

KENT AND MEDWAY GROWTH AND INFRASTRUCTURE FRAMEWORK

KENT COUNTY COUNCIL

2018 UPDATE



EXECUTIVE SUMMARY

The link between infrastructure and growth is well known. Robust infrastructure can fundamentally unlock the viability of development. Infrastructure frameworks such as the Kent and Medway Growth and Infrastructure Framework (GIF) should be at the forefront in spatial planning considerations, but freedoms and flexibilities need to be extended to allow for a tighter and more collaborative response to barriers to infrastructure delivery.

PURPOSE OF THE GIF

There is value in having infrastructure and growth requirements considered over a wider geography to provide a spatial perspective. The GIF has been prepared by Kent County Council (KCC) to provide a view of emerging development and infrastructure requirements to support growth across Kent and Medway. KCC has worked closely with Medway Council, districts and boroughs, and key strategic partners in the preparation of this framework.

The GIF provides a strategic framework across the County, for identifying and prioritising investment across a range of infrastructure, for planned growth up to 2031. It draws together information and data from a range of sources, including district Local Plans, Infrastructure Delivery Plans (IDPs) and infrastructure and service providers. The framework is also fundamental in providing robust evidence to attract investment and engagement, and in supporting the case for public funding bids and packaging projects for major private sector investment.

Ultimately, the GIF will help to ensure that Kent residents enjoy a good quality of life through well-planned, sustainable development that is supported by the right infrastructure and services. By planning strategically, it enables Kent and Medway to respond to the growth pressures on the County's housing and infrastructure needs, while supporting growth pressures from London.

A COUNTY UNDER PRESSURE

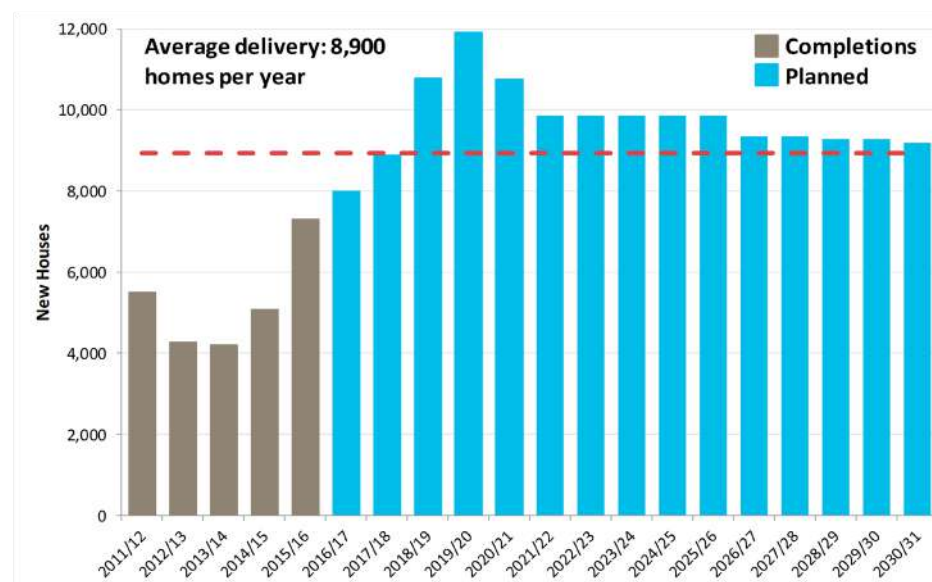
Over recent years, Kent and Medway have delivered some of the highest rates of housing delivery in the country; however, the infrastructure has not kept up with the pace of growth. Growing congestion on roads and in towns, overcrowded trains and ever longer waiting times to access health facilities have meant a continued challenge to the quality of life for residents and businesses. For years, housing

and population growth has far outpaced the delivery of the infrastructure required to sustain it. Combined with unprecedented funding challenges, local services across the County have been brought to breaking point. Nonetheless, the County remains critically important to national productivity and is strategically located as the main international gateway into the UK from Europe, being a key link to the investment being made in the Midlands Engine and Northern Powerhouse. The County holds important connections in relation to London, as well as already having made crucial contributions to the Government's housing agenda.

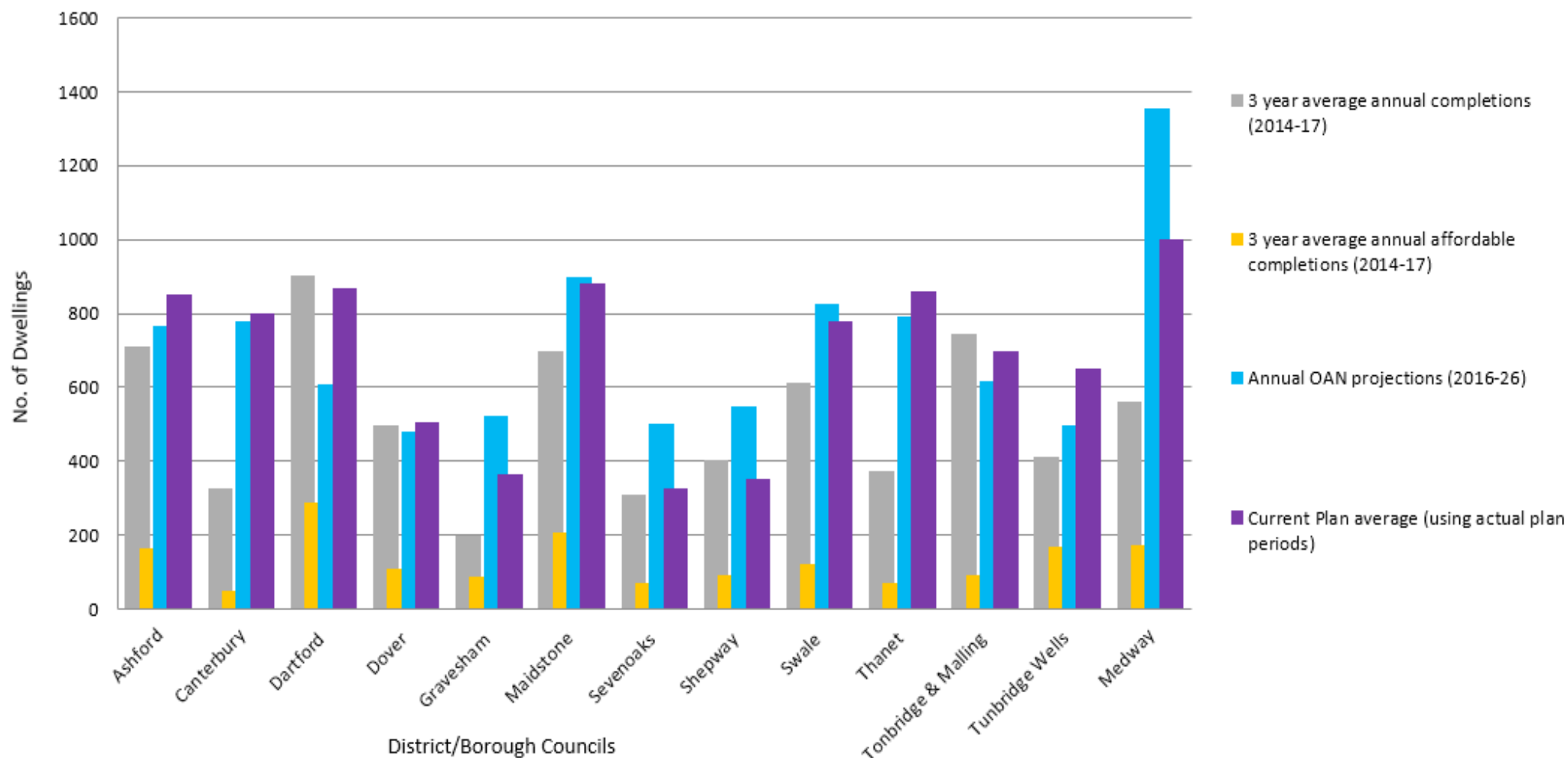
The UK is the third worst country for congestion in Europe in terms of peak hours spent in congestion, with the most traffic hotspots¹. There was a 14.3% increase in the number of vehicles on major roads in Kent between 2006 and 2016². Additionally, there has been an increase of 42% in people using train stations in Kent in the past ten years³. In 2016/2017, 1.8 million people used Ebbsfleet International Station, whilst the passenger usage of Canterbury West has almost doubled in the last ten years.

THE GROWTH CHALLENGE

Kent and Medway's growth aspiration up to 2031 is equivalent to building another town the size of Faversham every year, for 20 years! Our ambition is high. In 2016/17, we delivered the highest completion rate of all the shire areas in the country*. However, the scale of the challenge cannot be underestimated - the pace of development remains behind an average requirement of **8,900 homes per annum to 2031**.



Kent and Medway Housing Delivery and Projections



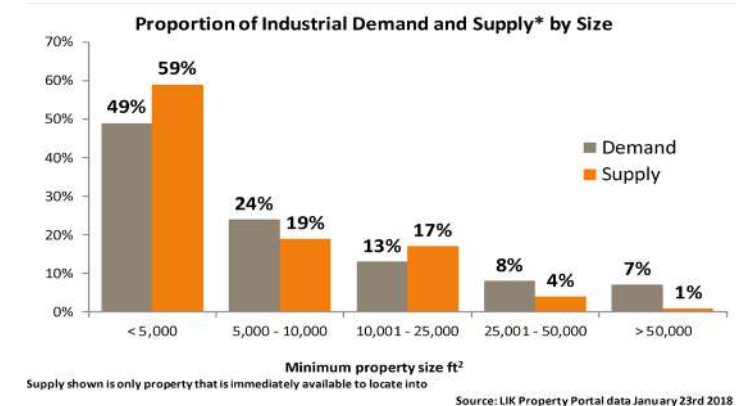
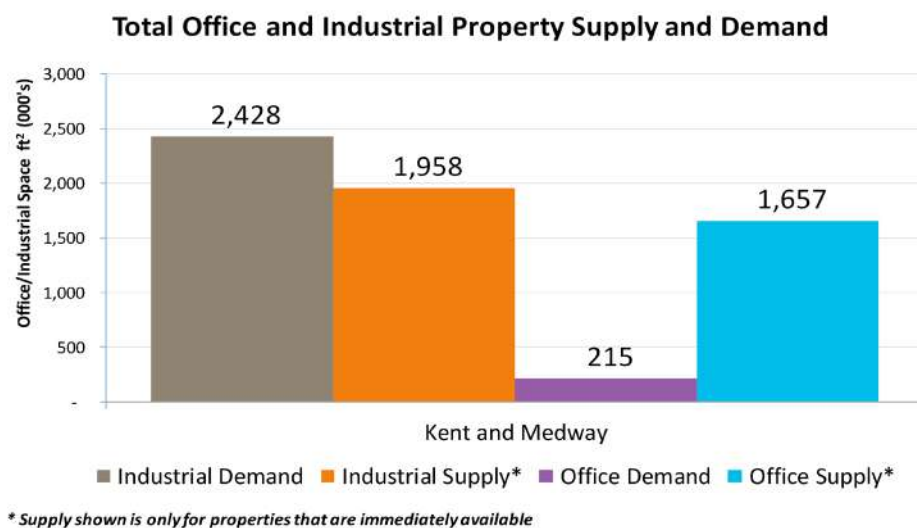
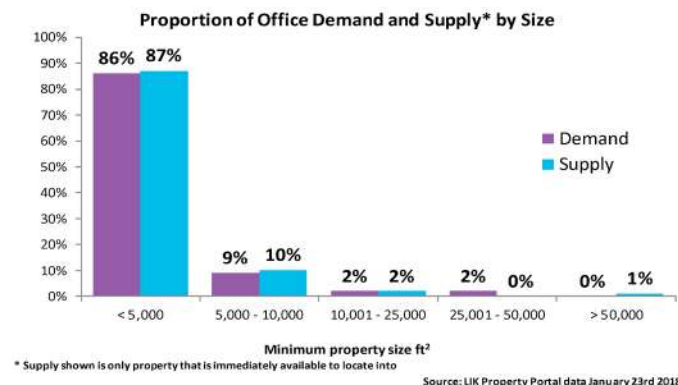
1 <http://inrix.com/press-releases/traffic-congestion-cost-uk-motorists-more-than-30-billion-in-2016/>; 2 <https://www.dft.gov.uk/traffic-counts/area.php?region=South+East&la=Kent>; 3 Office of Rail and Road

*Shire Counties exclude all Unitary Authorities within each geographical county

There are approximately 770,000 existing housing units across the County. To accommodate the forecast increase in population, local authority housing forecasts indicate that some **178,600 housing units are planned** across Kent and Medway between 2011 and 2031. **Between 2011/12 and 2016/17, a total of 30,537 houses were constructed across Kent and Medway.**

Despite increases in housing delivery over recent years, there remains a significant challenge in delivering at the planned rate of required growth. The pressures facing local authorities across Kent and Medway in meeting current Objectively Assessed Needs (OAN) remains significant.

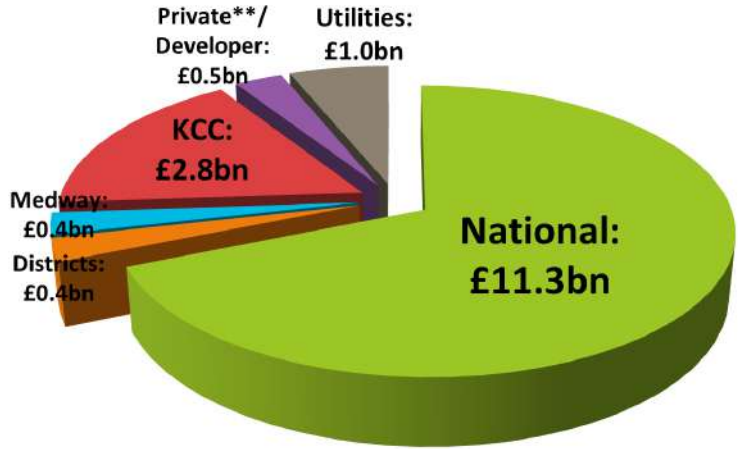
A key challenge facing the growth agenda is how to attract inward investment and employment opportunities that enable the area to grow economically. There is a need for the local economy to provide the right space in the right location, to encourage businesses to set up and grow. Evidence indicates that suitable commercial space is in limited supply and with a Government agenda focused on the housing crisis, the challenge of delivering suitable commercial space links back to viability challenges.



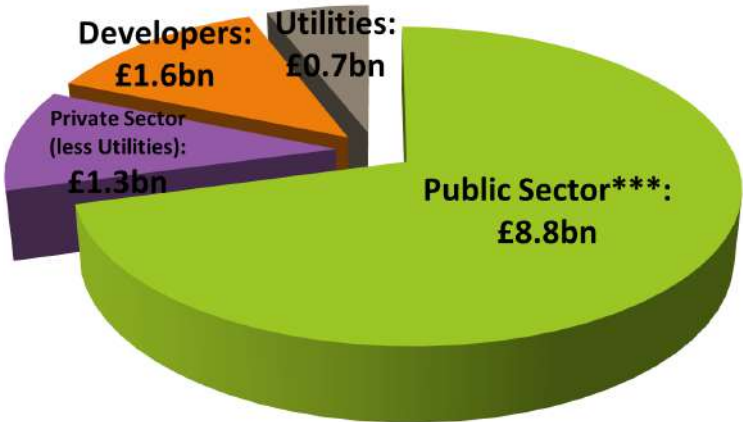
THE BURDEN OF RESPONSIBILITY

The GIF identifies that 76% of the infrastructure required for growth will be funded. Only 5% of the total requirement has funding that is secured. The remaining funding is “expected” based on previous rates of attracting developer contributions and at which other infrastructure providers are able to invest in the relevant infrastructure – which means that even where we expect funding, there is a significant risk that such funding may not materialise to the amount or the timescale required. A total of 24% of the total infrastructure required is neither secured nor expected – leaving a funding gap of **£3.96bn**.

Based on the total infrastructure requirement, further analysis identifies the following breakdown for who is the principal body responsible for delivery*:



Based on total identified funding, further analysis identifies the following breakdown for infrastructure funding*:



*Estimated based on GIF project lists

WHAT HAVE WE ACHIEVED?

Since the original publication of the Kent and Medway GIF in September 2015, the authorities and infrastructure providers across Kent and Medway have worked collaboratively to secure the following private and public investments:

- Securing almost **£120mn** of Local Growth Funding from Central Government for transport schemes, including the new junction 10A scheme on the M20 at Ashford;
- Securing **£27mn** of funding under LGF3 (2016) to deliver:
 - Dartford Town Centre transformation;
 - Ashford International Rail Connectivity (Ashford Spurs);
 - Fort Halstead;
 - A2500 Lower Road Improvement;
 - Kent & Medway Engineering and Design Growth and Enterprise Hub;
 - Leigh Flood Storage Area and East Peckham - unlocking growth;
 - A2 Off-slip at Wincheap, Canterbury.
- A commitment from Government to deliver a new Lower Thames Crossing and identification of significant private sector interest in its financing;
- Government support and funding of **£155,000** for Otterpool Park Garden Town;
- Since 2015, **£121,449,009** has been secured through s106 contributions;
- Delivered **15,068** new dwellings from 2015/16 to 2016/17 in Kent and Medway.

