding as part of the project delivery process. This chapter sets out:

- Organisations within Surrey with access to funding and their respective funding source options which could be relevant to infrastructure delivery.
- A high level analysis of the ability of developer contributions through Section 106 agreements and the Community Infrastructure Levy to deliver infrastructure, recognising the dependence on overall scheme viability relating to land values across Surrey.
- Other potential sources of funding.

The funding situation outlined in this chapter reflects current knowledge of approaches to the delivery and funding of infrastructure. However, an important point to note is that over the document time period (to 2031) at least three general elections will take place. This makes it difficult to predict the policy towards various types of infrastructure (health, education, transport etc.) in five years' time, and even in one years' time.

To illustrate this point, an education authority working 10 years ago, planning for an additional secondary school forecast as required in 2015 would have been unaware of the forthcoming creation of the Building Schools for the Future (BSF) programme, the subsequent abolition of that BSF programme, the Academies model and the recent direction towards free schools. Surrey local authorities can only work with what is currently known which highlights the need for flexibility - essential to accommodate the inevitable changes to delivery and funding over the planning period.

6.1 RELEVANT ORGANISATIONS WITH ACCESS TO FUNDING

AS IDENTIFIED IN EARLIER CHAPTERS THERE ARE A WIDE RANGE OF ORGANISATIONS RESPONSIBLE FOR THE DELIVERY AND FUNDING OF INFRASTRUCTURE WITHIN SURREY. THIS SECTION PRESENTS AN OVERVIEW OF THESE ORGANISATIONS AND THEIR SOURCES OF FUNDING.

SURREY COUNTY COUNCIL

As set out in previous sections SCC is responsible for providing many key local services and oversaw a gross annual expenditure of £1.85 billion in the financial year 2014/15. SCC is responsible for managing public money in the provision of these services including schools, social services, the fire service, roads, libraries, trading standards, land use, transport planning and waste management. SCC is the transport authority responsible for delivering the majority of the transport-related infrastructure to support development proposals in each local authority within Surrey.

Transport infrastructure projects in Surrey are funded through a blend of funding sources including Department for Transport grants, developer contributions and from other sources within SCC.

Education and Children's Services represents the biggest outlay, in 2014/15 gross expenditure was over £1 billion, although the majority of costs are covered through government grants.

BOROUGH AND DISTRICT COUNCILS

The main services provided by the majority of local authorities include:

- Planning and Development Control
- Environmental Health
- Housing
- Leisure and Recreation
- Waste Collection

Sources of finance for local authorities include receipts from Council Tax distributed by Central Government, developer contributions (S106 or CIL) for specific local level infrastructure and service income.

The following additional funding sources are also now available to local authorities to support development growth:

- **New Homes Bonus** - this commenced in April 2011, and will match fund the additional council tax raised for new homes and empty properties brought back into use, with an additional amount for affordable homes, for the following six years. It is based on the council tax of additional homes and those brought back into use, with a premium amount for affordable homes, and paid for the following six years.
- **Retention of business rates** A business rates retention scheme was introduced in April 2013. It will provide a direct link between business rates growth and the amount of money councils have to spend on local people and local services. Councils will be able to keep

a proportion of the business rates revenue as well as growth on the revenue that is generated in their area.

HIGHWAYS ENGLAND

Highways England (formally the Highways Agency) became a publicly owned corporation on 1st April 2015. Highways England reports to the Department for Transport and has responsibility for managing the Strategic Road Network in England. It operates a variety of information services, liaises with other government agencies as well as providing staff to deal with incidents on their roads.

Highways England responsibilities most relevant to the growth plan include undertaking large scale improvements through a programme of major schemes, carrying out routine maintenance of roads, structures and technology to make the network safe, serviceable and reliable and making sure traffic can flow easily on major roads and motorways.

A 'Road investment strategy' (RIS) sets out a long-term programme for UK motorways and major roads. Between 2015 and 2020, the first RIS will see £15.2 billion invested in over 100 major schemes to enhance, renew and improve the network nationwide.

Recent government announcements have confirmed a £1.4 billion package of 18 new road schemes in London and South East of England and of particular importance to Surrey a strategic study to look at long-term answers to conditions on the south-west quadrant of the M25, that can make the route effective for a generation to come.

NETWORK RAIL

Network Rail owns the infrastructure, including the railway tracks, signals, overhead wires, tunnels, bridges, level

crossings and most stations, but not the passenger or commercial freight rolling stock.

Although it owns over 2,500 railway stations, it manages only 19 of the biggest and busiest of them, all the other stations being managed by one or other of the various train operating companies.

Track renewal, the ongoing modernisation of the railway network by replacing track and signalling, continues to be carried out by private engineering firms under contract.

ENVIRONMENT AGENCY

The Environment Agency (EA) is a non-departmental public body, established in 1996 and sponsored by the United Kingdom government's Department for Environment, Food and Rural Affairs (DEFRA), with responsibilities relating to the protection and enhancement of the environment in England.

There are two "policy and process" directorates. One deals with Flood and Coastal Risk Management and the other with Environment and Business. These are backed up by the Evidence directorate. The fourth directorate is a single Operations "delivery" unit, responsible for national services, and line management of all the Regional and Area staff.

As a risk management authority, authorities can apply for an allocation of government funding annually from the Environment Agency (EA). Authorities can use flood and coastal erosion risk management grant in aid (FCERM GiA capital grants) towards the costs of building new flood and coastal erosion defences. The amount of government funding the EA allocates to a project depends on the public benefit it provides. Benefits include reducing

flood risk to households, businesses and infrastructure and creating habitat for wildlife.

Authorities would need to apply to the FCERM Programme a year in advance. For example, to apply for an allocation for a project starting in April 2016, Authorities need to submit details in the 2015 submission period.

NHS COMMISSIONING (NHS ENGLAND AND CLINICAL COMMISSIONING GROUPS)

NHS commissioning is the process of planning, agreeing and monitoring services. This includes the development of new buildings and health infrastructure.

Commissioning is not one action but many, ranging from the health-needs assessment for a population, through the clinically based design of patient pathways, to service specification and contract negotiation or procurement, with continuous quality assessment.

The NHS commissioning system was previously made up of primary care trusts and specialised commissioning groups. Most of the NHS commissioning budget is now managed by 209 clinical commissioning groups (CCGs). These are groups of general practices which come together in each area to commission the best services for their patients and population.

Nationally, NHS England commissions specialised services, primary care, offender healthcare and some services for the armed forces. It has four regional teams but is one single organisation operating to a common model with one board.

The NHS recognise that there is no single geography across which all services should be commissioned: some local services can be designed and secured for a population of a few thousand, while for rare disorders, services need to be considered and secured nationally. In Surrey therefore, there is no single commissioning body that adheres to the County boundary.

CCGs and NHS England are supported by new commissioning support units (CSUs).

The CCGs and NHS England receive direct funding for commissioning from the Government. In some instances they may also be recipients of developer contributions or other sources of local funding.

LOCAL ENTERPRISE PARTNERSHIPS (LEPS)

Surrey is covered by two cross-boundary LEPS:

- Enterprise M3 - which covers the M3 corridor to the west of the County
- Coast to Capital - which covers the corridor from Brighton to Croydon to the east of the County

LEPs are business-led, public/private bodies established to drive economic growth. With constrained public funding, the LEP need to find innovative ways to ensure the funding they receive has the greatest impact, and (where possible) creates future funding opportunities at the same time.