**Private Sector/Developer Bodies:

- *Highways contractors*
- *Bus companies*
- *Rail franchises*
- *Dover Harbour Board*
- *Broadband providers*
- *Social care providers*
- *Academy/Further Education groups and organisations*

***Public Sector:

- *DfE*
- *DfT and Highways England*
- *National Rail*
- *NHS England*
- *Local Government Capital Budgets*
- *Skills Funding Agency*
- *South East LEP grants*

KEY MESSAGES TO GOVERNMENT

- **There is a need for more forward funding of strategic infrastructure by Government** – like the Housing Infrastructure Fund;
- **Government funding needs to be easier and less costly to access** – local authorities currently spend hundreds of thousands of pounds on the preparation of business cases for every round of funding that is announced, often with different requirements, objectives and timescales;
- **There should be a mechanism for enabling local authorities to bring forward sites with unimplemented planning permission** – in some cases, planning permissions are not implemented for good reason, but where there is unnecessary delay in new development being brought forward, local authorities should have the ability to intervene;
- **The Government should unlink infrastructure funding from specific growth proposals** – too often, strategic infrastructure goes under-funded, as the impact of that infrastructure is shared by many development sites and existing settlements. It is therefore difficult to attribute entirely to specific settlements;
- **The Government should establish greater power of direction over utility companies where practices are stalling development** – utility companies across the board create some of the most costly and time-consuming barriers to development, with the risk and cost of new utility provision often falling disproportionately on developers. The Housing Finance Institute (HFI) paper *“How to build homes, fast”* was partly informed by the GIF and highlights the importance of improving the timely provision of utilities. It also recommends the need for Infrastructure Dependencies Mapping to understand the requirements for utilities within an area, and for direct intervention to force improvement performance.

NEXT STEPS

Tackling these challenges will require innovative thinking and proactive collaboration between local authorities, Government and industry. The Government is already reviewing its model for the Community Infrastructure Levy (CIL) and exploring the issues leading to unimplemented planning permissions. In working with the Government to further develop solutions, Kent and Medway has set out the following action plan:

- 1. Defining the investment gap:** We will make clear the shortfall in capital investment identified for delivering planned, high-quality growth across Kent and Medway;
- 2. Pioneering a “place-based” approach:** We will pioneer an approach that sees greater co-ordination of investment in homes, infrastructure and jobs to build quality communities, and new ways of working with Government and its agencies across Kent and Medway. In this, we will work with the local planning authorities to enable coherent new towns and settlements where infrastructure is available to support, but recognise where infrastructure is insufficient to accommodate further growth;
- 3. Exploring innovation in financing the funding gap:** We will explore new ways of closing the funding gap and ways of working with Government and other potential funders in addressing the shortfall in capital funding;
- 4. Commercial supply and demand:** We will work with local partners to develop key actions to respond to the gaps identified between the supply and demand of commercial space, such as through encouraging speculative commercial development or funding incentives;
- 5. Future-proofing Kent and Medway’s infrastructure:** We will future-proof the infrastructure we deliver today to the greatest extent possible, building in resilience, innovation and flexibility;
- 6. Creating well-designed communities:** We will work with local partners and the industry in ensuring high-quality, innovative and inclusive design across the County;
- 7. Collaborating with infrastructure providers:** We will work and liaise with the utilities companies, the health sector and other providers to ensure that their medium- to long-term planning aligns with Kent and Medway’s growth agenda;
- 8. Creating an increasingly robust evidence base:** For the GIF to continue to be a valuable tool in helping us understand the county-wide growth agenda and associated delivery challenges, we will continue to develop and evolve the Framework, working with partners.

KENT AND MEDWAY SUMMARY

The Growth and Infrastructure Framework identifies the following headlines for Kent and Medway to 2031:

178,600

Additional homes 2011-2031 **(24% growth)**

396,300

Additional people 2011-2031 **(23% growth)**

170,300

Additional jobs* 2011-2031 **(21% growth)**

TOTAL INFRASTRUCTURE REQUIREMENT 2017-2031:

£16,376,314,000**

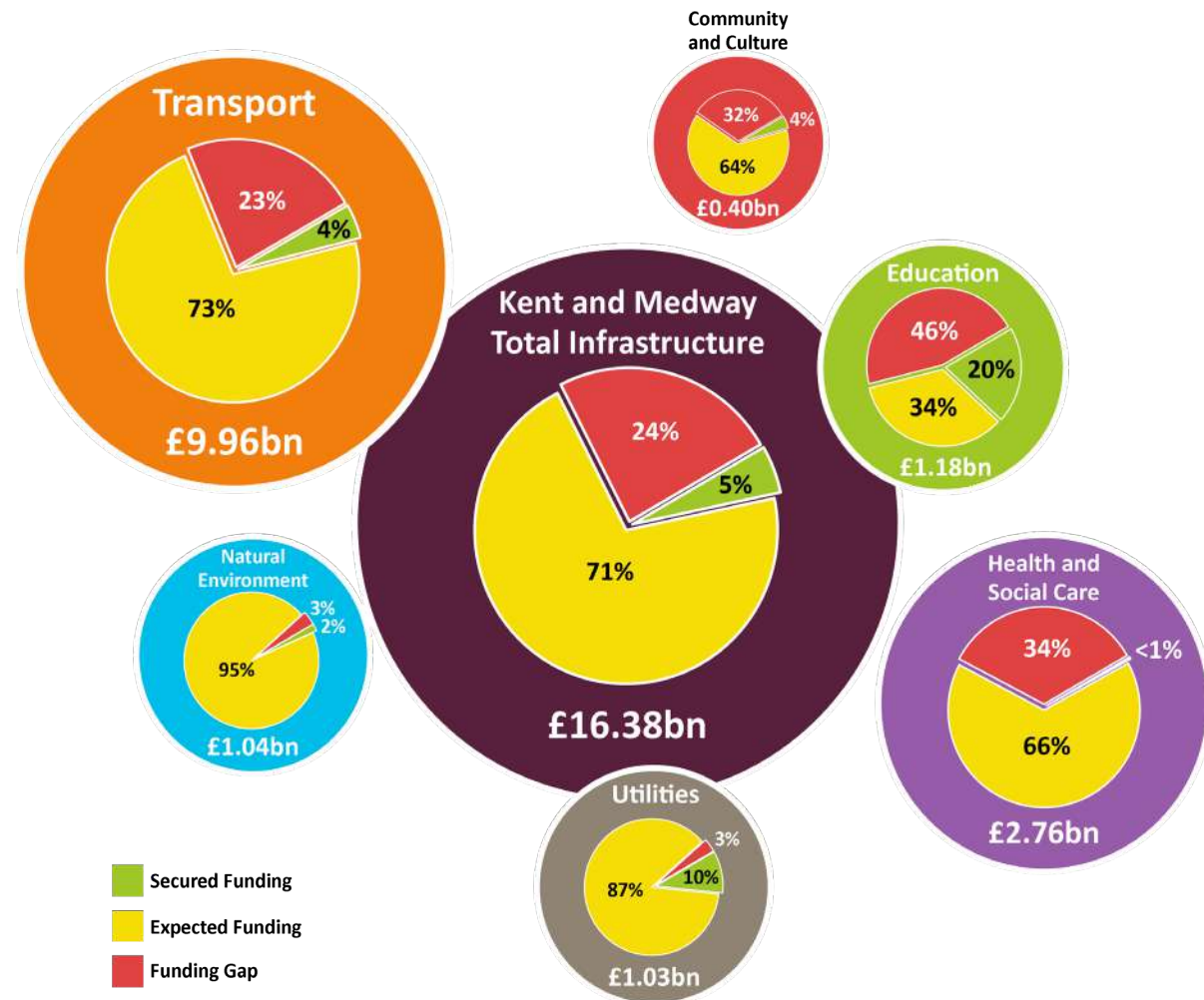
TOTAL SECURED FUNDING: £820,174,000

TOTAL EXPECTED FUNDING: £11,599,146,000

TOTAL FUNDING GAP: £3,956,994,000

(£2 billion allocated to C2E extension)

% OF INFRASTRUCTURE FUNDED: 76%

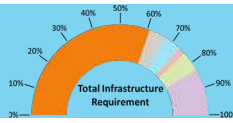


* Residents in employment means jobs created will not necessarily be taken up within Kent and Medway

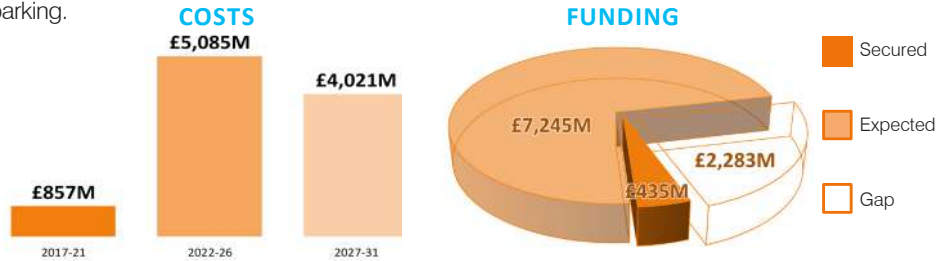
** Includes Lower Thames Crossing and C2E costs and funding



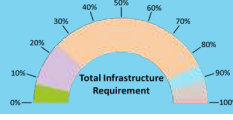
TRANSPORT: £9.96BN



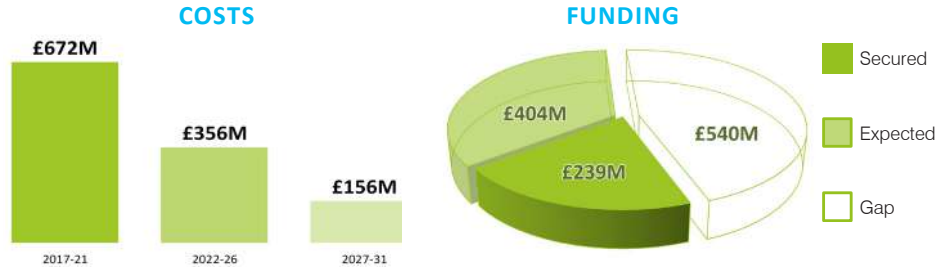
Major projects include the Lower Thames Crossing and associated strategic road corridor through to the Channel ports, Crossrail extension to Ebbsfleet, a solution to Operation Stack and lorry parking.



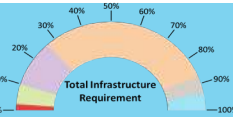
EDUCATION: £1.18BN



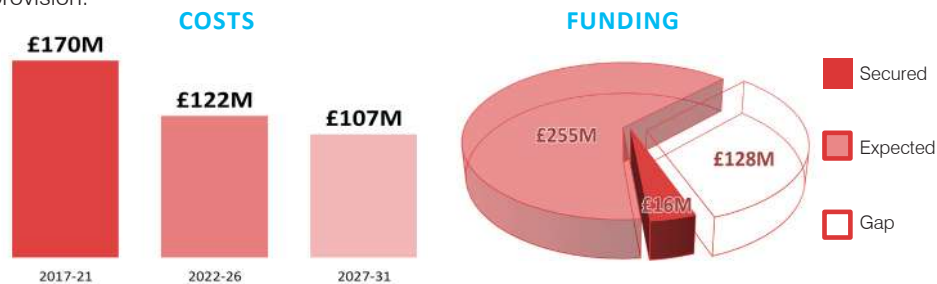
Major projects include providing sufficient education places caused by growth, especially in secondary education.



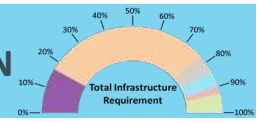
COMMUNITY & CULTURE: £0.40BN



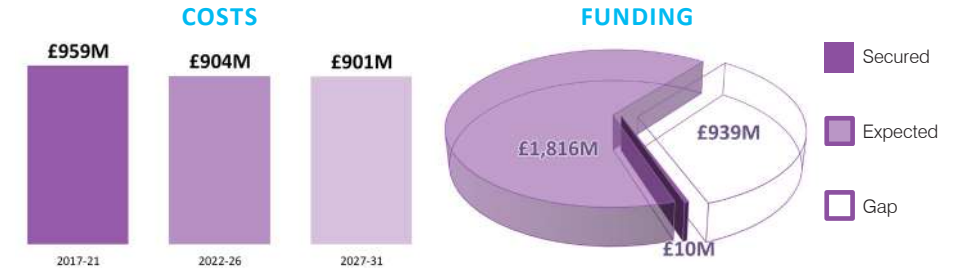
Major projects include Tunbridge Wells Cultural Hub and county-wide sports and recreation provision.



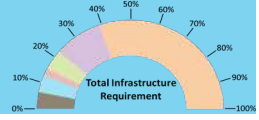
HEALTH & SOCIAL CARE: £2.76BN



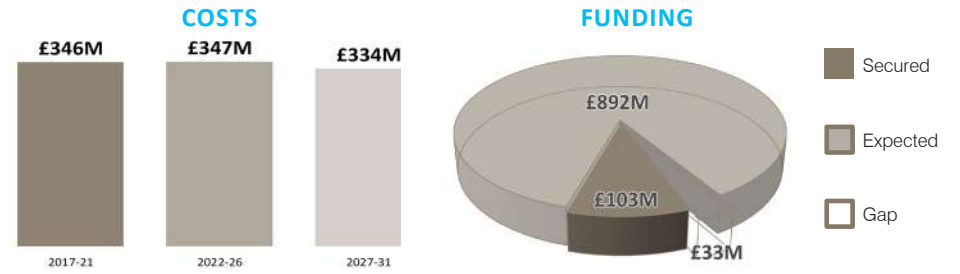
Major projects include transformation of the health estate and implementing KCC's Accommodation Strategy.



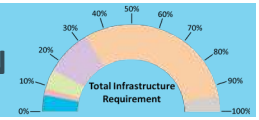
UTILITIES: £1.03BN



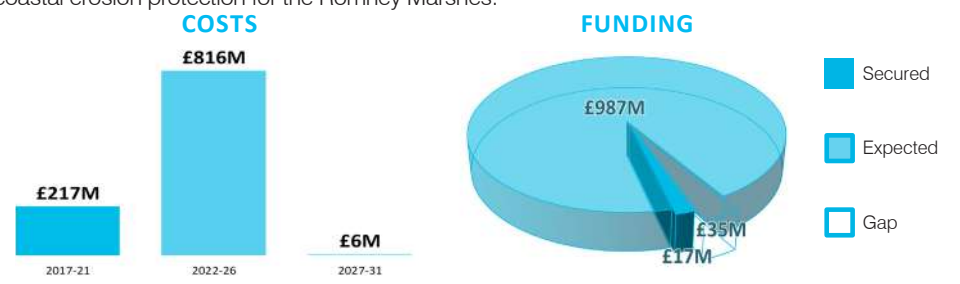
Major projects include sufficient county-wide energy and water provision.



NATURAL ENVIRONMENT: £1.04BN



Major projects include the Thames Estuary flood risk management programme and flood risk and coastal erosion protection for the Romney Marshes.



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Ramsgate Beach, Visit Kent

1. INTRODUCTION

The Growth and Infrastructure Framework (GIF) has been prepared by Kent County Council (KCC) to provide a view of emerging development and infrastructure requirements to support growth across Kent and Medway. KCC has worked closely with Medway Council, districts and boroughs, and key strategic partners in the preparation of this document.

The purpose of the framework is to highlight the opportunities and challenges to creating sustainable communities in Kent and Medway that are balanced with employment growth alongside vital infrastructure. This document provides an overview of the price of growth across the County, which in turn supports national productivity. It aims to:

- Collate and summarise population and housing growth projections across Kent and Medway;
- Set out an understanding of capacity within current infrastructure provision and pipeline infrastructure projects being taken forward by KCC, Medway Council and other infrastructure providers; and
- Highlight cumulative costs, gaps in infrastructure funding and funding streams.

Critically, the framework has not been developed in isolation. Consideration is given to external factors affecting growth and infrastructure provision in Kent and Medway in relation to London and the wider South East growth requirements.

The GIF has been produced for Government, infrastructure providers, district councils, parish councils, local communities, Kent and Medway businesses and developers and other local partners. Looking forward, a dynamic online platform will be progressed, using the data that underpins the GIF to develop a platform that will enable users to interact with relevant areas of interest.

1.1 SCOPE OF THE FRAMEWORK

The GIF includes a broad range of infrastructure required to turn housing and employment growth into sustainable communities.

It therefore includes infrastructure provided by KCC, Medway Council and other providers. The GIF draws together information and data from a range of sources, including district local plans and Infrastructure Delivery Plans (IDPs). KCC, Medway (a unitary authority) and all local authorities within Kent have been included within the assessment.

1.2 PLANNING FOR INFRASTRUCTURE

This document provides a co-ordinated understanding of growth and infrastructure across Kent and Medway.

Changes to Government legislation have modified how infrastructure planning is undertaken and place greater emphasis on the link between local plans and the delivery of infrastructure.

In Kent, it is the district councils and Medway Council who have responsibility for producing local plans, as Local Planning Authorities (LPAs). KCC is a statutory consultee in the creation of these local plans, as an infrastructure and service provider, but it 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) 2012 states that LPAs should work with other authorities and providers to assess the quality and capacity of a range of infrastructure types, their ability to meet forecast demands and take account of the need for strategic infrastructure within the LPA area.

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

Local planning authorities in Kent and Medway are at varying stages in the preparation of local plans, some have been adopted while others are in the process of being prepared. The majority are supported by an IDP, which sets out the infrastructure required to support growth and funding regimes. Neighbourhood plans are also taken into consideration that enable local people to align strategic needs with priorities for their local area.

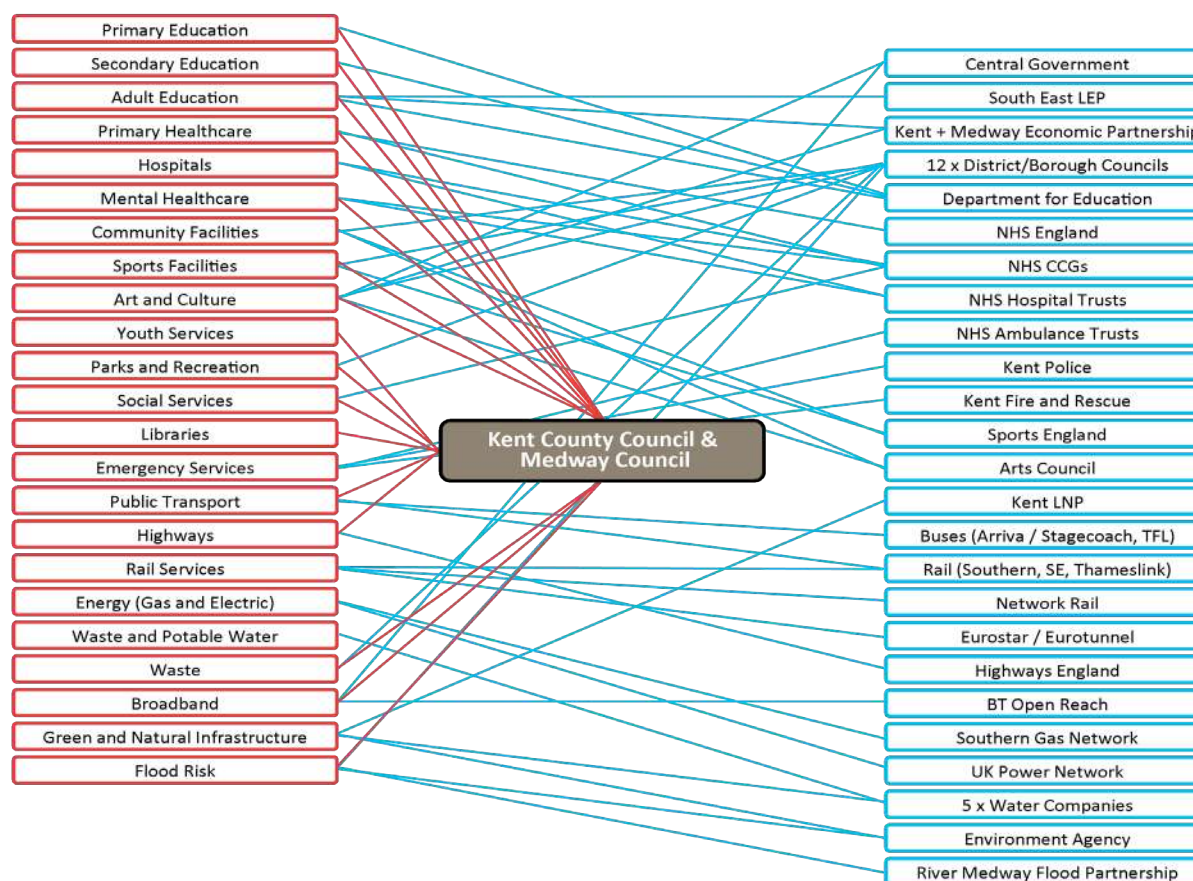
The NPPF also sets out a duty to co-operate across boundaries; ensuring local authorities engage with neighbouring authorities and other organisations on strategic planning issues, in particular infrastructure providers. However, an improved mechanism needs

to be in place to provide strategic co-ordination of growth across local authority boundaries or strategic infrastructure.

1.3 INFRASTRUCTURE PROVIDERS

KCC, Medway Council and the district councils play a vital role in the provision of infrastructure in Kent. A range of public and private organisations have responsibility to provide infrastructure to support the existing population and proposed growth.

In practice the relationship between infrastructure requirements and providers in Kent and Medway is complex, as shown in the figure below.



1.4 PARAMETERS OF THE FRAMEWORK

It is important to note that the GIF is a snapshot in time; the data used is the best available, and in some cases, theoretical costings and assumptions have been used where exact data is not available.

POPULATION

Population Forecast

The GIF makes use of the KCC housing-led population forecast that is produced annually, based on the latest demographic information available from the ONS and driven by housing numbers detailed in district and borough council local plans at a set point in time.

The latest population forecasts are based on 2016 ONS Mid-Year Population Estimates (released August 2017) and housing figures as at September 2017.

Migration - The migration data is sourced from the 2016 ONS Mid-Year Population Estimates.

Demographics - Indices of Multiple Deprivation (IMD) information is sourced from the DCLG with the latest information available being IMD 2015.

HOUSING

Trajectories - Compiled by KCC Business Intelligence in September 2017, based on district/borough submissions (so may not fully reflect emerging Local Plan figures). Housing may not be delivered to the scale/time frames stated, as it is market led.

Completions - Housing completions information is sourced from the KCC Business Intelligence bulletin.

Strategic Housing - Strategic housing sites are defined as those over 100 units and include both extant permissions and allocations, using a list of strategic housing sites and numbers collated by KCC Business Intelligence (from 2016 HIA returns).

INFRASTRUCTURE

Project lists - Project lists are compiled from information received from various sources, including KCC service leads, Medway and district IDPs.

Costs - Total infrastructure costs are a combination of proposed project costs and theoretical costs. The total costs of actual proposed projects will always take priority over theoretical costs.

FUNDING

Secured funding - any named project that has a legal agreement or Government funding stream stating that funding will be provided, regardless of whether it has been received or not.

Expected funding - any public sector, private sector or developer contribution funding that is expected, but where there is no legal agreement in place stating that the funding will be provided. This funding is estimated based on previous rates of attracting funding from a variety of sources (e.g. developer contributions, the NHS, etc). All theoretical modelling outputs for funding are considered as expected funding.

THEORETICAL COSTS

Theoretical projects are used to forecast the overall infrastructure costs up to 2031.

Costs from theoretical projects represent the services required and not the cost of maintaining/supplying current service demand. They are capital requirements and do not account for any revenue-based services, i.e. they do not include costs for running or staffing buildings and services.

Theoretical costs are used as a proxy measure of cost for an entire service and are completely separate to proposed projects.

THEORETICAL FUNDING

Theoretical funding is based on percentages across three potential funding sources - public sector, private sector and developer contributions. The percentages may not cover the full cost, i.e. may not add up to 100%. This allows for the assumption that there may not be sufficient funding available to meet requirements for certain services.

Theoretical funding does not make up for shortfalls in any proposed project – if there is a shortfall, it is calculated as part of the overall funding gap.

1.5 COUNTY-WIDE APPROACH WITH SUB-COUNTY BREAKDOWN

The approval of a successful local plan is reliant on collaboration between a wide range of organisations and public bodies to determine the infrastructure required to support growth. A number of districts and boroughs prepare IDPs to identify the infrastructure required to meet spatial objectives and growth anticipated in the local plans – to ensure that the plan is realistic and deliverable. A range of infrastructure schemes are provided by councils, but many others are provided by other bodies – both public and private – and will often extend beyond physical district boundaries. Similarly, physical constraints and socio-economic trends that will influence growth and the provision of infrastructure and services will often cover much broader areas.

Therefore, alongside the Kent and Medway analysis, the GIF also takes a sub-county approach by giving an overview of the characteristics, planned growth and infrastructure required within each sub-county area. This provides a new strategic layer to growth and infrastructure challenges.

The County is shown by its three sub-county groupings: North Kent, East Kent and West Kent – as shown in Figure 1.1.

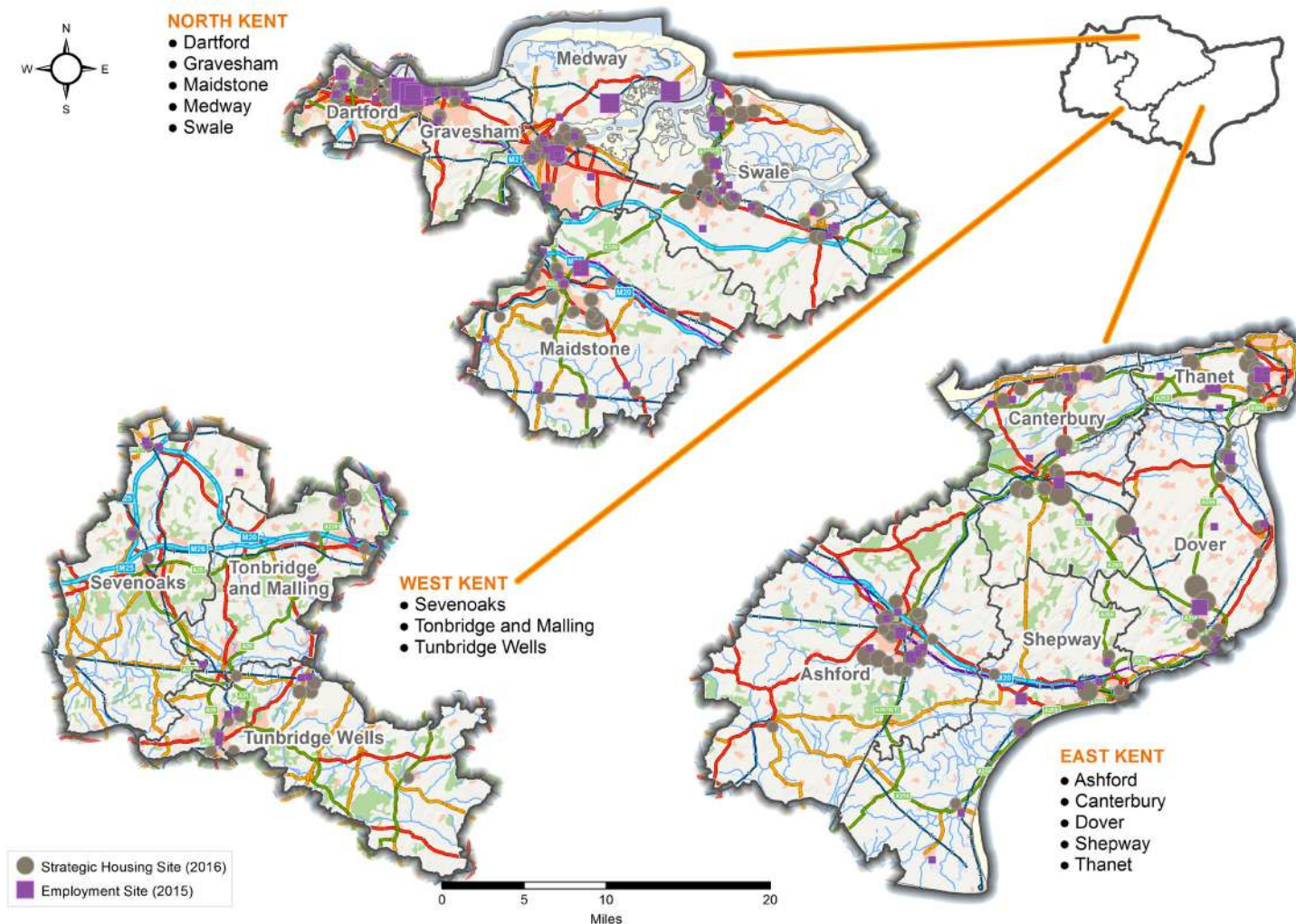


Figure 1.1: GIF sub-county areas for Kent and Medway

2. A WIDER SOUTH EAST CONTEXT

Strategically, the County's position as the main international gateway from the UK into Europe, and adjacent to London, inevitably means it plays a major role in the national economy. It also means that the Kent and Medway economy is sensitive to external demographic, political and economic influences. This section identifies the external factors, parties influencing the County and opportunities for collaboration that will affect the growth challenge in Kent and Medway.

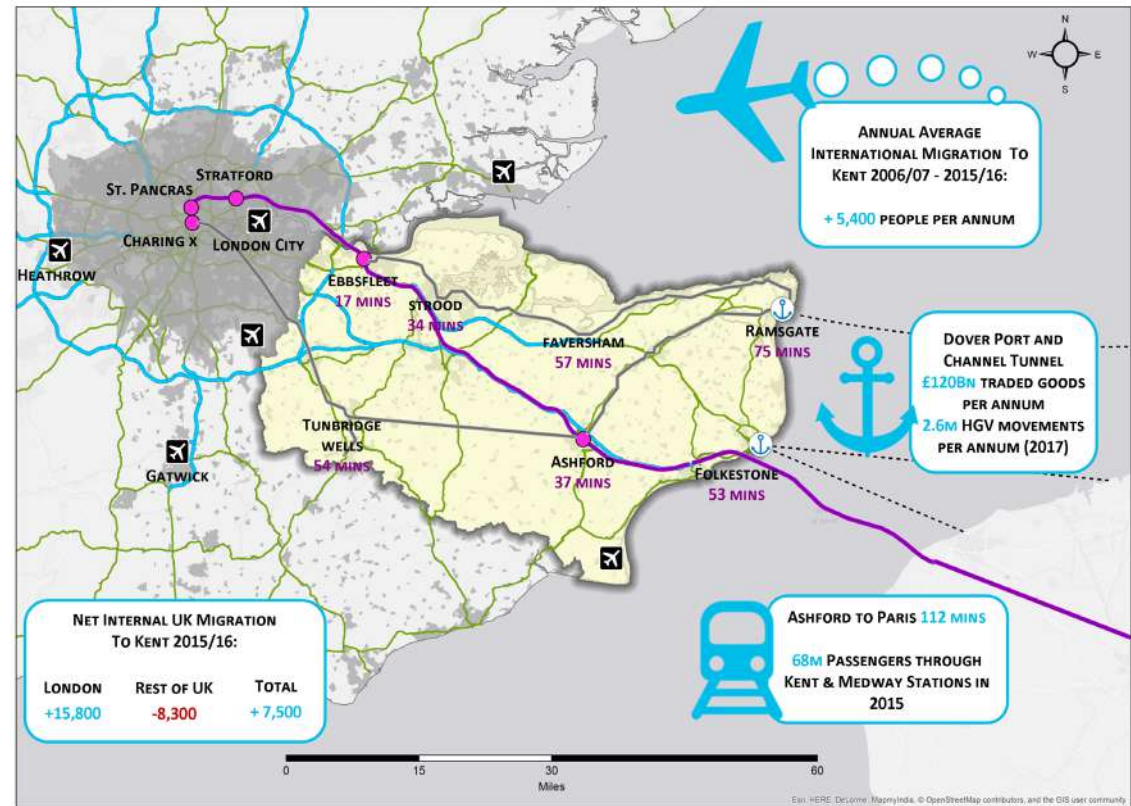


Figure 2.1: Kent in the wider South East

2.1 LONDON

The impact of London's growth on Kent and Medway will influence migration in and out of the County, as well as business relocation. These trends could lead to growing pressures on areas that surround London, and a potential pressure to absorb some of the capital's growth¹. London is under intense pressure to address the acceleration in housing need, which in turn could affect the supply of suitable office space². The residual housing demand and the growing crisis in office and employment space will necessarily put additional pressure onto economies across the wider South East - all of which are facing their own growth in demand.

It will be crucial to continue engaging proactively with the Greater London Authority (GLA) as the London Plan progresses to ensure that the County's growth is supported by all the necessary infrastructure and services. Kent and Medway are represented on the Wider South East Political Steering Group, which meets to initiate, steer and agree strategic collaboration activities across the wider South East - covering common strategic planning and economic growth issues, alongside the preparation of the 2016 London Plan.

Kent and Medway are also actively involved with, and represented by, South East England Council (SEEC) which looks to ensure that the South East has opportunities to influence London's housing and strategic infrastructure plans.

2.2 WIDER CROSS-COUNTY PARTNERS

Thames Gateway Kent Partnership

The wider Thames Gateway/Estuary is a key regeneration area that stretches north of the Thames from Canary Wharf to Southend, and south of the Thames from Deptford to the Medway and Swale, Canterbury and Thanet. Regeneration of the Thames Gateway has been underway since the 1990s, in which Thames Gateway Kent has an important role and vision to enable North Kent to prosper and grow.

The Thames Gateway Kent Partnership (TGKP) champions sustainable economic growth across North Kent (aligning with the original geography of the Gateway) and seeks to create the best conditions possible to attract investment and deliver sustainable, private sector-led economic growth across North Kent, promote and enable collaboration to achieve growth and ensure that the Thames Gateway remains a key priority for Government. The Thames Estuary 2050 Growth Commission, now chaired by Sir John Armitt, has announced its priorities, which include equipping people with the right skills and providing high-quality housing. The

Commission's final report, which will lay out recommendations to Government, will be published in spring 2018.

SEEC

SEEC has identified an infrastructure funding gap of £15.4bn over the next 15 years, holding back South East and national business success³. The South East's changing fortunes are due to a growing gap in per capita public spending, including in areas such as transport and enterprise investment⁴. Kent and Medway are represented by SEEC and work with a number of partners in ensuring growth priorities are delivered across the South East.

SELEP

The South East Local Enterprise Partnership (SELEP) is tasked with supporting local growth and helping deliver a stronger economy that covers East Sussex, Essex, Kent, Medway, Southend and Thurrock.

SELEP is business-led and brings together the public and private sectors to drive local economic growth, build new homes and create sustainable communities by delivering jobs and tackling skills and training issues.

SELEP is currently refreshing its South East Strategic Economic Plan (SEP) to make sure it builds on progress to date, supports local priorities, unlocks funding and is responsive to the changing macro-economic environment and national agenda. The SEP will support forthcoming economic development strategies, infrastructure planning and housing policy, as well as improving overall productivity.

Transport for the South East (TfSE)

In May 2017, leaders from across the South East launched a partnership as a single voice with the ability to directly influence the area's transport priorities. The partnership brings together the area's sixteen transport authorities and five Local Enterprise Partnerships to work directly with the Department for Transport

(DfT). It also involves road and rail providers, such as Highways England and Network Rail, and other providers such as ports and airports. The major benefits of the partnership include:

- Setting spending priorities to improve the transport network for all travellers and businesses;
- Ensuring the South East economy remains a driver of national prosperity;
- Directly influencing the decisions of national and regional infrastructure providers and operators.