In March 2013, Lord Heseltine published a report on economic growth entitled 'No stone left unturned: in pursuit of growth', which outlined a number of new roles and responsibilities for LEPS. Since then the Government

established the Single Growth Pot, worth £2bn per year, that LEPs can bid into (the Growth Deal). LEPs are also now responsible for overseeing the creation of a European Funding Strategy for 2014-2020 for their individual areas. With regards to funding, the LEP's role is to:

- Explore new ways of funding infrastructure and enterprise investment
- Identify the finance gap for innovative SMEs looking to expand
- Help develop a 2014-2020 European Funding Programme that meets the need of the area
- Design innovative financial models to make best possible use of Enterprise Zone Business Rates income and Growing Places Fund recycled funds
- Provide clear guidance on where help, support and finance is available for enterprises

Growth Deal

Enterprise M3 and Coast to Capital have received the following growth deals:

Enterprise M3

£118.1 million received in the first tranche of the Local Growth Fund announced in July 2014

A further £29.9 million award in the second tranche plus £42 million in loans from the Public Works Loan Board.

Identified to support 14 infrastructure projects to support creation of 4,000 new homes, 7,000 new jobs and attract up to £410 million public and private investment in Surrey and Hampshire.

Coast to Capital

The deal is worth £238m over six years, starting with investment of £41.5m of new funding in 2015/16.

This investment will unlock an additional £390m of investment from local public and private sector partners. Combined together this will create a total new investment package of £628m for the Coast to Capital region.

There will be a further £237m invested in new housing which will subsequently be enabled by this investment.

Overall, the Coast to Capital Growth Deal will deliver up to 21,000 jobs, 9,000 new homes and 380,000 sq m of employment space.

RELEVANT UTILITY COMPANIES

Utilities infrastructure delivery and funding is largely the responsibility of the relevant utility companies with connections to services also funded through site developers. Of importance to this business plan however is clarifying the procedure by which these utility companies consider development sites and how these are included within their own investment strategies.

Utility Providers are regulated by OFGEM and OFWAT; in principle, neither regulator supports installing new infrastructure on a speculative basis, rather they are reactive to providing supply to new developers once schemes are consented. However, if a robust business case that gives a good level of certainty that development will take place in a definite timescale is put to the Regulators, advance funding may be approved.

PARISH AND TOWN COUNCILS

Parish councils are the first tier of local government. They are elected corporate bodies, have variable tax raising powers, and are responsible for areas known as civil parishes. A parish council serving a town is called a town council, and has the same powers, duties and status as a parish council.

Local Parish and town councils have powers to provide some facilities themselves, or they can contribute towards their provision by others. There are large variations in the services provided by parishes, but they can include the following relevant to this business plan:

- Support and encouragement of arts and crafts
- Provision of village halls
- Recreation grounds, parks, children's play areas, playing fields and swimming baths
- Cemeteries and crematoria
- Public conveniences
- Provision of cycle and motorcycle parking
- Acquisition and maintenance of rights of way

The Council also has the power to raise money through taxation, the precept. The precept is the parish council's share of the council tax. The precept demand goes to the billing authority - the local authority - which collects the tax for the Parish Council.

Parish councils and associated neighbourhood forums also now receive a "meaningful proportion" of Community Infrastructure Levy receipts to the neighbourhoods affected by development, typically 15-25%. The scale of this contribution is directly linked to the number of homes developed in the Parish and the existing scale of the parish (in terms of dwellings). The meaningful proportion can be spent on anything to help mitigate the impact the development has on the town or parish. It is the decision of the town or parish council where the money is spent.

It should be noted that there is incomplete coverage of town and parish councils across the local authorities in Surrey with none in Epsom and Ewell or Spelthorne.



6.2 DEVELOPER CONTRIBUTIONS

DEVELOPER CONTRIBUTIONS' INCLUDE "SECTION 106 AGREEMENTS" HIGHWAY CONTRIBUTIONS KNOWN AS "SECTION 278 AGREEMENTS" AND THE COMMUNITY INFRASTRUCTURE LEVY (CIL). THIS SECTION PRESENTS AN OVERVIEW OF DEVELOPER CONTRIBUTIONS IN SURREY.

SECTION 106

Planning obligations under Section 106 of the Town and Country Planning Act 1990 (as amended), commonly known as s106 agreements, are a mechanism which make a development proposal acceptable in planning terms, that would not otherwise be acceptable. They are focused on site specific mitigation of the impact of development. S106 agreements are often referred to as 'developer contributions' along with highway contributions and the Community Infrastructure Levy.

The common uses of planning obligations are to secure affordable housing, and to specify the type and timing of this housing; and to secure financial contributions to provide infrastructure.

The legal tests for when you can use a s106 agreement are set out in regulation 122 and 123 of the Community Infrastructure Levy Regulations 2010 as amended. The tests are:

- necessary to make the development acceptable in planning terms
- directly related to the development; and
- fairly and reasonably related in scale and kind to the development.

The Government viewed S106 as providing only partial and variable response to capturing funding contributions for infrastructure. As such, provision for the Community Infrastructure Levy (CIL) is now in place.

In terms of developer contributions, the Community Infrastructure Levy (CIL) has not replaced Section 106 agreements. The introduction of CIL has resulted in a tightening up of the s106 tests. S106 agreements, in terms of developer contributions, should be focused on addressing the specific mitigation required by a new development. CIL has been developed to address the broader impacts of development. There should be no circumstances where a developer is paying CIL and S106 for the same infrastructure in relation to the same development.

Section 278 Agreements – Highways Act 1980 - Developer Funded Improvements Works to the Existing Highway

Where highway objections to proposals can be overcome by improvements to the existing highway, developers can enter an agreement that requires them to pay for or undertake such works. These works may include minor highway realignments, roundabouts, traffic signals, right-turning lanes, passing bays, etc. S278 funds are exempt from CIL pooling restrictions.

DEVELOPMENT VIABILITY

A development's ability to contribute to infrastructure is dependent upon the value it will generate and the costs required to deliver it. This in turn is in part dependent on the value of the land. The "viability" of a scheme will impact on its ability to contribute through Section 106, CIL and other contributions to supporting infrastructure such as

highways provision, affordable housing, education and green infrastructure.

Residential Land Values across Surrey

Figure 6.1 illustrates average land values across local authorities in Surrey. This is based upon Valuation Office Agency (VOA) data an average price per hectare for land with planning permission for residential uses.

Across Surrey the average price ranges from £3,876,000 per hectare in Spelthorne to £7,081,000 in Elmbridge. In general it is not surprising that the local authorities with best connectivity to London (i.e Guildford, Woking, Elmbridge, Epsom & Ewell) have highest land values..

The estimated value of a typical residential site for England (excluding London) was £1,958,000 per hectare. When London is included the average value rises to £6,017,000 . All authorities in Surrey are significantly above the average for England.

It should be noted that the VOA produce annual reports of residential land transactions until late 2010 when Government withdrew funding for it. This is despite the requirement in the NPPF for local authorities to have regard to land values.

The locally-based values illustrated in Figure 6.1 are produced by the VOA on a theoretical basis and provide a means to compare variations across Surrey. However, they do not necessarily represent true land values, and are not able to demonstrate variations between sites or conurbations within each local authority.