The creation of sub-national transport bodies, such as TfSE, allows decisions on strategic transport investment to move from national to area level. The Government's Industrial Strategy and its devolution agenda also support the principle of allowing places to build on their strengths and remove obstacles to further growth. TfSE intends to move to full operation, with Government backing, in 2020/21 and produce a transport strategy for the South East.

KEY FACTS AND FIGURES

- In 2015/16, the South East delivered an additional 34,900 homes - the most across all regions in England.
- Its economic output (GVA) is the second highest in England, at £249 billion.
- At 9.1 million (in 2017), it has the UK's largest population.
- It has an estimated £15.4 billion infrastructure investment gap (by 2030)⁵.
- The current Further Alterations to London Plan (2015) sets a ten-year housing target of 49,000 houses per year.
- The London Strategic Housing Market Assessment (SHMA) is indicating a housing target of 65,000 a year, with a need for 66,000 homes per year. The Greater London Authority will be looking beyond London to explore if there is potential to accommodate more growth in sustainable locations outside the capital.

¹London Office Policy Review 2017 - Greater London Authority; ²London Industrial Land Demand (June 2017) - GLA; ³South East England Councils' response to Government's Industrial Strategy Green Paper 2017;

⁴SEEC, South East MP Briefing; Maximising Economic Potential, 2017; ⁵ <http://www.seecouncils.gov.uk/wp-content/uploads/2012/04/SEEC-Dashboard-SUMMARY-2-SIDES-SUMMER2017.pdf>

3. KENT AND MEDWAY IN 2050

In order to start to prepare for a longer time horizon, this refreshed version of the GIF starts to examine the challenges and opportunities likely to face Kent and Medway to 2050, by taking a scenario-based approach. This chapter will provide a framework to ensure that Kent and Medway are in a strong position to anticipate and plan for sustainable growth. The full 2050 report, written by ARUP, can be read as a separate document.

3.1 POPULATION AND TRENDS

The scenarios set out in this chapter use predicted metrics in population, housing and jobs numbers expected in 2050. The expected increase in population and growth in the demand for housing will intensify the infrastructure challenges, if growth is delivered in the same way as today.

METRIC	2031	2050	2031-2050 INCREASE	2031-2050 INCREASE (%)
Population	2,127,000	2,347,000	220,000	10%
Households	922,000	1,061,000	139,000	15%
Jobs	976,000	1,075,000	99,000	10%

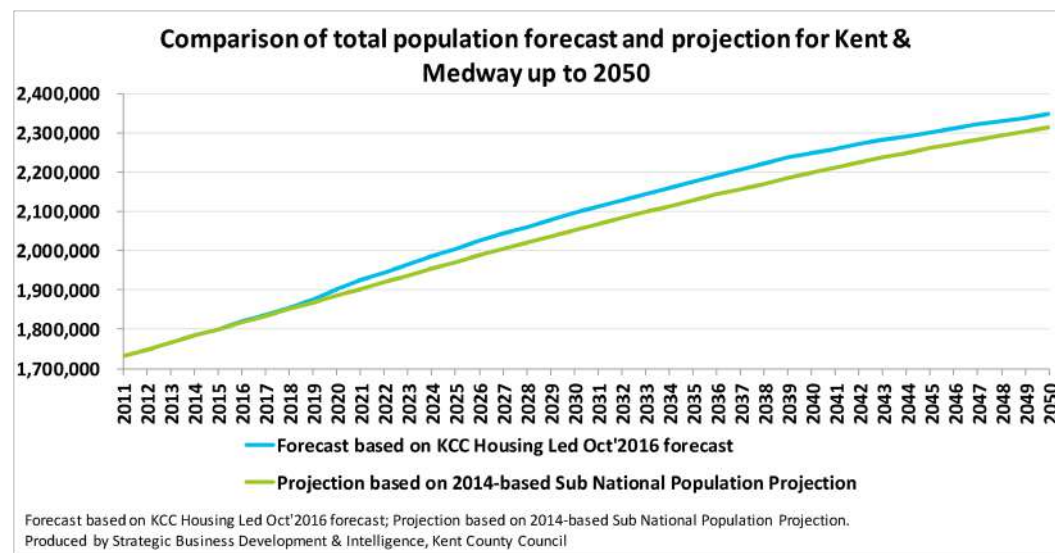


Figure 3.1: Long-term population forecast in Kent & Medway (KCC SBDI data)

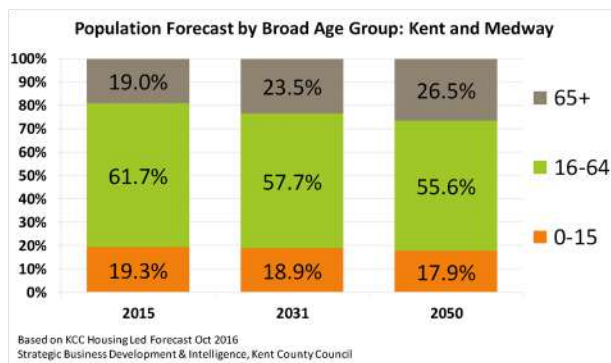


Figure 3.2: Long-term population forecast by age (KCC SBDI data)

2050 baseline for population, housing and employment

A predicted baseline expected in 2050 has been calculated using KCC's forecast for 2031 and employing the following assumptions:

- Households will rise at a similar rate as population (taken from the Kent 2050 population forecasts), with an adjustment made for the average household size reducing (trends taken from DCLG 2014-based household projections);
- Employment will rise at a similar rate as population, with no adjustment for changes in participation rates or the balance of commuting (instead, adjustments are made in each of the scenarios).

3.2 A SCENARIO APPROACH

This chapter provides a basis for county-wide conversations on how the area can ensure it is adaptable, resilient and connected in planning for a sustainable future.

Beyond these certainties, there are a number of “critical uncertainties” – trends that could go one way or another, based on current information. It is these trends against which the following scenarios have been developed.

‘Climate Challenges’ and ‘Economic Growth’ have been chosen as critical uncertainties on which to base the scenarios. These factors are both highly uncertain and have the potential to be highly impactful or disruptive to 2050. Four scenarios have been developed based on these uncertainties and each scenario explores potential impacts on the County's infrastructure provision, in order to inform the development of effective strategies and responses.

Scenario D (page 21) is characterised by high economic growth and moderate climate challenge impacts – of the four scenarios, it is the one to aim for.

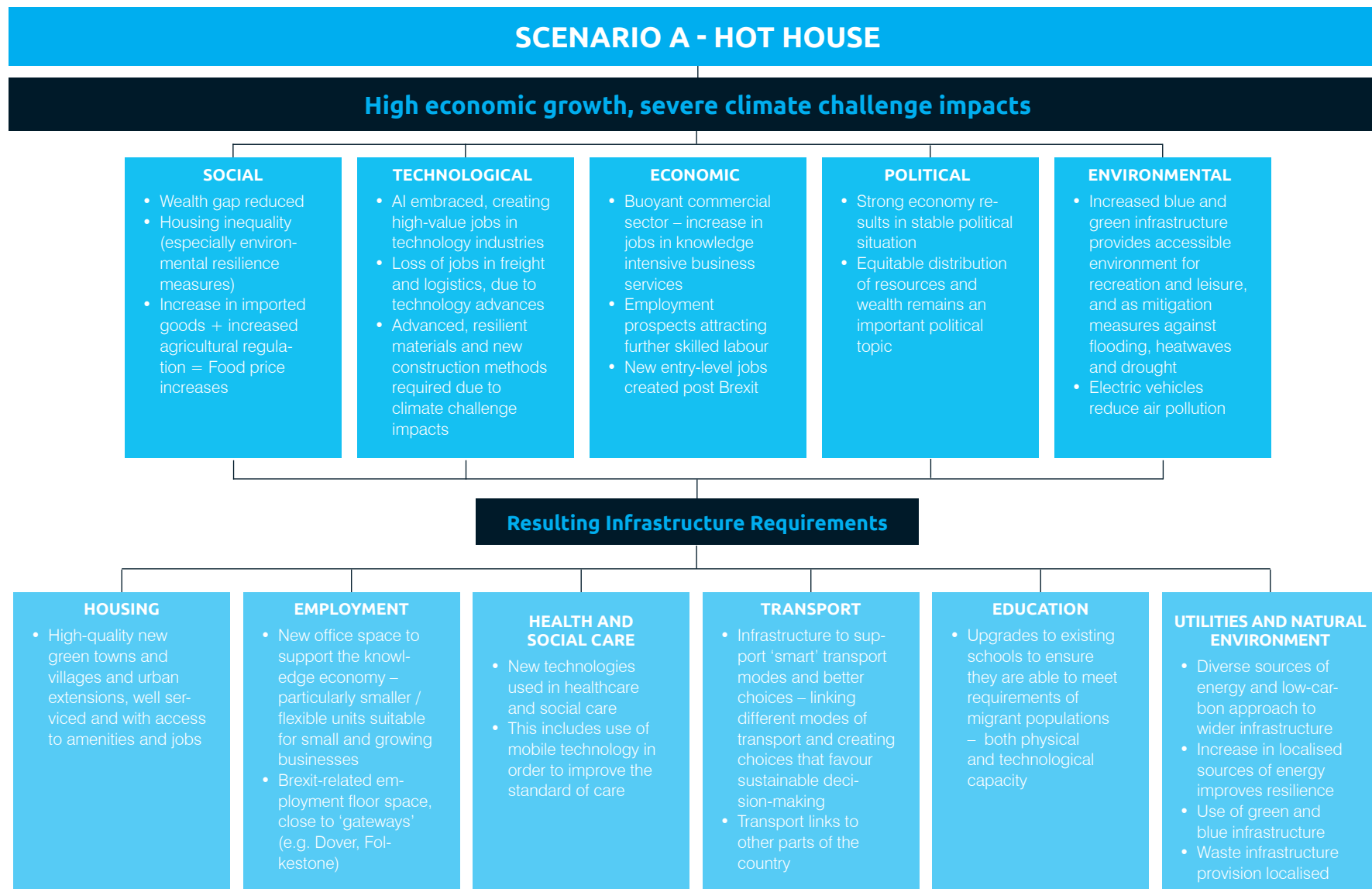
3.3 FUNDING, FINANCING AND GOVERNANCE CONSIDERATIONS

As well as creating demands for new types of infrastructure, there is likely to be an appetite and need for different forms of governance and for new models of funding and financing infrastructure. The table below sets out some of the funding and finance implications of “high economic growth and moderate climate challenges” vs. “low economic growth and severe climate challenges”.

HIGH ECONOMIC GROWTH AND MODERATE CLIMATE CHALLENGES	LOW ECONOMIC GROWTH AND SEVERE CLIMATE CHALLENGES
Greater economic autonomy - local authorities have greater discretion over how much to invest	Shorter-term approach to investment
More investment in infrastructure from institutional investors	More borrowing from central government, more dependence on bidding for grants and more central government control
Central government offers more local control for creative and innovative funding and finance mechanisms	Increased competition between investments for climate challenge adaptation and mitigation
Economic stability leading to a longer-term approach to investment on behalf of local authorities	Local government rationalising estates and selling off assets
A higher proportion of foreign direct investment (FDI) from outside the EU	Greater collaboration with other public bodies for shared services and co-investment

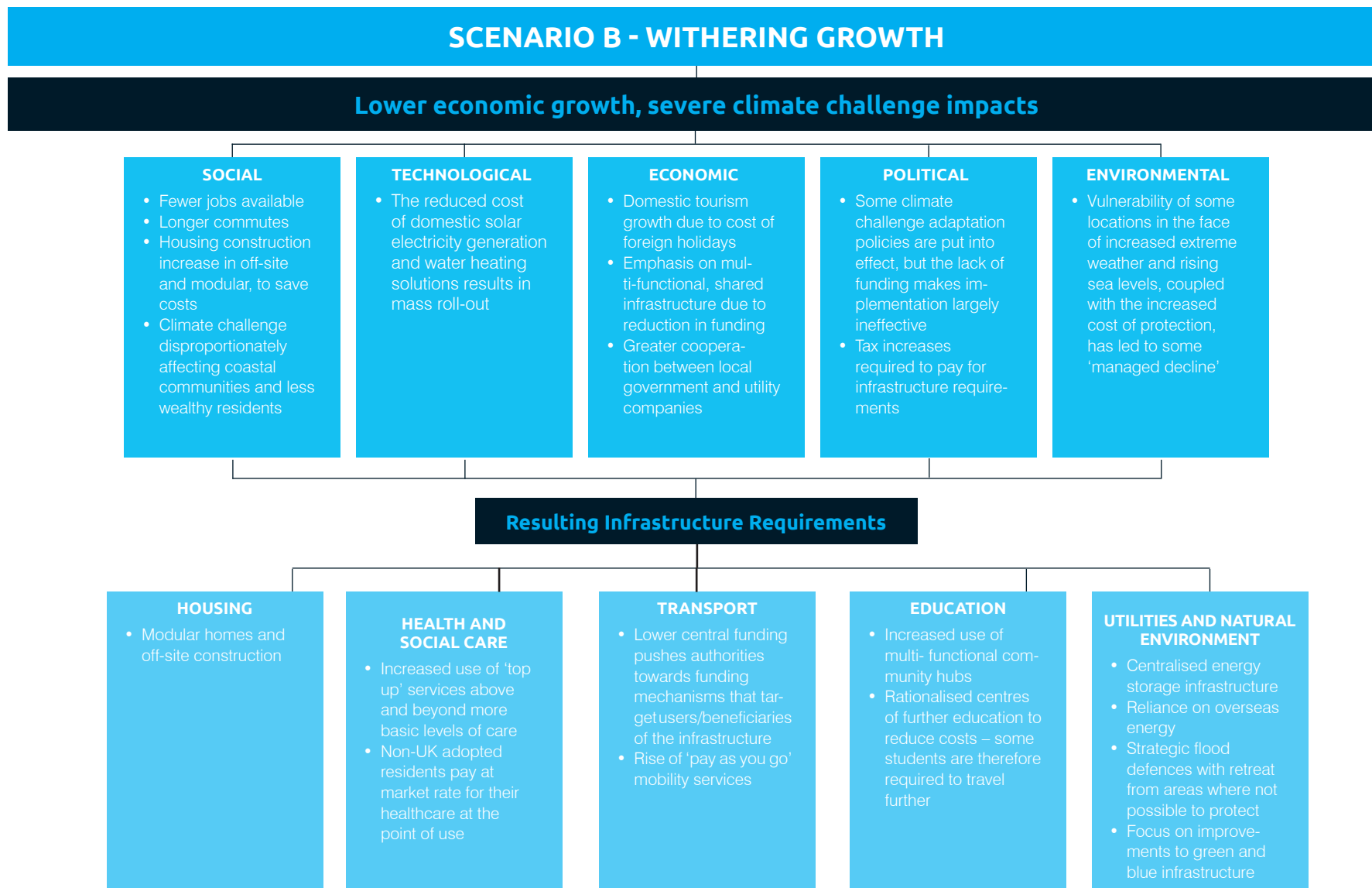
SCENARIO A – HOT HOUSE

This scenario is characterised by high economic growth and severe climate challenge impacts. Due to extreme levels of economic, environmental and political migration and the UK's buoyant economy as a pull factor, the County experiences a relatively high amount of immigration. There has been an increase in employment opportunities in London, as well as Kent and Medway, due to a strong local economy fuelled by increased entrepreneurial activity. This has also increased commuting within and out of the area.



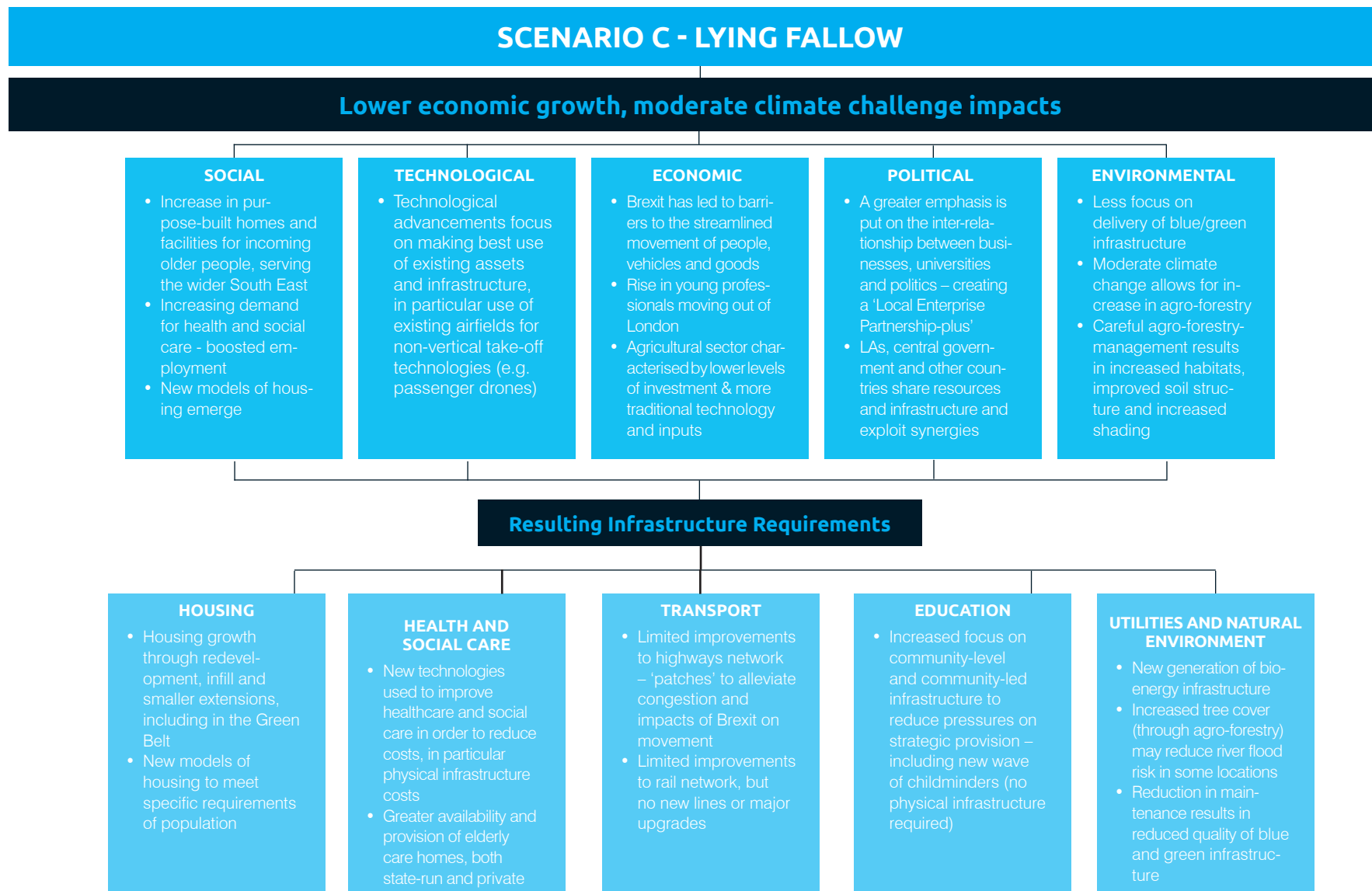
SCENARIO B – WITHERING GROWTH

Immigration has increased (briefly) – with associated pressure on the rental market, healthcare and schooling. Low economic growth has led to many falling below the poverty line and has increased the wealth gap. Severe climate challenges are increasing in frequency, as are the magnitude of extreme weather events such as heatwaves, droughts and flash floods from surface water.



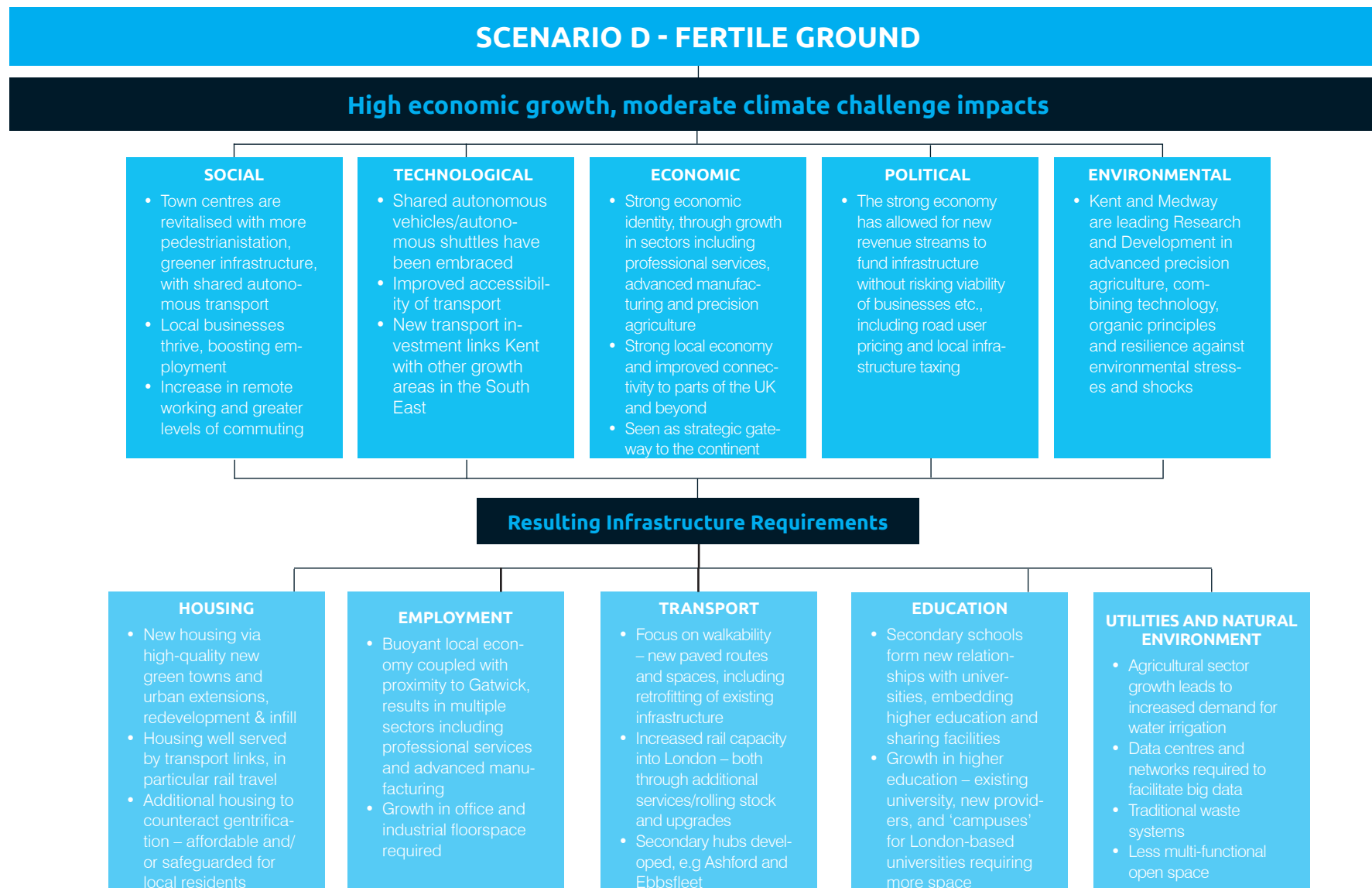
SCENARIO C – LYING FALLOW

This scenario is characterised by lower economic growth, and moderate (less severe) climate challenge impacts. Poor economic performance combined with technological advancement has led to fewer jobs. There is also limited funding for infrastructure, creating further congestion and poor service provision. This hardship leads to social unrest, heated public opinion and heightened political activism.



SCENARIO D – FERTILE GROUND

This scenario is characterised by strong economic growth and only moderate climate challenge impacts – it is therefore the most desirable of the four scenarios. The County has capitalised on its identity as the 'Garden of England', focusing on cultural identity, natural beauty and attractiveness as a tourist destination. Kent competes successfully for skills, investment and talent. The buoyant local economy creates new revenue streams to fund infrastructure, while new technologies are embraced to create efficiencies in service provision and delivery.



3.4 IMPLICATIONS AND NEXT STEPS

Whilst it is impossible to predict which of these scenarios is most likely, it is clear that there are certain inevitabilities that Kent and Medway need to start preparing for if they are to deliver sustainable growth.

- **The role and pace of technology in the delivery of new infrastructure will grow.** In every scenario, the role of technology will either enable infrastructure providers to provide more competitive forms of infrastructure or deliver more cost-effective infrastructure. How authorities enable this growing pace of technology in the future is a key challenge. The implication is that the County needs to build horizon scanning for new technology into the analysis phase, in the development of new infrastructure projects.
- **As a result of this increasing role of technology, the role of digital connectivity is vital.** Whatever outcome or scenario, the way in which information is gathered, analysed and communicated will become increasingly important to sustainable communities.
- **The critical necessity of a more sustainable solution to providing energy.** With an imminent influx in the adoption of electric vehicles, there will be significant implications for the way in which energy is delivered to support this new infrastructure. In addition, growth pressures, whether in a high- or low-growth scenario, will mean that pressures on the grid are exacerbated further. There will be a need to strategically plan the way in which electricity is generated and delivered.
- **Whatever scenario materialises, the funding of infrastructure will continue to present real challenges.**

Whilst emerging technology has the potential to radically change the way that infrastructure is planned, delivered and maintained, this needs to be considered within the context of the County already being challenged in how to provide the necessary infrastructure for current growth.

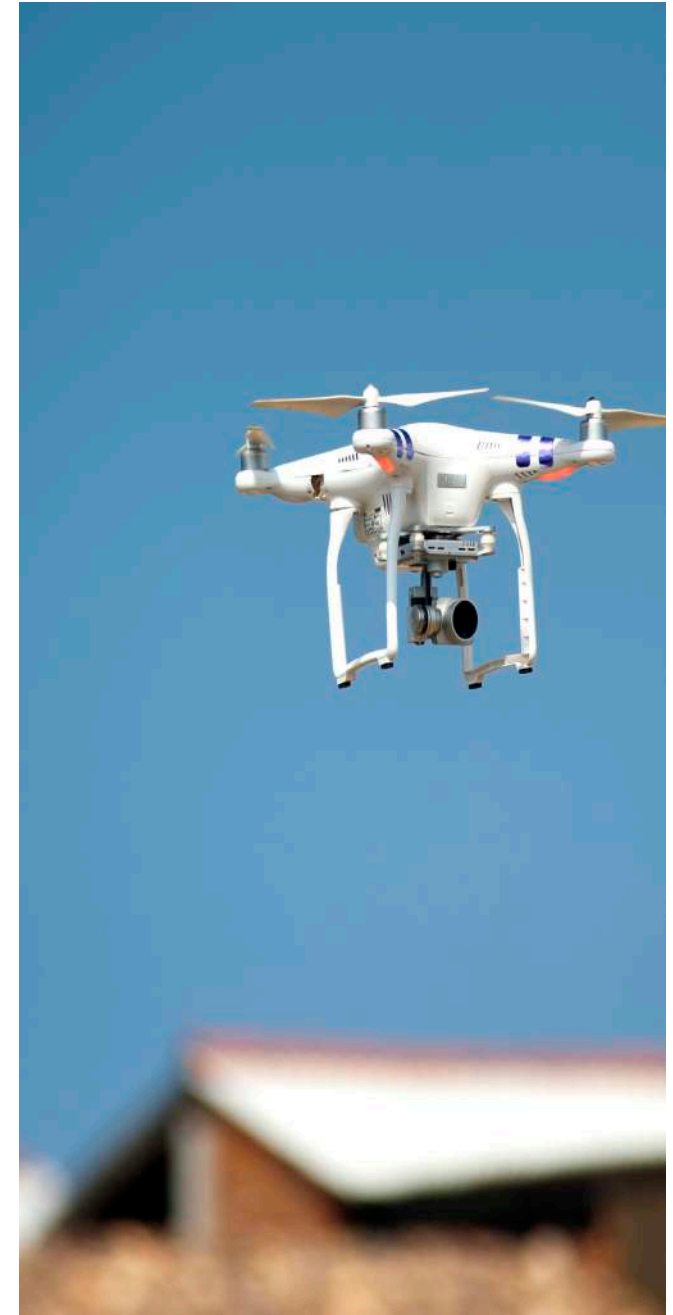
Moving forward, partners will be using this scenario-based framework to test the approach on infrastructure types and developing a more consistent approach to future-proofing infrastructure through a series of workstreams. These workstreams will feed into more detailed iterations of this analysis.

KENT AND MEDWAY - PLANNING NOW FOR 2050

ADAPTABLE to new technologies, a rise in electric vehicles, a growing and ageing population, climate risks, decarbonisation and a growing energy demand;

RESILIENT to changes in climate, economic uncertainty (Brexit), population growth and increased financial pressure on services;

CONNECTED to growth in technology, AI and automation, broadband demand, changes in work patterns and employment.



4. A PICTURE OF GROWTH IN KENT AND MEDWAY

This chapter provides the context for growth across Kent and Medway to 2031. It gives an overview of the projected growth in population, employment and housing for Kent and Medway and explores the demographics and economics of that growth. In doing so, it sets out key trends and projections that will affect the distribution of growth and planning to support infrastructure to 2031.

In order to illustrate how Kent and Medway is changing in terms of population, demographics and housing growth, the figures in this section represent the period 2011-2031, unless stated otherwise.

4.1 POPULATION FORECASTS

GIF POPULATION FORECAST

The GIF uses the KCC Housing Led Forecast, produced by KCC Strategic Business Development & Intelligence, to establish a population forecast directly linked to (and constrained by) the planned housing identified for this framework. As districts are at various stages in the Local Plan process, housing trajectories can be volatile. The GIF forecast takes housing trajectories at a set point in time (September 2017) provided by Local Authorities to perform a consistent analysis of growth and need across the County.

The GIF forecast shows a 2031 population of 2,127,600 – an increase of 396,300 from 2011, equivalent to 23% growth

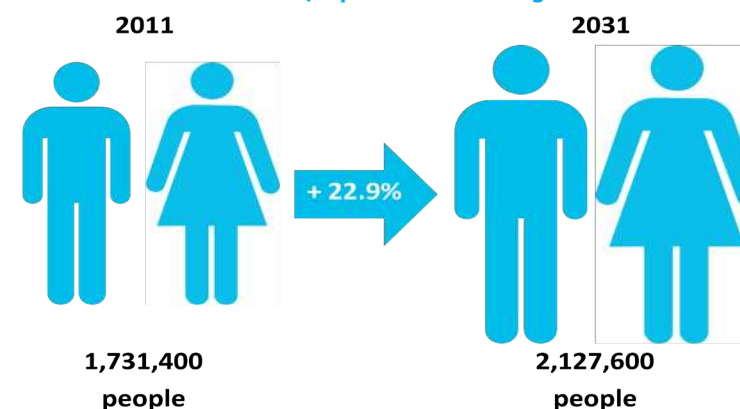


Figure 4.1: Forecast population change 2011 to 2031 (Source: KCC GIF Forecast 2017)

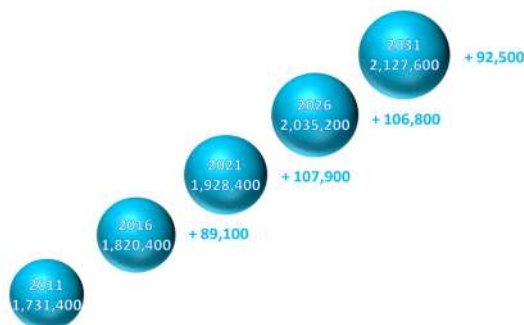


Figure 4.2: Forecast population change in five-year blocks (Source: KCC Housing Led Forecast 2017)

4.2 MIGRATION

Migration is the main driver of population growth for Kent and Medway. Between 2007 and 2016, net inward migration accounted for 72% of total population growth during this period.

In 2016, there were a net 7,500 migrants into Kent and Medway from other UK areas and 7,300 international migrants, resulting in a net inward flow of 14,800 into Kent and Medway.

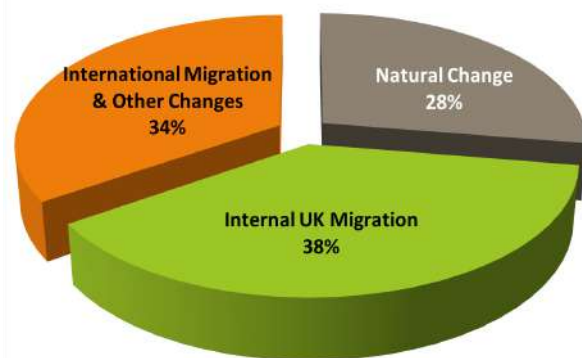


Figure 4.3: Causes of population change 2006/07 – 2015/16 (Source: ONS August 2017)

Net international migration accounted for approximately a third of this net flow into Kent and Medway, and continues a general trend of the last decade. Net migration into Kent and Medway has increased across all population age groups with the exception of 16-24 year olds.

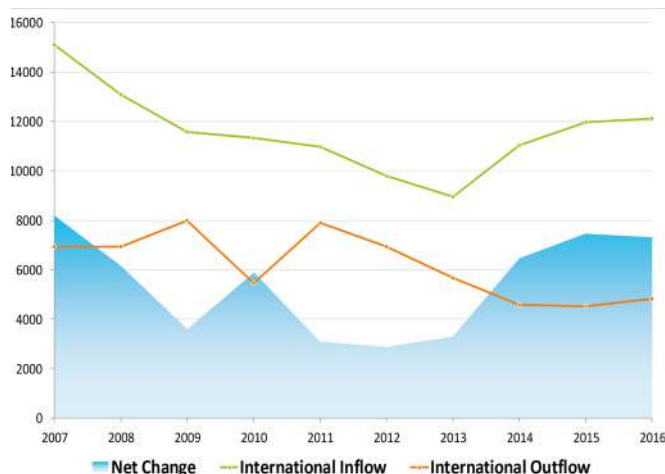


Figure 4.4: International migration to and from Kent and Medway 2006/07 - 2015/16 (Source: ONS August 2017)

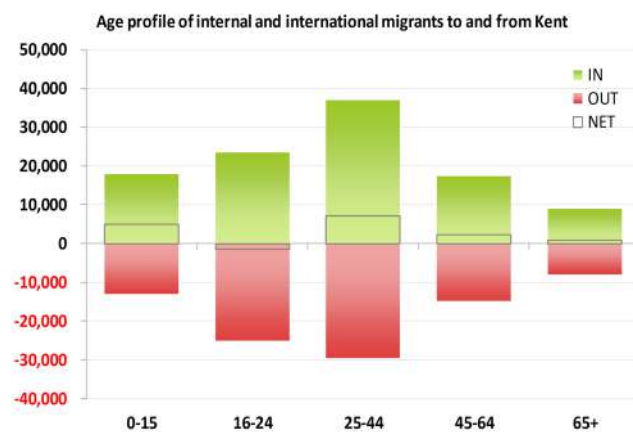


Figure 4.5: 2016 age breakdown of all migration to and from Kent and Medway (Source: ONS August 2017)

The majority of people who move into Kent and Medway come from London. In 2016, this was 29,200 people. In contrast, 13,400 people moved to London, giving a net gain of 15,800 people from London into Kent and Medway.