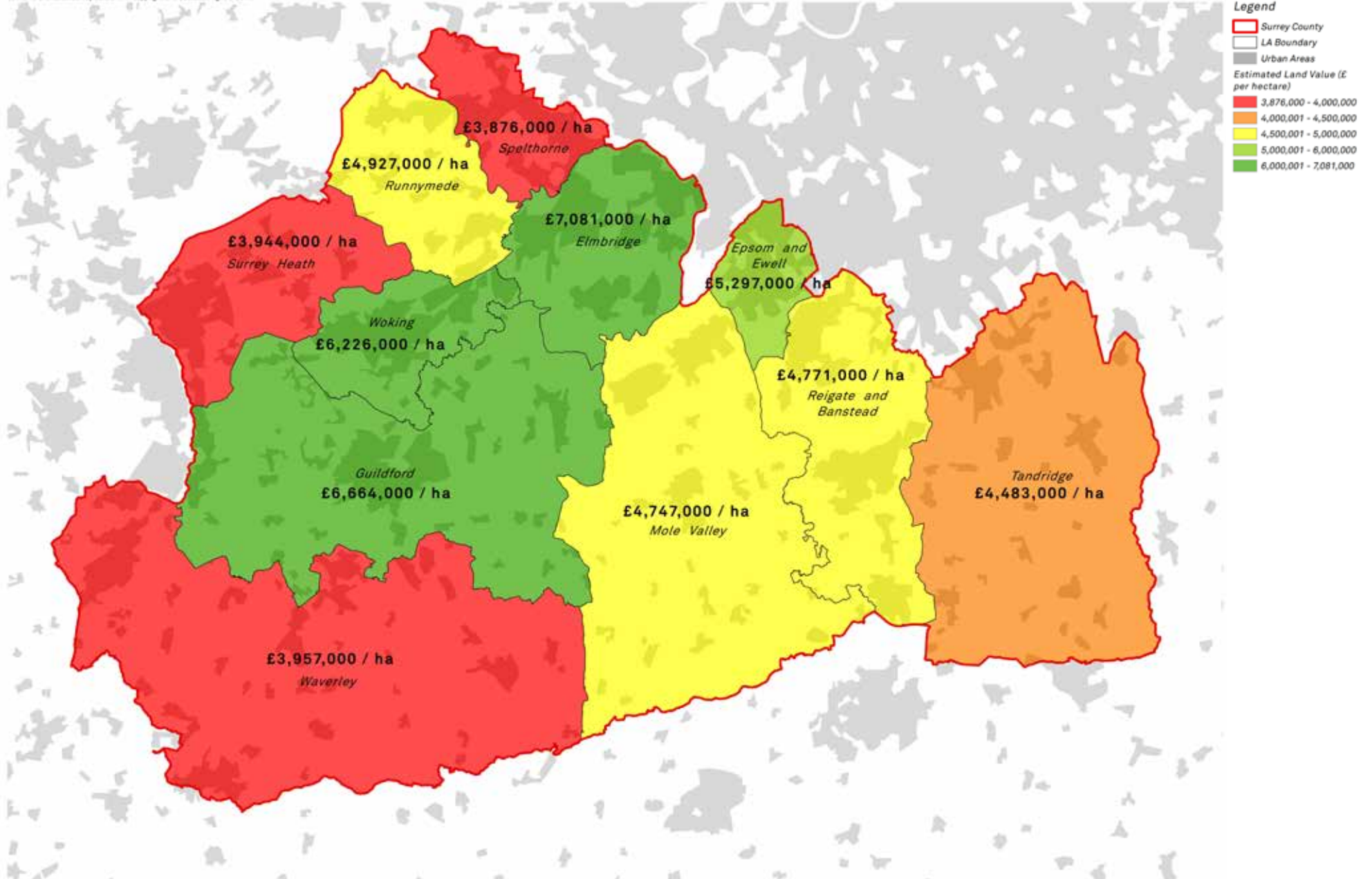


FIGURE 6.1 - LAND VALUES ACROSS LOCAL AUTHORITY AREA IN SURREY

Source: The Valuation Office Agency (VOA)

COMMUNITY INFRASTRUCTURE LEVY

The Community Infrastructure Levy (CIL) came into force in April 2010. It is a fixed tariff based levy directed at new development to fund infrastructure.

The Government considers the CIL to be “fairer, faster and more certain and transparent than the system of planning obligations which causes delay as a result of lengthy negotiations”. Levy rates are set by individual local authorities and may vary across each LPA and are subject to consultation with local communities and developers.

Figure 6.2 shows how CIL has been taken up across Surrey.

Six authorities are currently charging CIL with typical residential charges of between £100 and £150 per sq metre.

Reigate & Banstead and Mole Valley are expected to adopt their CIL in 2016. Meanwhile Runnymede and Guildford are each delayed in bringing CIL forward, as is Waverley’s work on CIL whilst the Council gives priority to preparing their new Local Plan.

As Figure 6.2 shows, adopted and draft CIL rates are fairly consistent across Surrey representing the viability of development is broadly comparable across the county.

IMPLICATIONS OF CIL REGULATIONS ON SECTION 106 AGREEMENTS

The 2014 CIL Statutory Regulations placed additional restrictions on LPA’s use of Section 106 funding. Since 6th April 2015 local authorities can no longer pool more than five s106 obligations together (dating back to March 2010) to pay for a single infrastructure project or type of infrastructure (however Section 278 agreements are unaffected). While this will not stop the use of S106 altogether, it now means that LPA’s must be clearer on what projects specific developments will be contributing to and restricts the ability of the county council to fund projects using S106 contributions.

6.3 PROJECT LIST FUNDING SENSE CHECK ASSUMPTIONS

TAKING INTO CONSIDERATION OUR UNDERSTANDING OF CURRENT AND PROJECTED DEVELOPER CONTRIBUTIONS AS SET OUT IN THE PRECEDING SECTIONS, THIS SECTION SETS OUT THE WORKING ASSUMPTIONS THAT WE HAVE USED IN ASSESSING LIKELY FUNDING AND GAPS FOR INFRASTRUCTURE PROJECTS TO 2030.

As set out in earlier chapters, the information on projects and costs set out within this study has been obtained from a variety of sources, with inputs from SCC officers, local authority IDPs and infrastructure providers.

In many instances information has been provided on likely costs but a considerable gap in information remains regarding likely funding sources.

In order to provide a “sense check” against total costs, a series of funding assumptions have been made based upon an analysis of current and projected funding sources.

A number of infrastructure topics have been assessed theoretically using benchmark calculations where no actual infrastructure projects have been identified. These theoretical costs have subsequently had a theoretical level of funding applied to them from either developer contributions, public sector funding or private sector funding.

The assumptions applied are set out here.

Developer Contributions

Table 6.2 on the facing page summarises our research into potential developer contributions through the community infrastructure levy to theoretically apply to projects with no identified funding. Surrey County Council have undertaken an estimate of potential CIL contributions across the Country in light of the fact that eight out of eleven authorities will be charging a CIL rate from 2016. Taking into account affordable housing exemptions the average level of CIL receipt per dwellings across all types of housing unit is estimated at £8,160.

The county have refined this analysis further with an assumed breakdown of this contributions across the various topics from transport, education through to the administrative costs of CIL. A different breakdown has been applied to those authorities charging for SANGS projects and those that are not. This breakdown and the list of authorities to which this applies are set out on the facing page.

These combined sources have allowed us to develop a working assumption with regards to the potential level of CIL contribution per unit that could be expected across each of the infrastructure topics. The analysis presented in table 6.2 suggests that a total contribution of £6,732 can be assumed per dwelling which has subsequently been applied to the post 2015 housing trajectories to generate the ‘Expected Funding’ presented within this report.

It is important however to note there will also be additional developer contributions in the form of S78 and S106, particularly in those local authorities where there are identified and potential strategic sites. There could also be some CIL contribution towards specific library projects and flood defences but both of these factors have not been included in the figures presented here and is therefore presented as a conservative estimate.

The county have established these estimated contributions only for the purpose of this study as a theoretical exercise and are based on the current CIL regulations which have the potential to change.

Public & Private Sector Funding Assumptions

A number of the theoretical costings can also be assumed as funded by either public or private sector organisations and subsequently be discounted from the identified funding gap. The table below highlights the % of identified costs assumed to be funded after all known secured funding and developer contributions have been taken into account.