Therefore, Kent is a net importer of migrants from London and a net exporter to all other regions and countries in the UK.

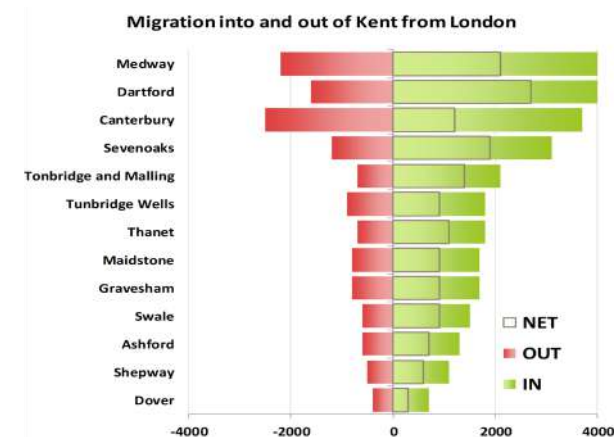


Figure 4.6: 2016 Migration flows to Kent and Medway from London (Source: ONS August 2017)

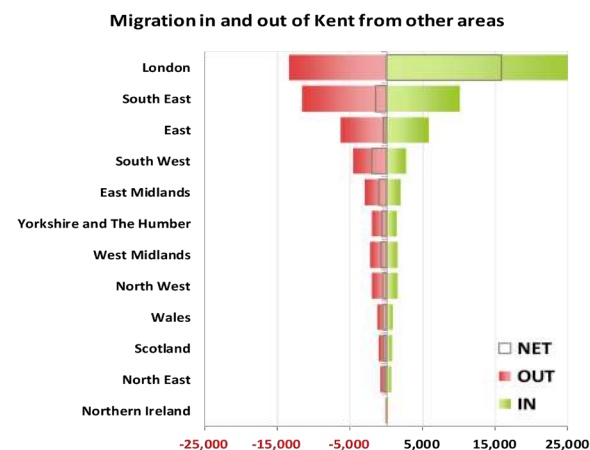


Figure 4.7: 2016 Migration flows to Kent and Medway from all UK regions (Source: ONS August 2017)

At a district level, all districts have experienced net inflows of internal (within UK) migration from 2011 to 2016, with the exception of Tonbridge and Malling. The largest flows have been into Canterbury, Swale and Maidstone.

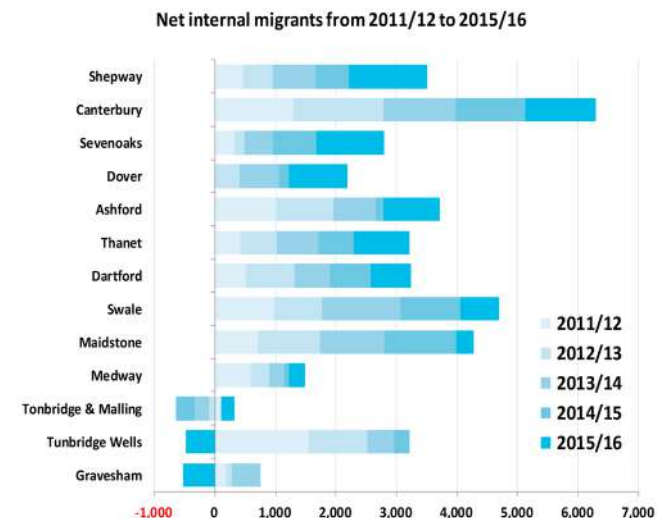


Figure 4.8: Internal migration flows to districts and boroughs from 2011/12 to 2015/16 (Source: ONS August 2017)

4.3 DEMOGRAPHIC HEADLINES

Similar to the rest of the UK, the population of Kent and Medway is ageing. Those aged 65 and above are forecast to increase by **64%**, and those aged 80+ are forecast to increase by **94%**.

An ageing population presents its own challenges and will alter infrastructure demands in Kent and Medway. These challenges include changing requirements for house types to be more adaptable and the increasing need for better healthcare and accessible infrastructure.



Figure 4.9: Forecast percentage population growth by 5-year age band between 2011 and 2031 (Source: KCC Housing Led Forecast 2017)

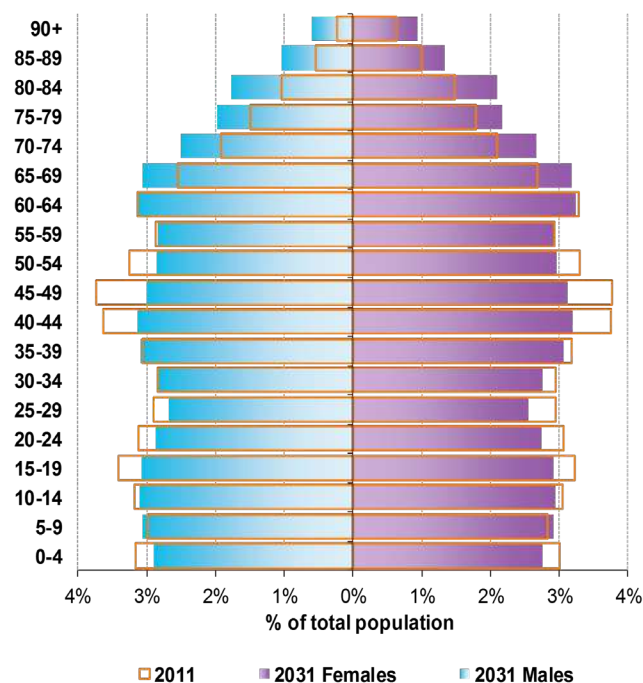


Figure 4.10: Population pyramid showing forecast differences between 2011 and 2031 (Source: KCC Housing Led Forecast 2017)

Traditional assumptions on the working age population age range will likely need to be revised as the population continues to get older. As an approximate measure of the working age population, those aged 20-64 will decline by 5% in their total share of the population by 2031, whereas those aged 65+ will increase their share by 6% of the population (Figure 4.11).

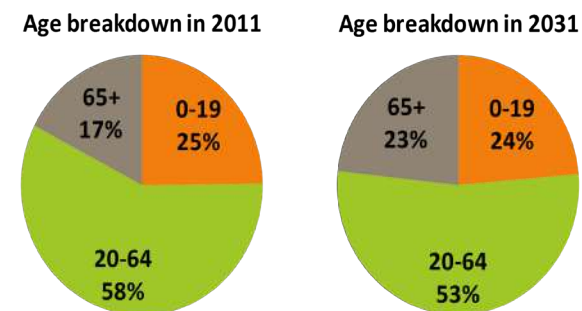


Figure 4.11: Forecast differences in population by age group between 2011 and 2031 (Source: KCC Housing Led Forecast 2017)

4.4 DEPRIVATION

Relative to the rest of England, quality of life is generally high across Kent and Medway.

Yet there are clear pockets of deprivation in urban areas such as Chatham, Gillingham, Ashford, Folkestone and Dover as well as peripheral coastal and estuarial areas, including the Isle of Sheppey and parts of Thanet (Figure 4.12).

There are variations in the causes of deprivation across Kent and Medway, ranging from a lack of access to healthcare and skills training, to poor access to potential job markets.

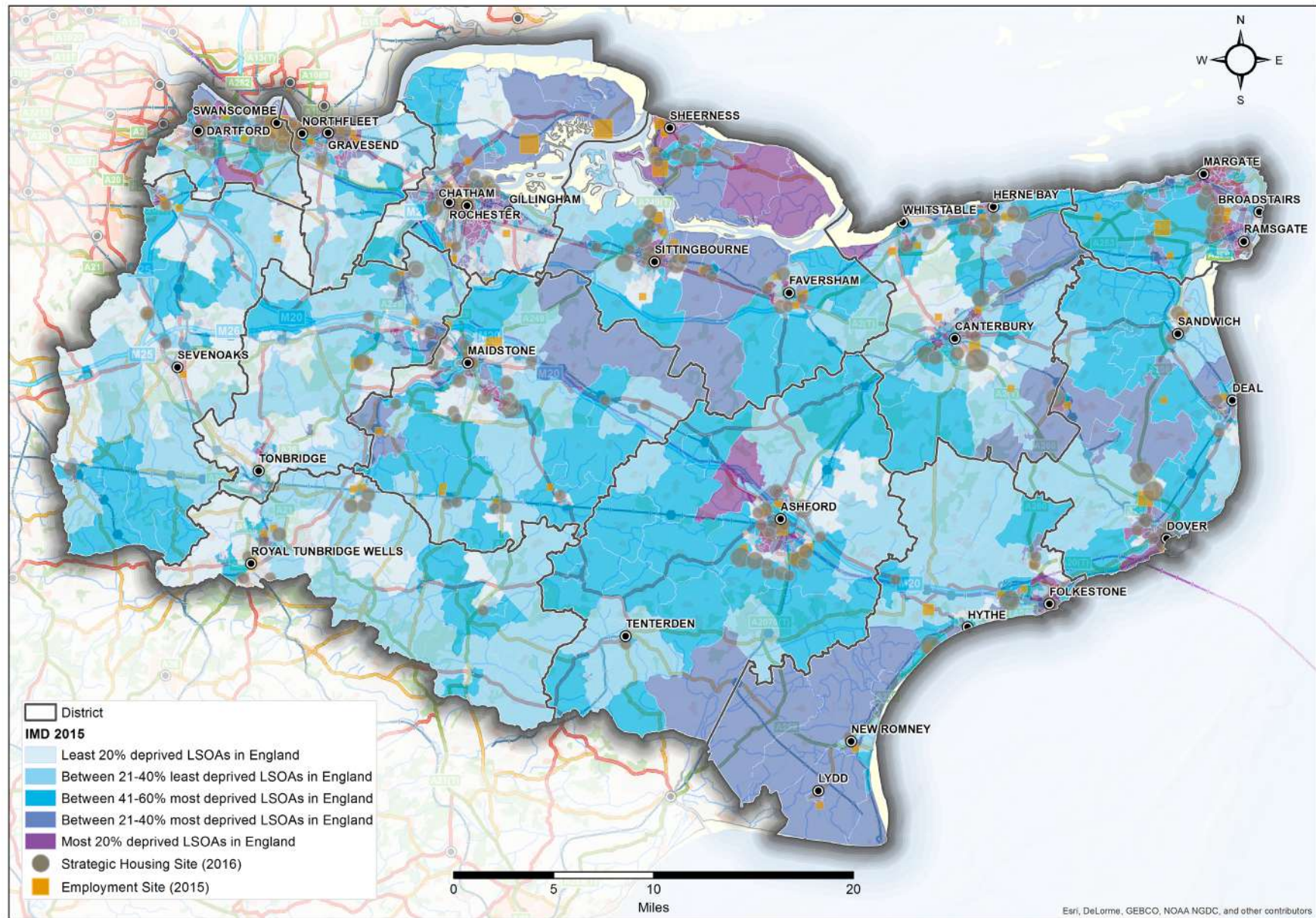


Figure 4.12: Map showing Indices of Multiple Deprivation 2015 (Source: ONS 2016)

4.5 HOUSING DELIVERY

There are approximately 770,000 existing housing units across the County. To accommodate the forecast increase in population, local authority housing forecasts indicate that some 178,600 housing units are planned across Kent and Medway between 2011 and 2031. Housing forecasts used within the GIF have been sourced from Kent and Medway's districts and boroughs as at September 2017. These sources are summarised below. Forecasts are adjusted to match the 2011-2031 period, where required.

DISTRICT	SOURCE
Ashford	Reg 19, 2011 - 2030
Canterbury	Adopted Local Plan 2011 - 2031
Dartford	Core Strategy 2006 - 2026
Dover	Core Strategy 2006 - 2026
Gravesham	Core Strategy 2011 - 2028
Maidstone	Main Mods, Reg 19, 2011 - 2031
Medway	2014 Housing position statement
Sevenoaks	Issues and Options, 2015-2035
Shepway	Core Strategy 2006 - 2031
Swale	Adopted Local Plan 2014-2031
Thanet	Draft Local Plan, 2011 - 2031
Tonbridge and Malling	Issues and Options, 2011-2031
Tunbridge Wells	Issues and Options, 2011-2031

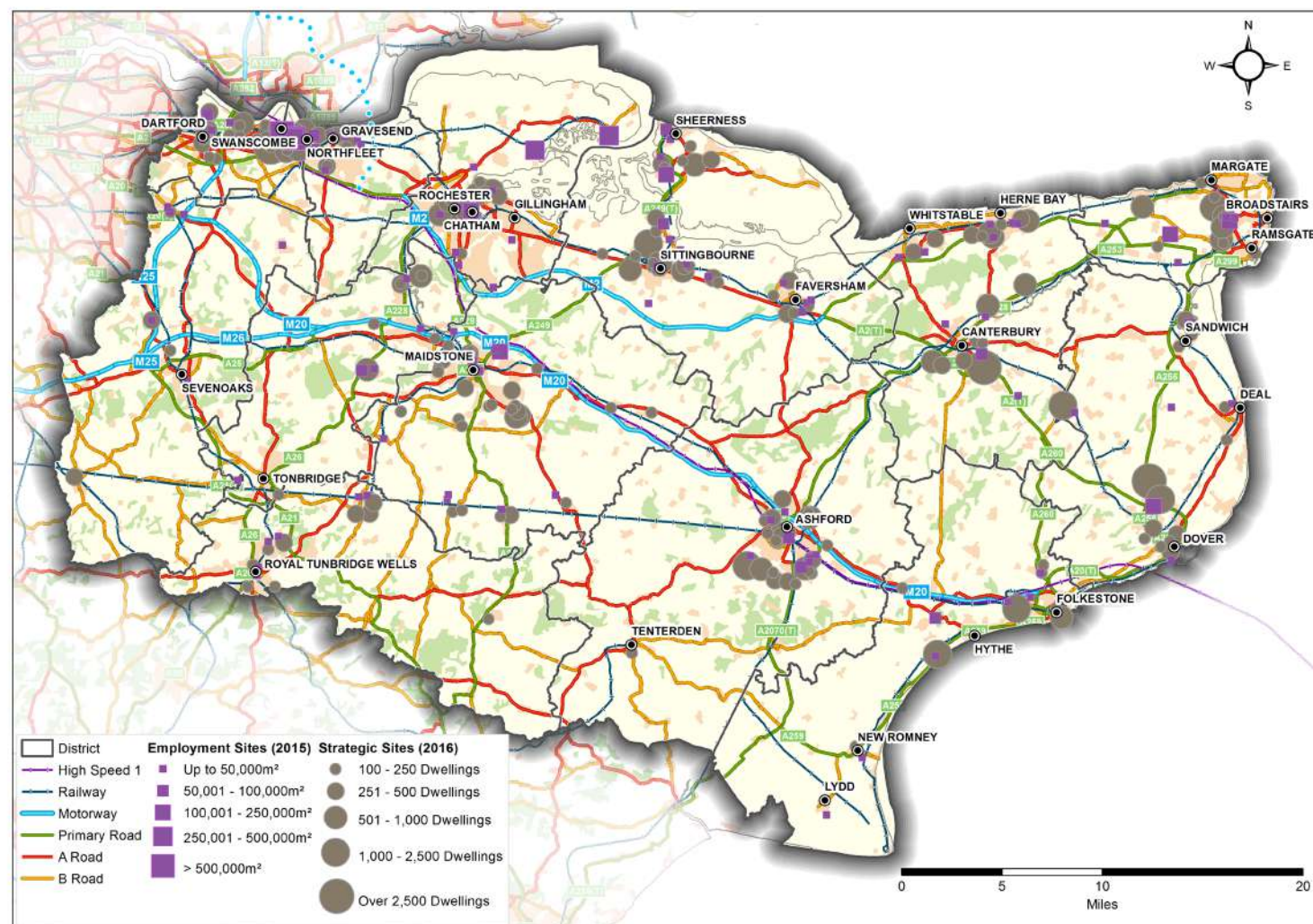


Figure 4.13: Kent and Medway growth context

CURRENT PICTURE AND PLANNED GROWTH

As the UK economy has improved since the height of the financial crisis, the pace of housing delivery has increased. The Government recorded that housing starts for the December quarter of 2015 were at their highest point for 7 years, nearly double the low point of 2009¹. Between 2011/12 and 2016/17, a total of 30,537 houses were constructed across Kent and Medway. There were 7,300 housing completions in Kent and Medway in 2015/16.

Despite increases in housing delivery over recent years, there remains a significant challenge in delivering at the planned rate of required growth, as shown in Figure 4.15.

The scale of development varies across the County, with much of the planned housing growth tending to be more focused in areas in the north and east of the County (Figure 4.14).

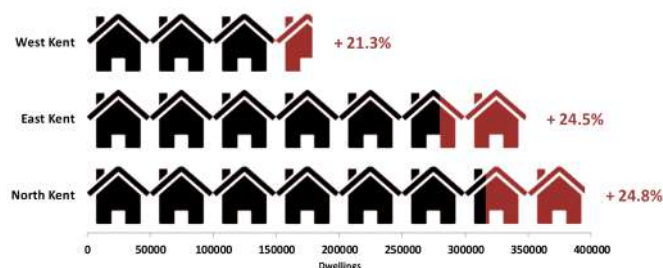


Figure 4.14: Planned additional housing growth by sub-county from 2011 to 2031 (Source: KCC September 2017)

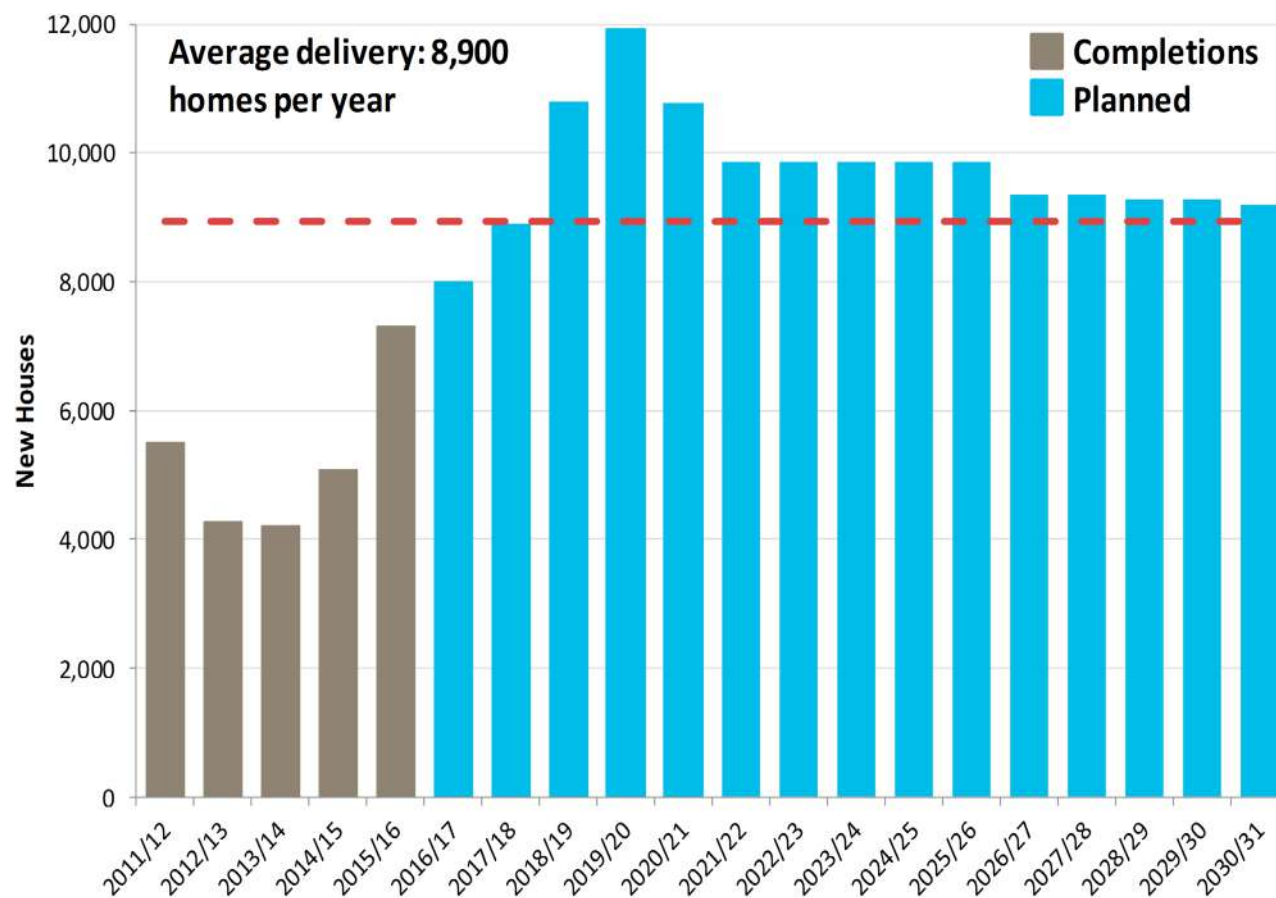


Figure 4.15: Developed and planned housing growth in Kent and Medway from 2011 to 2031 (Source: KCC September 2017)

¹<https://www.gov.uk/government/news/housing-starts-and-completions-hit-7-year-high>

4.6 AN ECONOMIC PORTRAIT

Kent and Medway play a critical role in the wider UK economy. The County is home to the Port of Dover, Eurotunnel and High Speed 1 access, ensuring many of the economic hubs in Kent and Medway are within an hour of London, and within two hours of Europe.

The Kent and Medway economy has transformed over the last twenty years. The core of the County continues to focus on service sectors including distribution, public administration and real estate. The traditional manufacturing industries of Kent and Medway's past - such as paper and cement manufacture - have declined, and whilst other sectors continue to expand and new industries emerge, there remains a legacy of an economy which continues to lag behind not only the South East, but the national economy.

Since 1998, Kent and Medway's GVA has grown by 84.6% to nearly £38bn in 2015. However, this is a lower rate of growth than that of the South East and the UK economy. In particular, the measure of GVA per head in Kent and Medway in 2015 was £20,977, which was 18% lower than the UK figure of £25,601 and

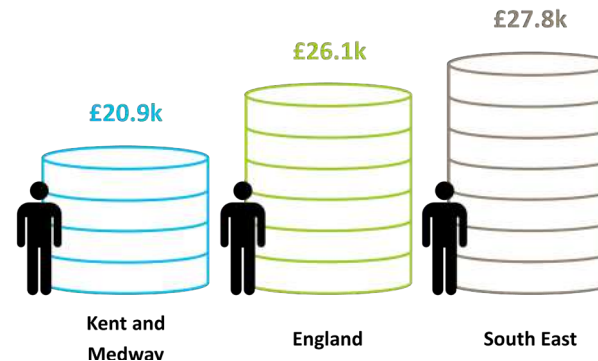


Figure 4.17: GVA per head in Kent and Medway

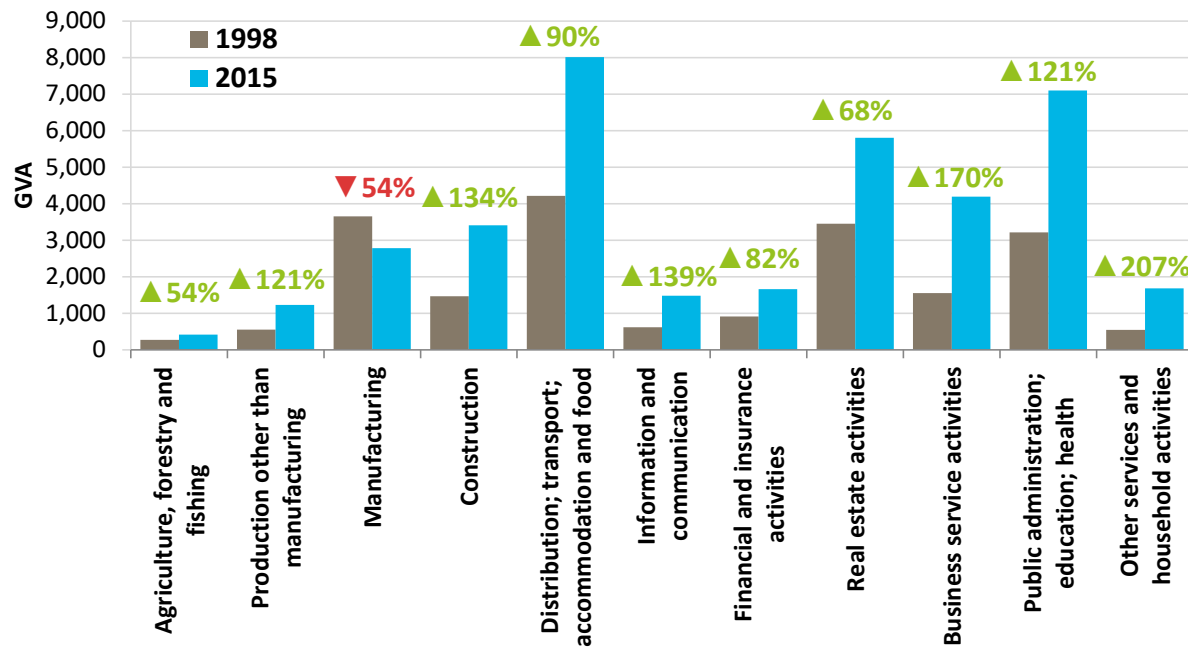


Figure 4.16: Changes in Kent and Medway's industries 1998 against 2015. (Source: ONS)

25% below the figure of £27,847 for the South East. GVA per head across the County highlights a clear east/west split, suggesting that those with good access to strong economic centres, such as London, benefit from increased average productivity.



Figure 4.18: GVA per head across Kent and Medway

One of the key challenges facing the growth agenda for Kent and Medway is how to provide the environment that enables the business character of the area to evolve. This is to enable and promote indigenous business growth, whilst attracting inward investment in the sectors of the future, thereby creating employment opportunities which can enable the area to move further up the value chain in key industries.

WORKFORCE

The available workforce in the County continues to be challenged by a growing retired population against a shrinking proportion of those of traditional working age. This is in conjunction with a decline in the availability of training opportunities/appropriately skilled workers as more Kent and Medway residents travel to take up employment opportunities outside of the County, especially commuting to London.

Employment in Kent and Medway is currently less 'knowledge intensive' than the national average (Figure 4.19).

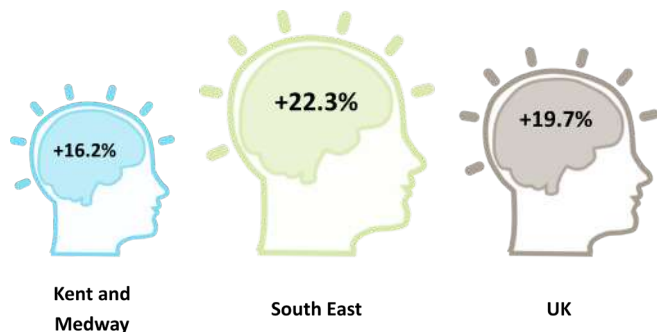


Figure 4.19: % of employees in the knowledge economy

Nonetheless, there are strong signs that there are changes in the structure of Kent and Medway's workforce – with the growth in knowledge intensive industries outstripping that of the national and South East average (Figure 4.20).

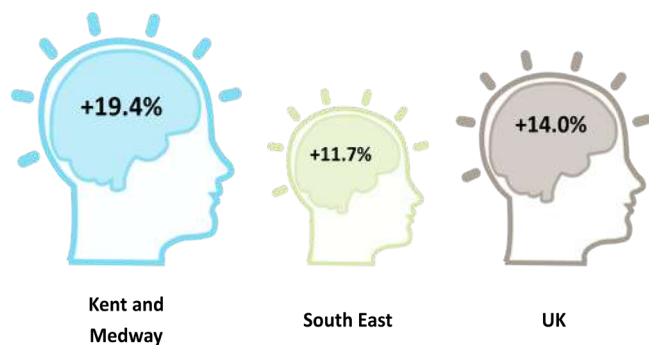


Figure 4.20: Growth in knowledge economy employees, 2009-2015

Although less of Kent and Medway's workforce holds an equivalent NVQ4+ qualification than both the South East and the rest of England, there has been significant growth of those in a highly skilled occupation.

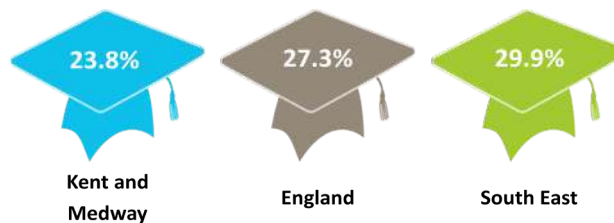


Figure 4.21: % of workforce with NVQ4+



Figure 4.22: Growth in highly skilled occupations 2004-2016

Within the County, average full-time earnings are below those of England and the South East.



Figure 4.23: 2016 Annual average fulltime earnings (median) - workplace based

COMMERCIAL PROPERTY

If Kent and Medway are to overcome the economic challenges and realise the economic opportunities presented above, there is a clear need for the local economy to provide the right space in the right location at the right specification to enable businesses to set up and grow in the area. Available, modern, flexible properties in the right location are needed to satisfy demand and business needs, with adequate space on site for businesses to grow and develop. However, whilst the Government focuses on resolving the housing crisis, there is less being initiated to support commercial development across the whole country.

There is an opportunity to attract businesses out of London into Kent and Medway, where such businesses can arguably achieve greater value for money in the space that they occupy and with the workforce they employ. There is clear opportunity for any county within reach of the capital that can create an attractive environment for business growth.

However, there is growing evidence as to the fact that this suitable commercial space is in limited supply. This limited supply could be hindering the growth of new and existing businesses in Kent and Medway.

There are several obvious consequences of the gap between demand and supply, including the loss of potential inward-investing businesses, but also the potential loss of indigenous businesses to neighbouring counties or further afield where more suitable properties may be available.

COMMERCIAL PROPERTY AND THE ECONOMY

Together, the current economic and political uncertainty is being viewed as an impediment to commercial property market activity.

However, despite the current uncertainties affecting the economic market, there has been a marginal increase over the last twelve months in the South East in the level of occupier demand for commercial space. The largest proportion of growth is demand for industrial property².

Demand for commercial space is driven by

- Local transport connections;
- Quality of space;
- Access to local workforce with relevant skills and knowledge;
- Facilities available with the commercial space, eg. receptionist, welfare etc;
- Opportunities for growth / expansion.

Case study examples include Nepicar Park, an industrial park in Wrotham which provides high-quality industrial spaces, with easy access to the M20 and M26, as well as a workforce with the relevant skills.

Nepicar Park

Gallagher Properties created speculative warehouse space at its Nepicar Park site in Wrotham and the industrial estate sold nearly all units in just 18 months after planning permission was secured.

Nepicar Park as a case study indicates there is strong confidence among small and medium-sized businesses in the county for well-designed, highly specified and well-located industrial units that are close to the motorways.

Future commercial supply is planned for within a Borough's Local Plan Employment Space Allocations.

In line with the NPPF, districts within Kent and Medway therefore identify sites suitable for commercial development during the Local Plan process. These will include sites for a diverse range of supply, allocated in consideration of the commercial demand attributes such as accessibility to local transport connections.

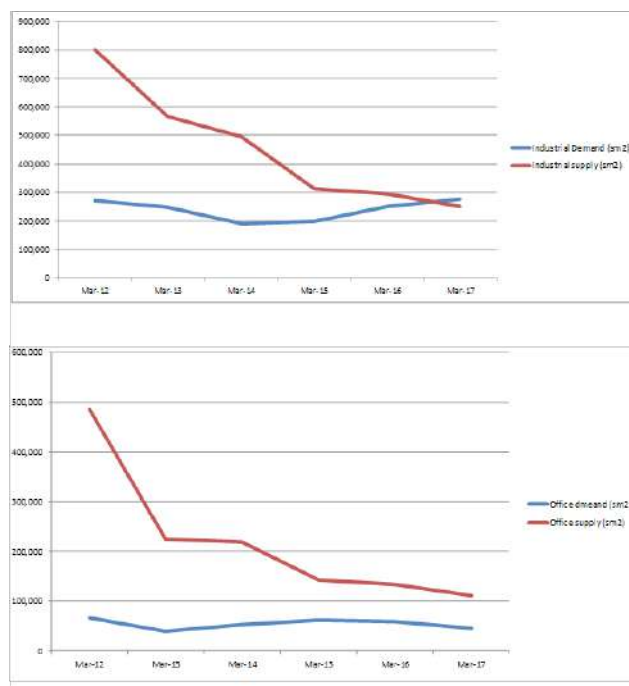


Figure 4.24: Supply and demand for industrial and office property
(Source: LIK Property Portal, May 2017)

CURRENT SUPPLY IN KENT AND MEDWAY

There is a varied supply of commercial space within Kent and Medway, both operating as standalone spaces as well as estates. Kent's inward investment agency, Locate in Kent (LiK), notes that the overall level of supply of industrial and office space in Kent and Medway has been declining since 2012³ as demonstrated in Figure 4.24.

There is generally a limited supply available for occupation – creating a limited supply to enable new business growth. Whilst there are several hubs of commercial space that have been developed over recent years, these have limited vacancies – having generally been faced with more demand than can be met with these available spaces. These opportunities include Ebbsfleet, which is providing an anchor for business growth, as well as Chatham Maritime university campus, Rochester Airport Technology Park, the Kent Science Park, the University of Kent and Canterbury Christ Church University campuses in Canterbury and the Discovery Park at Sandwich.

In fact, as of May 2017, from a total of 31 marketed sites on LiK's Property Portal, only 5 properties were readily available.

This imbalance between demand and supply is part of a trend over recent years, which threatens to worsen if some of the fundamental causes of this imbalance are not addressed. As shown in Figure 4.24, in 2017, in Kent and Medway, the level of demand for industrial property overtook that of supply. In March 2017, almost 300,000 sqm of industrial space was demanded from occupiers against c. 250,000 sqm of supply of industrial space.

²RICS Q2 2017: UK Commercial Property Market Survey; ³LiK Commercial Development Presentation, 10 May 2017

Latest figures show that industrial demand companies are increasingly looking for larger industrial units where there is little supply across Kent and Medway – for both office and industrial properties (over 25,000 ft²) and few very large size industrial units (over 50,000 ft²).

The figures also suggest that there is sufficient office supply to cope with current demand. However, for both office and industrial there are difficulties matching the appropriate property at the required quality and size, as well as meeting other clients' requirements (location, new build, internet speed, infrastructure, flexible lease arrangements, etc.).

Finally, nearly one-third of all commercial properties (office and industrial) across Kent and Medway are not available for new companies to locate into due to reasons such as the property has not been developed, does not have planning permission or is under offer to another company. There are however significant variations across districts in terms of available property and premises being developed.

These issues are making it difficult to meet all the demand for industrial and office properties and limit investment opportunities in Kent.