Table 6.1

High level Funding Assumptions for Modelling

INFRASTRUCTURE	FUNDING WORKING ASSUMPTIONS	%
Healthcare	NHS	75
Waste Facilities	SCC / Local Authorities	75
Early Years	Private sector operators	90
Social Care	Private sector investment and institutional investment	90
Electricity & Gas	Electricity and Gas providers	100
Water and Sewage	Water supply and waste water providers	100
Broadband	Broadband communication providers	100

The funding assumptions presented on this page are indicative and provide an overall rule of thumb in sense checking funding streams required to support infrastructure delivery in Surrey. These should be subject to review in dialogue with county and local authority officers and other infrastructure providers.

SCC Estimated CIL contributions across Surrey Local Authorities	Local Authorities with SANG Projects	Local Authorities without SANG Projects	Applicable to Project List
Transport	£1,632	£1,632	100%
Education	£1,632	£1,632	100%
Local Authorities / healthcare	£1,877	£2,448	100%
Parish / Neighbourhood Proportion	£2,040	£2,040	50%*
SANGS	£571	£0	100%
CIL Administration	£408	£408	0%
Total	£8,160	£8,160	£6,732

Source: Surrey County Council

Local Authorities with SANGS:

Elmbridge, Guildford, Runnymede, Surrey Heath, Waverley and Woking

Local Authorities without SANGS:

Epsom & Ewell, Mole Valley, Reigate & Banstead, Spelthorne and Tandridge

*Working assumption applied that a percentage of the Parish / Neighbourhood meaningful proportion of CIL could be contributed towards local infrastructure projects.

SCC Estimated CIL contributions across Surrey Local Authorities		Per Dwelling CIL Contribution	
		Local Authorities with SANG Projects	Local Authorities without SANG Projects
Motorways			
Highways	50%	£816	£816
Public Transport	25%	£408	£408
Rail			
Other Strategic	25%	£408	£408
Primary Education	30%	£490	£490
Secondary Education	70%	£1,142	£1,142
Community Learning	5%	£145	£173
Early Years	5%	£145	£173
Primary Healthcare	15%	£435	£520
Acute Healthcare	5%	£145	£173
Mental Healthcare	5%	£145	£173
Adult Social Services			
Libraries			
Youth Services	5%	£145	£173
Community Facilities	20%	£579	£694
Sports Facilities	20%	£579	£694
Outdoor sport & Recreation	20%	£579	£694
Green Infrastructure	100%	£571	£0
Energy (Electricity & Gas)			
Water and Sewage			
Waste			
Broadband			
Flood Defences			
Total		£6,732	£6,732

TABLE 6.2 - REVIEW OF POTENTIAL COMMUNITY INFRASTRUCTURE LEVY CONTRIBUTION FORMING WORKING ASSUMPTION

6.4 ADDITIONAL SOURCES OF FUNDING

GIVEN THE LIMITATIONS OF CIL AND SECTION 106 TO FULLY FUND INFRASTRUCTURE ACROSS SURREY, CONSIDERATION MUST BE GIVEN TO WIDER (AND MORE INNOVATIVE) FUNDING MECHANISMS THAT ARE BEING DEVELOPED BY THE PUBLIC AND PRIVATE SECTORS.

CONTEXT

The market is in an economy where development investment finance is less freely available and risk is under greater scrutiny. This is coupled with an austerity budget position in the public sector resulting in lower availability of funding to support infrastructure projects.

Local authorities need to look across their full range of funding streams when considering delivery and prioritisation of infrastructure requirements. The flexibility to mix funding sources at a local level enables local authorities to be more efficient in delivering outcomes. Funding sources change over time with emerging priorities and changes in regime either at local, regional or national level. In addition, other partners and stakeholders may be able to play a part.

The following options reflect current possibilities for funding. They reflect a wide range of options based on proposals across Surrey, experience of the developer/ financier community and existing and emerging sources of public sector funding.

The analysis has focused on four categories:

- **Cash and Funds** – funding from sources of ‘investment capital’, including grant funding and commercial finance, potentially delivered through a joint venture mechanism;

- **Assets** – funding sources that arise from capturing an increase in land value;
- **Fiscal** – funding that comes from the application of main stream fiscal tools (e.g. business rates); and
- **Other potential funding sources** – thinking creatively and learning from other forward thinking authorities.

1) CASH AND FUNDS

PRUDENTIAL BORROWING (PUBLIC WORKS LOAN BOARD OR ‘PWLB’)

This is the main direct funding source for local authorities and is still perceived as a cheap form of financing. It is also arguably an efficient option to implement as the obligations fall predominantly on the local authority to ensure it has properly assessed affordability.

Under the PWLB option, SCC or the local authority would have to assess its own level of borrowing commitment at the time the capital is needed. Effectively, the local authority would have to assess the level of income it would generate against repayments it has to make, or whether wider County resources will be required.

It has the benefit of being a relatively reliable source of finance, not being subject to commercial market appraisals in the way that a bank financed project would be. However, it does place the local authority in a position of risk in terms of repaying the whole value of infrastructure from resources, if revenue or value through the schemes to come forward cannot be captured.

The PWLB has tended to offer an interest rate only 0.15-0.20% above the government’s borrowing costs, but in October 2010 this differential was raised to 1%. As a result,

a number of larger local authorities began to investigate whether a bond issue could achieve a more favourable interest rate. However, in the 2012 Budget, the Government introduced a discount for borrowing from the PWLB for local authorities which provided information requested on long-term borrowing and capital spending. This took the form of a new ‘certainty rate’, a discount from 1% to 0.80%, available from 1 November 2012. A further discount to 0.60% for borrowing regarding an infrastructure project nominated by a Local Enterprise Partnership was introduced in November 2013.

EUROPEAN FUNDING

This information is included for reference purposes to explain how previous funding sources have evolved into the current available funds. JESSICA funds were initially set up using European Regional Development Fund (ERDF) money. The JESSICA structure was focused around an Urban Development Fund (UDF), which held the ERDF money, and made either loans, equity or guarantee investments into projects. ERDF funding allocations were divided by the nine English regions in accordance with the former Regional Development Agency regions. The last round of funding was to last until 2013.

The UK Government has since brought the European Regional Development Fund (ERDF), European Social Fund (ESF) and part of the European Agricultural Fund for Rural Development (EAFRD) together into a single ‘EU Structural Investment Funds (ESIF) Growth Programme’ and made it available to Local Enterprise Partnerships (LEPs) on a competitive basis.

The large majority of the funds in the ESIF Growth Programme are allocated to LEP areas where LEPs work with local partners, to set out their priorities for the EU Growth Programme Funds in their area through an

investment strategy. This has been covered earlier within this chapter under the review of Enterprise M3 and Coast to Capital LEP's.

2) ASSETS

The increase in land value has been a mainstay of economic development financing over recent years. Utilising a range of tools, such as development agreements, local asset backed vehicles or other joint ventures, local authorities have been able to secure large amounts of infrastructure from improvements to land values. This has needed to be combined with careful use of planning consents and S106 agreements, but with the restrictions on pooling of S106 contributions moving forward then the ability to use this option may narrow.

LOCAL ASSET BACKED VEHICLE (LABV)

The rewards or benefits of a Local Asset Backed Vehicle (LABV) in certain circumstances outweigh the costs although the financial implications of setting up a LABV are significant. Procurement, preparing and agreeing legal documentation, to include specialist property and financial advice require significant Officer and external advisor time. Once in place, on-going management and due diligence needs to be considered, along with post procurement advice and support to the authority. If such costs were sought to be recovered through the vehicle it would in effect become a reduction of the land costs.

STRATEGIC ASSET MANAGEMENT

There are a range of approaches to ensuring public sector assets are managed to maximise efficiencies. A number of innovative approaches to asset management, co-location

of services and provision of infrastructure are underway in Surrey.

Surrey like many other counties are seeking innovative ways to maximise returns from their assets. For example, Cambridgeshire County Council have an initiative called Making Assets Count (MAC) which brings together the County Council, all of the Cambridgeshire District Councils, as well as Fire, Police and Health Authorities have formally signed up to the Project. MAC aims to reduce the size of the public estate by removing poor quality, inefficient and incorrectly located buildings from the property portfolio, making better use of the remaining property assets and investing in new assets where these are required. New assets will have a focus on providing joined-up services to the communities they serve and providing spaces for local groups to use.

3) FISCAL

BUSINESS RATE RETENTION - THE LOCAL GOVERNMENT FINANCE ACT 2012

Business rate retention and Tax Increment Financing represent a real opportunity to bridge the infrastructure funding gap. It has required the enactment of new legislation which received Royal Assent in October 2012 and produced the Local Government Finance Act 2012. The Act introduced local retention of business rates, as well as powers for the Secretary of State to introduce Tax Increment Financing to allow councils to borrow against future increases in income.

The Act allows local authorities to now retain a proportion of future non-domestic rates (business rates) growth, subject to various checks and balances. This is called the Business Rates Retention Scheme (BRRS). A proportion

of the business rates collected by billing authorities will be paid into a central pool (the central share) with the remaining proportion retained by the authority (the local share). Under the act, authorities will now get a 50% slice of business rates and then retain any new business levies generated in their areas over seven years. The previous regime saw all business rates returned to the Treasury for redistribution according to a formula.

This is intended to provide local authorities with a strong financial incentive to promote local economic growth. This is intended to give local authorities increased financial autonomy, the flexibility to design schemes which reflect local priorities and a greater financial stake in the economic future of their area, while providing continuation of council tax support for the most vulnerable in society, including pensioners.

TAX INCREMENT FINANCING (TIF)

Tax Increment Financing allows local authorities to capture the value of uplifts in local taxes (business rates) that occur as a result of infrastructure investment. Tax Increment Financing allows that uplift to take place by borrowing against the value of the future uplift to deliver the necessary infrastructure. Local retention of business rates removes the most important historic barrier to Tax Increment Financing schemes, namely that local authorities were not permitted to retain any of their business rates and therefore could not borrow against any predicted increase in their business rates.

Borrowing for Tax Increment Financing schemes therefore falls under the prudential system, allowing local authorities to borrow for capital projects against future predicted increases in business rates growth, provided that they can afford to service the borrowing costs out of revenue resources. However, such borrowing can only take place if local authorities and developers have a degree of certainty about the future tax revenue streams and whether there are sufficient guarantees that they will be retained within the authority.

The Local Government Finance Act includes two options for TIF. Option one would see local authorities, within the existing prudential borrowing rules, able to borrow against their income within the business rate retention scheme. Option two would allow a limited number of Tax Increment Financing schemes to be permitted in which the business rates growth would not be subject to the levy or reset for a defined period of time.

PRIVATE FINANCE 2 (PF2)

In December 2012, the Government concluded its review of PFI and published full details of a new approach to public private partnerships, Private Finance 2 (PF2). The Government remains committed to private sector involvement in delivering infrastructure and services, but has recognised the need to address the widespread concerns with Private Finance Initiative and the recent changes in the economic context

They key reforms are as follows:

- **Public sector equity** - The public sector will take an equity stake in projects and have a seat on the boards of project companies, ensuring taxpayers receive a share of the profits generated by the deal.

- **Encouraging more investors with long-term investment horizons** - The use of funding competitions will be introduced to encourage institutional investors such as Pension Funds to compete to take equity in a PF2 project after the design stage. This is significant in terms of risk as Pension Funds are unlikely to invest in projects that are insufficiently developed.
- **Greater transparency** - Companies will have to disclose actual and forecast annual profits from deals. The new PF2 structure will curb gains to be made from refinancing and un-utilised funds in lifecycle reserves.
- **More efficient delivery** - An 18-month limit on procurement will be introduced. Failure to meet this limit will see the respective public sector body lose funding.
- **Future debt finance** - the tender process will require bidders to develop a long-term financing solution where bank debt does not provide the majority of the financing requirement. Institutional investment will, therefore, become an important source of finance for PF2.

The first confirmed programme to which PF2 has been applied is the £1.75 billion privately financed element of the Priority Schools Building Programme (PSBP). While the immediate PF2 pipeline is focused on accommodation projects, an asset class which has been a particular focus of the PFI reforms, the Government wants to ensure that all suitable projects take advantage of the benefits of PF2. Looking forward the Treasury will work with departments to assess which future projects are eligible for PF2.

4) OTHER POTENTIAL FUNDING SOURCES

There is the option to think 'creatively and bigger' and consider a range of further public and private sector sources, including but not limited to the following:

REVOLVING INVESTMENT FUNDS (RIFS)

The pooling of investments to create a regional fund for economic investment. These Revolving Investment Funds (RIF) provide access to a flexible source of capital that can be used to finance projects. Importantly this finance is provided as a loan, not a grant or subsidy. They will not provide quick fix solutions but have the potential to provide a vehicle for local investment that allows more entrepreneurship and experimentation than grant funding models.

There is on the ground experience to draw on in establishing RIFs, for example the Evergreen North West Fund, London Green Fund and the Cambridgeshire Horizon's rolling fund, but the model is new and will require ongoing evaluation to ensure that ventures are supported that realise the best returns. In the face of major cuts to grant funding a number of local authorities are considering the creation of similar schemes for regeneration and infrastructure.

PENSION FUNDS

The Local Government Pension Scheme (LGPS) is a funded, statutory, public service pension scheme. DCLG is responsible for the scheme's stewardship and maintaining its regulatory framework. It is administered and managed by local pension fund authorities. At the end of March 2013, the market value of the 81 funds in England was £167 billion.

A number of recent studies have looked at whether there is more scope for LGPS funds to do more to invest for wider social and economic benefit. A study by the Smith Institute in 2012 summarised the key barriers to developing impact investments (particularly for infrastructure funds) were managing reputational risks associated with new investments and potential conflicts of interest, especially where local infrastructure schemes were concerned. Despite these perceptions, investment for wider impact was certainly much higher up the agenda of all the funds interviewed.

Its recommendations for change included better guidance for local funds, changes to restrictions on investments in the Investment Regulations and the creation of an enabling platform or clearing house. Another report published in 2012, by *Localis*, said that local authorities should be prepared to see an additional 8.5% of LGPS funds invested in domestic infrastructure.

In 2012, DCLG carried out a consultation on possible changes to the Investment Regulations. It proposed two options for overcoming perceived barriers to investing in infrastructure. As a result of the consultation, it amended the investment regulations to increase the proportion of the capital value of a fund that could be invested in partnerships. The CLG said the change would give funds more scope to “invest in infrastructure projects subject to a full risk assessment and satisfying themselves there is no conflict of interests”.

LOCAL AUTHORITY BONDS / MUNICIPAL BONDS AGENCY

Local authorities have always had the power to issue bonds. Municipal bonds were used regularly throughout the early and mid-20th century, but fell into disuse during the 1970s and 1980s, as central government introduced controls over capital finance. The Public Works Loan Board

became the main source of borrowing during this period. Bonds allow local authorities to raise substantial sums of capital immediately, on the basis of promises to repay the capital with interest at a specified point in the future.

It would be possible for a local authority to issue bonds as part of a TIF process. Money would be obtained up-front by selling the bonds (instead of approaching financial institutions), and they could be repaid by the additional tax revenues resulting from the public investment. TIF takes this form in many cities in the USA. If the future tax revenues do not materialise and the local authority is thus unable to repay the bonds, this will of course cause financial problems for the local authority.