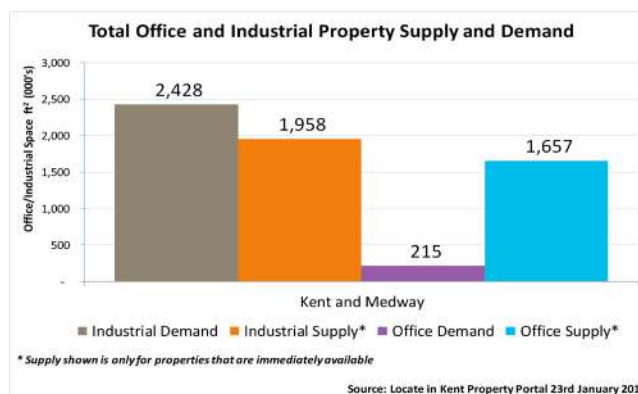
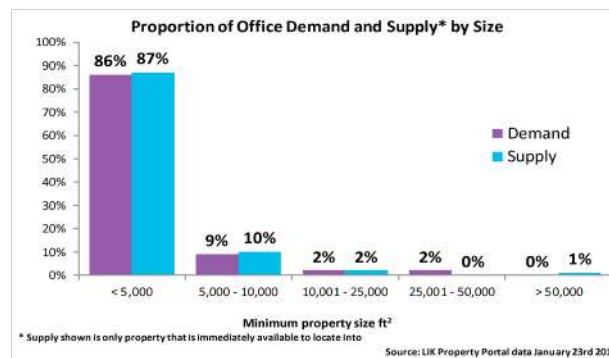
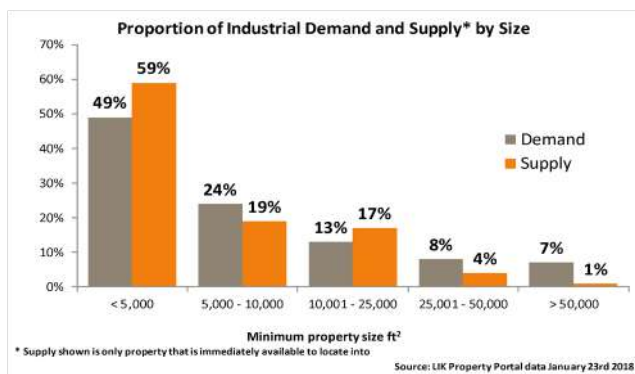


Figure 4.25: Supply and demand for industrial and office property (Source: LUK Property Portal, January 2018)

SUPPLY AND DEMAND BALANCE FOR COMMERCIAL SPACE: THE CHALLENGES?

There are a number of causes as to this emerging crisis in commercial property in Kent and Medway.

PERMITTED DEVELOPMENT RIGHTS

Permitted development (PD) rights allow certain changes of use to take place without needing detailed planning permission. Specific PD rights allowing conversion from office space, introduced as a temporary measure in 2013, were extended in 2016. A new temporary PD right has also been created for change of use from light industrial to residential (with limitations on floor space), which took effect from 1 October 2017.

The County has seen a very high level of PD conversions to residential, which is resulting in a significant loss of office space.

Whilst the total loss of floor space and its employment quality across Kent and Medway is not calculable, from 2012-13 to 2015-16 there have been a total of **295 dwellings** created through conversions from offices, storage and agricultural use under permitted development rights⁴.

Conversions of former commercial offices are making a much needed contribution to the County's housing supply, but this is at the risk of no longer being able to fully accommodate business growth to meet demand – which in turn is fundamental to provide jobs for residents, and crucial in creating sustainable communities.

MARKET, RISK AND PROBLEMS ACCESSING EXTERNAL FINANCE

However, the issue is not solely down to planning policy. In fact, many sites across Kent and Medway have been granted planning permission for commercial development – but the market has been unable to deliver. Issues of viability and access to finance are causing blockages in developing sites. Also, opportunities to attract companies and support expansions are limited. As a result, in recent years, residential development is generally viewed as delivering a higher rate of return at a lower risk than commercial development.

⁴ <https://www.gov.uk/government/statistical-data-sets/live-tables-on-dwelling-stock-including-vacants> (Table 123)

Specific issues relating to the market viability of commercial development that have been noted by stakeholders in Kent and Medway include:

- A shortage of commercial tenant pre-letting (especially an unwillingness to sign new commercial leases for more than ten years)
- A sense of business and economic uncertainty in relation to future corporate expansion plans (“wait and see”)
- A general reluctance for businesses to expand into new, untried locations - even if total occupational costs are reduced by over 50% by moving to a new location.

These factors all result in overall development risk being regarded as too high for new commercial schemes, and development funding from internal cash or banks is not available for this purpose.

FIT-FOR-PURPOSE, MODERN WORKSPACE

The demand is for well-positioned, high-quality flexible spaces and the need for faster broadband, particularly in its rural areas, is a key issue.

SPECULATIVE DEVELOPMENT

Ashford is one of a few locations in the County that is attracting and filling speculative development, with its commercial quarter in Station Road offering office space and several thousand jobs. In a perception study carried out by LiK, Ashford was identified as the best place in Kent to do business, with strong attractions being its rail links, road links, proximity to Europe and London, location and availability of sites.

Although in Kent and Medway, there are a couple of examples of successful speculative commercial development, there is generally a very small amount of this type of development. Risk and cost for the developer is attributed to commercial units which

Questor

Questor is a long-established business estate in Dartford, located one mile from J1B M25. Two further development sites for up to a further 52,400 sq. m. of industrial and office space have been speculatively developed, with completion in August 2017.

are developed and not occupied. Therefore, there is an inherent preference for pre-letting of commercial space ahead of construction. Pre-letting also allows for individual occupiers' requirements to be met as opposed to speculative development, where the units tend to be constructed to a more generalised specification to attract a diverse range of occupiers.

The need for business rates to be paid on empty commercial properties is a disincentive for speculative commercial development.

SOLUTIONS AND MOVING FORWARD

In light of these challenges, it is important to note where there are opportunities for stimulating a redress of the mismatch between supply and demand of commercial space.

PLANNING FOR GROWTH CLUSTERS

Businesses are increasingly making location decisions based on proximity to other businesses – either in the same or complementary sectors – hence the rising popularity of growth clusters. Such hubs of commercial space provide a supportive environment and the opportunity for collaboration and innovation.

There are several examples of successful clusters in Kent and Medway already. However, more of this kind of thinking and approach could be fostered in order to overcome the risks associated with speculative development, as such clusters can create a

EDGE Hub

Working with Canterbury Christ Church University (CCCU), the Kent and Medway EDGE Hub is an industry-led initiative to drive economic growth in the engineering and technology industry.

This has been achieved through the establishment of a transformative teaching and research centre, satellite facilities at the Discovery Park and CCCU's Medway Campus.

It was awarded £6 million from the Local Growth Fund. The Hub will add a suite of new technical and professional education opportunities and provide support to businesses with research projects, prototype development and CPD opportunities.

This project is highly needed in Kent and Medway, where fewer young people enter higher-level engineering and technology courses, and where businesses are held back by skills shortages and the lack of infrastructure to support innovation and research.

locus for inward investment.

An Enterprise and Productivity Strategy for Kent and Medway will draw upon the GIF evidence and start with a robust analysis of the economic and social characteristics of the County. It will develop specific actions to set out a framework for investment in infrastructure, technology and skills up to 2050, adapting to the changing national framework and within the context of the Industrial Strategy.

Three proposals for new facilities for postgraduate medical training have been identified in Ebbsfleet, Canterbury and Maidstone. These would all help serve Kent's rapidly growing population and

provide a focus for the integration of the health and social care economy, which is significant to Kent's economy. Not only would they fulfil an identified need to train more medical and social care practitioners, they would also provide the catalyst for clusters of health technology (medtech) and life science companies.

The recently established, employer-led Kent and Medway Skills Commission could have an important role in working alongside the Growth Commission to consider how clusters of high-value activity in the area can be supported.

THE ROLE OF THE PUBLIC SECTOR IN FORWARD FUNDING FOR COMMERCIAL DEVELOPMENT

One of the fundamental issues in the delivery of commercial space is the "chicken and egg" scenario – i.e. a developer will not develop speculatively without a pre-let, but a business often cannot commit to a new commercial development so far in advance to enable that developer to invest. There is a need to bridge the gap between the developer and the eventual business tenant.

Central Government could help bridge this gap by making forward funding mechanisms available to enable local authorities to intervene in helping pump prime local commercial development.

THE ROLE OF THE PUBLIC SECTOR AS ANCHOR TENANT

The level of risk in speculative commercial development is high and seeking ways to lower the level of risk may encourage further supply of available commercial spaces. Suggested routes to reducing developer risk could be through a Public Authority offering themselves as Head Leasehold of the commercial space or as a guarantor⁶. This is an example where Central Government could stimulate local growth by relocating Government agencies, arms-length bodies or cultural institutions, as suggested in the final pillar of the Industrial Green Paper.

THE ROLE OF THE PUBLIC SECTOR IN TARGETED BUSINESS FINANCE SCHEMES

The other opportunity to help connect demand for commercial space to the supply would be to enable businesses themselves to more readily finance their relocation. KCC's successful RGF loan schemes demonstrate how local authorities are already working with businesses that have growth potential to help to tackle this barrier.

The private sector has a crucial role in the delivery of commercial sites. Issues of viability and access to finance are critical in delivery of commercial space. Working with the private sector to examine this viability issue is fundamental and needs to be addressed to prevent the County's economic outputs lagging behind the South East. It will also ensure that a place-based approach enables greater co-ordination of investment in homes, infrastructure and jobs, to build sustainable communities. Work on the viability of sites will be progressed, alongside working with local partners, including Kent Developer Group and Locate in Kent, to develop key actions to respond to gaps identified between supply and demand of commercial space.

MOVING FORWARD

In order to increase the level of commercial supply in Kent and Medway, a more detailed analysis will be undertaken in response to the imminent Enterprise and Productivity Strategy for Kent and Medway. This Strategy will be identifying the future economic trajectory for Kent and Medway, and will identify the particular economic characteristics and sector opportunities that Kent and Medway will aim to realise over coming years – and with this strategy in mind, a finer-grain picture of the particular geographic opportunities for intervention will be developed. This work stream would seek to focus on how to increase the level of quality commercial supply within Kent and Medway.



Nepicar Park, Tonbridge & Malling BC

⁶The Development of Speculative Business Accommodation in East Kent, September 2017

5. INFRASTRUCTURE: MEETING THE NEED

This chapter presents an assessment of current infrastructure provision against growth forecasts to 2031.

The following infrastructure categories are included:

TRANSPORT



MOTORWAYS



HIGHWAYS



RAIL



PUBLIC TRANSPORT &
ACTIVE TRAVEL

COMMUNITY AND CULTURE



LIBRARIES



SPORTS & RECREATION



COMMUNITY LEARNING
AND SKILLS



COMMUNITY & CULTURE

EDUCATION



EARLY YEARS



PRIMARY EDUCATION



SECONDARY EDUCATION



SPECIAL EDUCATIONAL NEEDS



FURTHER EDUCATION

HEALTH AND SOCIAL CARE



LOCAL HEALTHCARE



MENTAL HEALTHCARE



ADULT SOCIAL SERVICES



ACUTE HEALTHCARE

UTILITIES



ENERGY



BROADBAND



WATER AND WASTE WATER



WASTE

NATURAL ENVIRONMENT



NATURAL & GREEN INFRA-
STRUCTURE



FLOOD PROTECTION

Port of Dover

5.1 TRANSPORT

CURRENT SITUATION

Kent and Medway is the strategic gateway from the UK to continental Europe. The County is therefore a vital part not only of the South East transport network, but the entire country in the physical movement of goods, services and people across markets. As an international gateway, Kent's motorway network facilitated 2.6 million vehicles in 2017 through the Port of Dover and 23 million passengers a year. About £120 billion of traded goods comes through Dover each year; 17% of Britain's total.

In addition, the County is a significant growth corridor in its own right, complementing London's own growth. The County boasts a number of strategic locations that benefit from the excellent rail connectivity provided through High Speed 1 and Eurostar. Also, with future investment enhancing the strategic transport corridors, there is huge potential for planned development to be brought forward to meet the growth forecast to 2031. A smart and resilient road network is required alongside enhanced rail capacity, to accommodate rising international freight, housing and commercial growth across Kent.

STRATEGIC PRIORITIES

Kent and Medway is facing increased congestion on both road and rail infrastructure. KCC's Local Transport Plan 4: Delivering Growth without Gridlock 2016-2031 (LTP4) clearly identifies the County's transport priorities. These priorities are being promoted with Government, the South East Local Enterprise Partnership (SELEP), and other organisations that fund the investment needed to support growth¹. Similarly, the Medway Local Transport Plan 2011-2026 sets out the transport

improvements to unlock growth potential in Medway.

It is clear that without significant investment and real innovation in how infrastructure is delivered to support the movement of goods and services, the County could be severely gridlocked in the medium to longer term. By 2050, smart and multi-functional infrastructure that incorporates the latest technology for capacity management will need to be in place along main corridors in Kent and Medway. The County will also need to plan for the transformation in vehicle technology, with the Government's newly introduced ban on the sales of new petrol and diesel vehicles after 2040 and the rise in autonomous vehicle technology – all of which could enable solutions to increased pressure on transport networks.

MOTORWAYS AND TRUNK ROADS

The motorway and trunk road network in the County is already congested and further growth in housing, commercial space and cross-Channel traffic will place additional stress on this network.

As highlighted in LTP4, the motorway network along the Channel Corridor is fragile and inefficient, as most traffic is routed along the M20/A20. There is a need for priority improvements to the Strategic Road Network (motorways and trunk roads managed by Highways England) in Kent and Medway to build resilience and fully utilise the two high-quality motorway corridors; the M20 and M2. These improvements include:

- Delivering the Lower Thames Crossing to relieve congestion at Dartford, facilitate growth across the North Kent Thames Gateway area and create a new strategic route from the Port of Dover via the M2/A2 to the Midlands and North;
- Bifurcation of port traffic through Kent and Medway – including subsequent improvements to the M2/A2 and M20/

A20 corridors to address local capacity issues and facilitate growth. This includes removing pinch points on the network, such as at Brenley Corner (M2 Junction 7) where free-flow is required to create a continuous A2-M2 route and remove congestion due to the gyratory;

- Delivery of a solution to Operation Stack, as well as suitable navigational technology to enable efficient signposting of lorries in the event of cross-Channel disruption.

Summary of total costs/funding for motorway projects (2017-2031)

Total Cost = £815,448,000

Total Funding = £792,116,000

Secured Funding = £326,900,000

Expected Funding = £465,216,000

Funding Gap = £23,332,000

HIGHWAYS

The highways network across Kent and Medway is also severely congested, especially in the major centres of Maidstone, Ashford, Canterbury, Dover, Dartford and Tunbridge Wells. Further growth, both in housing and cross-Channel traffic, will place additional stress on this network and so the delivery of projects to relieve congestion in these centres will be critical to delivering growth. The initial findings from the Strategic Transport Assessment from Medway Council have found there are issues of congestion on the A2 through Medway, A289 in Wainscott, A228 in the Medway Valley and M2 junctions, particularly junction 3 for Chatham.

Kent and Medway have a high demand for lorry parking spaces because of their excellent connectivity to continental Europe and therefore high volumes of cross-Channel freight

using the Strategic Road Network. KCC is developing a strategy for a network of small lorry parks at suitable locations to meet this demand, in combination with a partnership approach with the district councils, Medway Council and Kent Police to address enforcement. The Lower Thames Crossing subsequent improvements should also consider how to address impacts on the A228/A229.

Priority projects are:

- A2 Bean and Ebbsfleet Junction Improvements
- A network of lorry parks across Kent and Medway, with initial focus on north-west Kent, where there is a particular shortage in sufficient spaces.

Summary of total costs/funding for highways projects (2017-2031)

Total Cost = £6,489,597,000

Total Funding = £6,278,757,000

Secured Funding = £70,086,000

Expected Funding = £6,208,671,000

Funding Gap = £210,840,000

RAIL

Growth across the County will place additional pressure on the rail network, particularly towards London. LTP4 highlights three key projects for Kent that will support growth and connectivity in the County; the Ashford Spurs signalling upgrade, the Journey Time Improvement scheme and the delivery of Thanet Parkway Railway Station.

Rail capacity is also vital to unlocking the growth potential of locations across Kent, particularly Ebbsfleet Garden City and the planned Otterpool Park Garden Town. The proposed Crossrail extension to Ebbsfleet is vital to maximise the value of public

investment in Ebbsfleet Garden City and across Kent. Further, the Mayor's draft Transport Strategy highlights the extension as important for London's own growth². The Network Rail Kent Route Study, which will be published in late 2017/early 2018, will set out proposals for investment in the Kent route network during the period 2019-2024.

The new South Eastern Franchise will also be operational from April 2019, which will seek to provide a reliable and efficient service to passengers in Kent and Medway. For example, the Thameslink extension to Medway and improved services on the Medway Valley Line.

Priority projects are:

- Extension of Crossrail to Ebbsfleet (C2E)
- Ashford International Station Signalling (Ashford Spurs) – the upgrading of critical infrastructure at this vital international rail hub
- Journey time improvements; and
- Thanet Parkway Railway Station.

Summary of total costs/funding for rail projects (2017-2031)

Total Cost = £2,560,050,000

Total Funding = £528,250,000

Secured Funding = £0

Expected Funding = £528,250,000

Funding Gap = £2,031,800,000

PUBLIC TRANSPORT AND ACTIVE TRAVEL

In LTP4, the strategic priority for bus improvements highlights the success of the FastTrack bus service in Kent Thameside. This service is an exemplar of a high-quality bus service that

has successfully encouraged greater bus usage and will be expanded and developed as the area grows.

LTP4 and the Active Travel Strategy show KCC's commitment to making active travel an attractive and realistic choice for short journeys in Kent. Walking or cycling as a means of transport can benefit a person's health and well-being, as well as reducing the number of motor vehicles on the road, and also improving air quality.

Summary of total costs/funding for public transport and active travel projects (2017-2031)

Total