Local authorities’ borrowing limits will be related to the revenue streams available to them, which influence their ability to repay the debt. Local authorities are prevented by law from using their property as collateral for loans. The only recent instance of bonds being issued is that of the Greater London Authority (GLA), which issued £600 million of bonds to raise funds for Crossrail. The GLA however has access to substantial revenue streams compared to most local authorities (such as fare revenue from Transport for London), and its borrowing capacity will therefore be proportionately larger.

The LGA produced a report in mid-2012 proposing to create a collective bond issuing agency. Participation would not be compulsory, but would be attractive to smaller authorities which might not be able to obtain the best price in the conventional bond market. The agency would also obviate the need for the participating councils to have a credit rating, though they would be required to supply financial information to allow investors to judge the agency’s collective creditworthiness. Participating authorities

would also be required to supply a small proportion of their desired loan in capital.

The business case assumed at least tacit support from government. Such support is critical in order for financial markets and bond investors to have confidence in the proposed agency. Securing and maintaining the necessary government support is a considerable risk as it appears that some parts of central government may be sceptical to the prospect of such an agency being created at this point.

Interest in this project was rekindled in late 2013, when the LGA management board voted to press ahead with the creation of such an agency. At least eighteen local authorities have expressed interest in participating in the new agency. LGA Modelling work suggests that a Municipal Bonds Agency would allow councils to raise funds at a significantly lower rate than those offered by the PWLB. The model showed that a council borrowing £100 million over 20 years would stand to save as much as £4.7 million compared to a PWLB loan.

CROWD FUNDING

Crowdfunding is the practice of funding a project or venture by raising monetary contributions from a large number of people, typically via the internet. The crowdfunding model is fuelled by three types of actors: the project initiator who proposes the idea and/or project to be funded; individuals or groups who support the idea; and a moderating organization (the “platform”) that brings the parties together to launch the idea. There are two primary types of crowdfunding:

- **Rewards Crowdfunding:** entrepreneurs pre-sell a product or service to launch a concept without incurring debt or sacrificing equity/shares.

- **Equity Crowdfunding:** the backer receives shares of a company/project, usually in its early stages, in exchange for the money pledged. The company/project's success is determined by how successfully it can demonstrate its viability

A variety of crowd funding platforms have emerged to allow ordinary web users to support specific philanthropic projects without the need for large amounts of money. Several dedicated civic crowdfunding platforms have emerged in the UK, some of which have led to the first direct involvement of local governments in crowdfunding. Notable examples include:

- Bristol City Council's Mayor's Fund – crowdfunding grants for local charities and social enterprises in as part of its 'Mayor's Fund'. The grants for 2013/14 will fund work with disadvantaged young people and children in Bristol.
- Mansfield District Council - Mansfield District Council successfully used the crowd sourcing platform **Spacehive** to raise over £36,000 to install free public WiFi across Mansfield.

There are limitations however, most projects are highly local, limiting the size of the community that might support and financially invest in an idea. Typical campaigns have generated funding around the tens-of-thousands mark. This would not be enough to support larger projects that local government is involved with, such as transport infrastructure and educational projects. This leaves the question of whether locally backed projects can raise enough money to support larger initiatives? It may be the case that crowd funding represents a potential funding stream for the smaller social infrastructure and desirable local level projects that can often be overlooked when

allocating limited funding across a range of infrastructure requirements.

SOCIAL INVESTMENT

Social problems transfer from one community to the next, from one generation to another. By investing repayable and recyclable capital into tackling social problems, two types of returns are generated: financial returns to investors, but social returns to investors and to society more generally. This is empowering, efficient and necessary.

Social impact investment is the provision and use of capital with the aim of generating social as well as financial returns. This type of investment carries an expectation of repayment of some or all of the finance. It can cover loans, equity, bonds, and is sometimes used alongside other instruments, such as guarantees or underwriting. As with any other investments, where the investee business performs well, returns generated may be principally reinvested in the business, as well as offering a limited proportion of these to investors.

Investors in social outcomes weigh up the balance between the social and financial returns which they expect from an investment, according to their own priorities. They may accept lower financial returns in order to generate greater social impact.

OVERSEAS SOVEREIGN WEALTH FUNDS

The UK, particularly the London region, offers an extensive set of infrastructure investment opportunities, including in the regulated utility, power generation and transportation sectors. The UK's longstanding track record of private ownership and robust rule of law makes it amongst the most attractive jurisdictions for infrastructure investing."

There is presently strong interest in the UK infrastructure market amongst overseas investors, including Middle East and Far East sovereign wealth funds as well as more traditional investors such as pension funds and which are struggling to find attractive opportunities to invest their cash amid record low interest rates, are committing more money to real assets, which promise higher returns as well as an annual cash yield. Infrastructure funds attracted \$40.7 billion in 2013, compared with \$30 billion the year before and nearing the 2007 peak of \$44 billion, according to Preqin, a global venture capital consultancy.

However, despite the strong interest in the UK market among investors, there are still hurdles to overcome as institutional investors attempt to marry their responsibilities and duties within tight legal and regulatory frameworks that vary across borders. Infrastructure debt competes for attention with other asset classes, and strong competition might see investors move their investment allocations away from the UK's infrastructure assets towards other asset classes.

INDUSTRY AND BUSINESSES

Surrey County is home to a wide range of businesses from multi-national firms to local family run businesses. All of these enterprises have a strong interest in ensuring the appropriate investment in infrastructure is maintained to support economic growth in the County. These firms represent a potential source of partner funding.

THE VOLUNTARY SECTOR

The voluntary sector (from voluntary organisations to individual volunteers) play an integral role in the delivery of social infrastructure provision across the County and will continue to provide capacity to support the existing and new population and assist in the delivery of new projects.

CONCLUSIONS

As identified at the outset of this document, this draft of the Surrey Infrastructure Study presents an overarching baseline of growth patterns, infrastructure projects and cost requirements and gaps. It has been produced drawing upon information obtained through Surrey County Council officers and following a period of engagement with the Local Authorities and other infrastructure providers.

The study provides a “snap-shot” in time, reflecting the position during July 2015. It must be remembered that the growth and development context is in a constant state of flux and with all LPAs in Surrey at varying stages in developing and implementing their local plans, and negotiating planning consents, the position will change over time.

The preparation of the study has demonstrated strong collaborative working between the county and local authorities. It has however shown that shortfalls exist in terms of a standardised agreed approach towards a study of this kind including the collection of data on housing and employment sites, population forecasting, modelling infrastructure requirements and the costs and funding assumptions for that infrastructure.

The following key findings have been established:

- Surrey authorities are planning to accommodate housing and economic growth over the 15 year period to 2030 delivering on average **3,137 dwellings per year**. This compares to completions of 2,495 dwellings per year across Surrey from 2010 to 2014.
- **47,053 dwellings** are expected between 2015 and 2030 with an associated population **increase of 60,991 people** (an increase of 5%).
- Delivering the necessary infrastructure to support that growth from now to 2030 is estimated to **cost at least £5.37 billion**.
- The study has estimated a combination of secured funding (over £993 million) and potential funding from the public sector, private sector and developer contributions (£1.23 billion). It is important to note that a full review of the funding position for each project included in the study is required to refine this estimation. This has been outside the scope of this project.
- Taking into consideration the potential funding identified, a **minimum gap in infrastructure funding of 3.2 billion** still remains between now and 2030.
- The study demonstrates that current anticipated developer contributions, Central Government grants and other sources of income are not sufficient to support the scale of growth anticipated in Surrey in the period to 2030. This is without consideration of further potential changes to current funding sources which may reduce finances further, such as reduction

in grants or additional exemptions from the Community Infrastructure Levy (CIL).

- CIL is at varying stages of adoption across the county reflecting variations in land value and the amount of money that will be collected. The identified funding gap should be considered and taken into account when setting CIL rates.
- The infrastructure requirements and associated costs presented represent a **minimum scenario** as these are based on a population forecast constrained by planned housing sites as opposed to ONS population forecasts.
- **ONS population forecasts for Surrey over the same 15 year period are 132% higher than the study forecasts.** The estimated costs associated with the infrastructure to support the population growth could therefore be increased considerably if a growth level nearer the ONS forecast was realised.

The following key steps have been identified for Surrey and its partners to take the study findings forward:

- Revisit the evidence base behind this study on a regular basis in collaboration with partners to maintain a rolling understanding of the infrastructure landscape and funding priorities.
- Consider the implications of infrastructure providers decisions both now and in the future. This study has used standard metrics to determine requirements for some infrastructure elements (such as healthcare, libraries, community and leisure, youth services, social care accommodation etc), but the actual requirements will be heavily dependent on service decisions on new

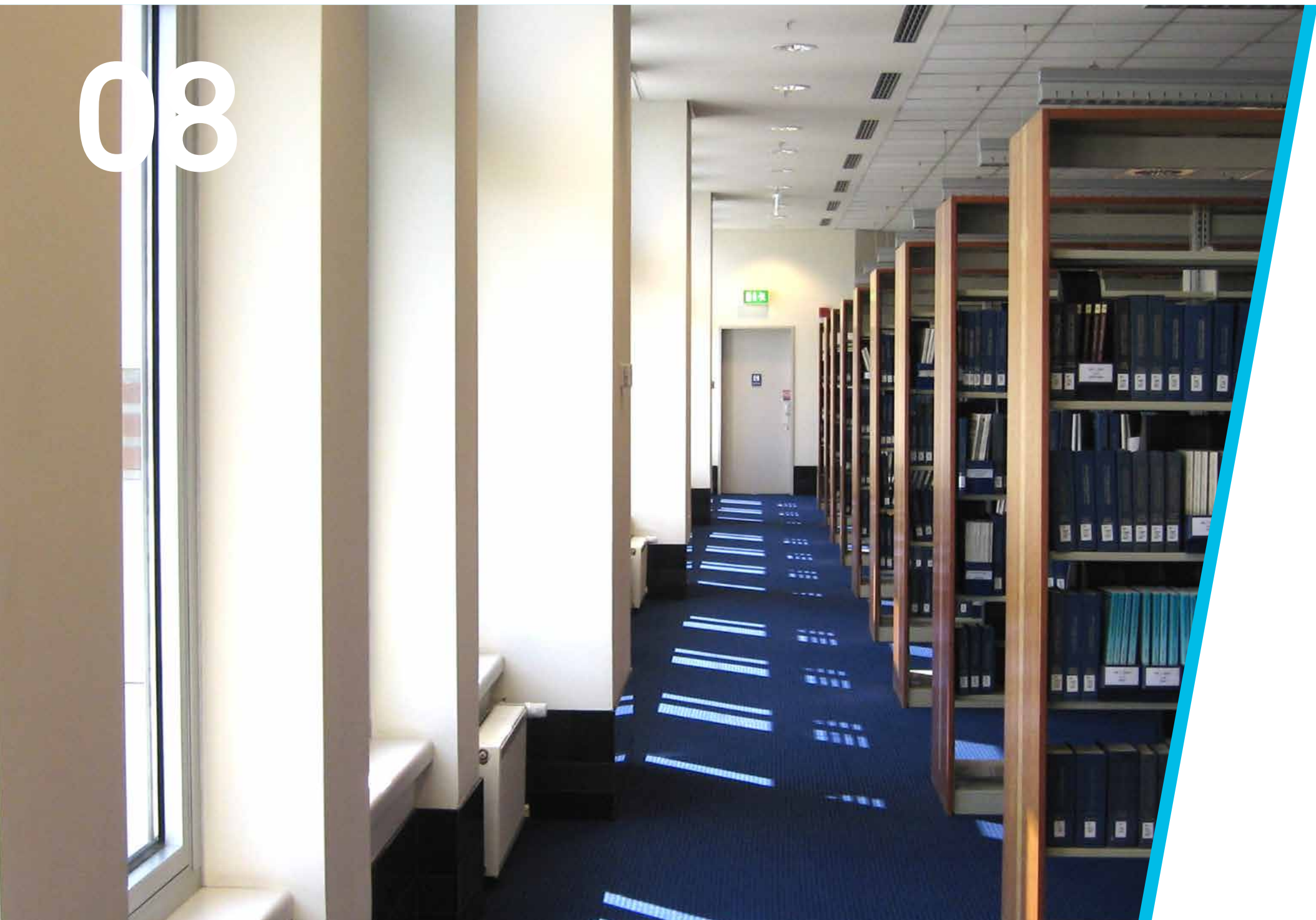
delivery models which are affected by regulatory, financial and technological changes.

- Use the study as a tool for engagement with Central Government in demonstrating the challenges faced in supporting growth within the county.
- Continue to work with local authorities and other infrastructure providers to maintain an up-to-date understanding of growth distribution and supporting infrastructure.
- Use the study as a basis for identifying local level shortfalls to support bids for future funding, including potential means outlined in Section 6.
- Undertake further work to review funding sources and cost assumptions to verify the study assumptions to assist in making representations to Central Government on infrastructure and funding issues.
- Conduct an in-depth review of potential funding mechanisms and their ability to fund infrastructure in the county.
- Develop a wider linkage to asset management reviews to best utilise county council estate.
- Continue dialogue with the GLA and CLG on wider growth issues including London overspill.
- Continue to work with the Local Enterprise Partnerships and other county councils in the South East on strategic issues and priorities - in particular transport - to support growth. This may include linkages to London and radial routes to better connect the wider South East. In addition, considering the impacts of major

infrastructure proposals such as airport expansion and the Crossrail extension.

- The study also provides an opportunity with regards to Green Infrastructure for Surrey to lead the way by embracing a “natural capital approach” to its future decision making in the widest sense and not just as a Green Infrastructure initiative.
- Improve understanding and dialogue with evolving infrastructure delivery and management regimes, i.e. NHS services, adult education, library services etc.
- Develop a long-term strategy for infrastructure investment and how it relates to planned growth, phasing, and the relationships (i.e potential synergies and conflicts) between different types of investment .

08



INFORMATION CAVEATS

COST CAVEATS

AECOM costing advice is provided within this document and should be qualified as high level estimates given a lack of detailed scheme information. These cost caveats apply to the following topics within this report:

- Transport Projects (where SCC / HE / Network Rail and others have not provided cost estimates)
- Healthcare Projects and Social Care Accommodation
- Community, Library and Youth Spaces
- Open Space Provision
- Community Learning
- Children's Playgrounds
- Indoor and Outdoor Sports facilities
- Electricity Connections
- Gas Connections
- Potable, Waste and Surface Water Infrastructure
- Communications
- Waste Facilities

The following caveats apply to all costing provided by AECOM:

- The information on which the cost estimates are based is very limited at this stage. As such, all of the costs are to be treated as "indicative" of the type of works stated rather than a specific estimate of the actual works.

- The works are assumed to relate to level greenfield sites with good access and no abnormal restrictions in respect of working hours and the like.
- AECOM have excluded all land purchase, demolition and site preparation that may be required.
- In respect of ground conditions, AECOM have excluded the impact of encountering archaeological remains, contamination, high water table level, major "soft spots" and underground obstructions. It also excludes encountering and diverting existing utilities and drainage.
- As AECOM do not have sufficient details of the individual sites that will be developed, we have excluded any allowances for external works i.e. all works outside of the building footplate.
- The costs are all based on a notional project that starts and completes in July 2015 and therefore all inflation costs are excluded.
- AECOM have excluded professional fees and survey works and all other consultants fees and planning / building regulation costs that would apply to the works.
- AECOM have excluded all phasing and temporary works that could apply to the works.
- AECOM have excluded all maintenance and operational costs.
- AECOM have excluded all loose fixtures, fittings and equipment and in particular specialist equipment.
- AECOM have excluded all VAT.

The following infrastructure topic costs are based primarily on the following sources although this list is not comprehensive:

- Highways - SCC / Local Authority IDP's
- Motorways - Highways England / SCC / Local Authority IDP's
- Rail - Network Rail / SCC / Local Authority IDP's
- Public transport and other transport - SCC / Local Authority IDP's
- Education - SCC
- BDUK Broadband - SCC
- Electricity - UKPN / SCC / Local Authority IDP's
- Flood Defences - SCC / Environment Agency

DATA CAVEATS

This study aims to present a vast amount of information in as simple and digestible format as possible. AECOM have received data from a number of stakeholders and partners and this section sets out key caveats that have been supplied alongside that data.

ELMBRIDGE

The housing trajectory supplied is caveated to include the following:

- Total completions data for all housing sites for 2014/15
- All housing sites under construction at 1 April 2015
- All housing sites with planning permission at 1 April 2015
- Opportunity sites (identified future housing sites in the Land Availability Assessment (LAA))
- Windfall
- All net yields

The figures are caveated with the following assumptions:

- Completions in 2013/14 (251 units)
- Completions in 2014/15 (286 units)
- Sites under construction (388 units) counted split with the majority included in 2015/16 and remainder in 2016/17 and 2017/18 (242, 73, 73 respectively)
- Sites with planning permission (660 units) split evenly over 2015/16, 2016/17, 2017/18 (220 each year)
- Windfalls – average of 86 per year counted from 2019/20 onwards

- Opportunity sites – estimates made as to which year they will come forward in based on 5 year estimates in LAA (1-5 yr = 444; 6-10 yr = 341; 11-15 yr = 170). Total number then averaged over each 5 year period.

Some opportunity sites have been removed as they have either achieved planning permission or come forward for another use. Please note, as we have not yet started our annual update of the LAA we have not done the additional work of identifying new opportunity sites from pre-apps/enquiries/call for sites. This represents the churn of sites we see in the LAA and it is therefore likely that the pot of opportunity sites is fewer than it would be following a full annual update of the LAA.

EPSOM & EWELL

The majority of future growth in Epsom & Ewell will come forward through intensification on small sites with a cumulative impact on infrastructure demand. As it is unlikely that large sites will come forward, it will be difficult to secure large scale infrastructure. Therefore the quality and type of development is important not just the quantity.

GUILDFORD

The figures and sites used for housing are sourced from the draft West Surrey SHMA (2014), draft Local Plan (consultation version summer 2014), the SHLAA (May and June 2014), and monitoring data (planning permissions not yet completed). The draft Local Plan carries little weight at this stage, and the figures included in this study do not reflect an agreed housing number for Guildford Borough, or agreed sites for allocation. Many responses were received during the consultation on the draft Local Plan.

The draft West Surrey SHMA identified a range for overall need for housing in Guildford over the 2011 - 31 period of 620 – 816 homes a year and the draft Local Plan identified

652 homes a year (2011-2031) as its proposed housing figure.

With regard to employment sites, these are sourced from monitoring data (planning permissions not yet completed) and from the draft Local Plan. These figures are caveated in the same way as the housing data and it should also be noted that, alongside re-appraisal of sites and updates of evidence base, a Town Centre Master Plan is also being prepared.

The currently published ELNA (September 2015) takes into account recent Planning Practice Guidance and shows a significantly reduced need for industrial floorspace compared with the draft Local Plan 2014.

REIGATE & BANSTEAD

The housing trajectory supplied to SCC is indicative only and is based on the following:

- Total completions data for all housing sites 2013/14 and 2014/15
- Figures for 2015/16 to 2021/22 are based on indicative unpublished housing trajectory information as at May 2015
- Core Strategy annual average figure post 2021/22

RUNNYMEDE

As part of Runnymede Borough Council's ongoing cooperation with other Local Planning Authorities, including the County Council, data has been provided from past and emerging housing trajectories illustrating the anticipated deliverable and developable sites that may come forward in the current emerging plan period.

Like all trajectories their accuracy reduces over the longer period and while likely delivery in the early part

of the plan period (the next five years) is considered to be relatively accurate, based as it is mostly on sites with planning permission that have been judged deliverable through past published Strategic Housing Land Availability Assessments, the later periods (years 6-10 and 11-15) are less likely to be accurate. Many of the sites identified in these periods have yet to be subject to the objective assessment of the Planning process and some are reliant on changes in planning policy that may or may not be introduced as part of the emerging Local Plan in Runnymede. It should be noted that the Council has not yet decided upon the housing allocations that will be made to help meet identified needs. There is no commitment by the Council at this stage in the plan making process to see the development of the DERA site as part of its housing strategy. The depiction of the site in the plan at page 5 is simply for the purpose of illustrating the Council's intention to consider the possible removal of sites from the Green Belt for development. No decision has yet been made as to which sites, if any, this will be.

However the work of AECOM to inform the Surrey Infrastructure Plan, for which this data has been provided, is seeking to provide a county-wide view of infrastructure needed to support growth set out in current and emerging Local Plans. As the emergence of new Local Plans are on radically different timetable across the County this will lead to apparently anomalous differences in anticipated growth and consequential supporting infrastructure need. The period of assessment by AECOM, up to 2031 and beyond, will, of course, ensure that every Local Planning Authority in Surrey will have replaced their current Local Plan with newer, up to date documents. Consequently any housing or other trajectory extending into approximately 2020 or beyond will not reflect the inevitable change in local policy and the implications that may have on housing delivery.

For this reason, while Runnymede Borough Council has provided a Housing trajectory of sites known to the LPA at this time it is not recommended that any future assessment of infrastructure need is based on this trajectory and instead greater infrastructure need should be modelled to account for the likelihood that Runnymede, as well as all other Local Authorities, is likely to have to take steps in emerging Local Plans that will take effect before 2020 to significantly increase the supply of housing wherever possible.

It is therefore recommended for Runnymede, and indeed for all Surrey districts and boroughs, a more unconstrained household growth projection is used to model infrastructure need from 2020 onwards. This may be sourced from either recently completed SHMA documents or from the published DCLG household projections. While it is likely that full objectively assessed housing need may not be met within the individual boroughs and districts of Surrey, due to the significant constraints of flooding, ecology and green belt, amongst others, this 'maximum' growth projection will enable infrastructure need to be modelled to ensure infrastructure provision should not be considered a constraint in itself. As emerging Local Plans reach a stage of maturity that weight can be given to them the actual infrastructure need, through local Infrastructure Delivery Plans, can be assessed in the appropriate detail to ensure it matches the actual growth forecast at that time.

A growth projection for each year after 2020 in Runnymede of 459 dwellings per annum should therefore be used by AECOM in their modelling work. This figure represents the bottom of the range of objectively assessed housing need in Runnymede's part of its local housing market area, and this reflects a reasonable estimate of maximum housing delivery that could, objectively be delivered in the Borough subject to ability to deliver specific new planning policies

to radically increase housing delivery. This figure may not be placed in the public domain until such time that Runnymede Borough Council has published the same in its formal SHMA document, anticipated to be in June 2015.

While achieving a consistency of approach to such modelling between Surrey districts and boroughs appears unlikely due to the different timetable of plan making, it is recommended that very clear caveats and explanations are included in any emerging work to enable readers to distinguish the different approaches taken by different LPAs and thereby understand any anomalies that are likely to arise from a district or borough choosing to not reflect the possibility of improved housing delivery in their areas in the future.

TANDRIDGE

Tandridge recognises that this document presents a snapshot in time. Since then Tandridge has updated many evidence bases and these are available via the Tandridge web site.

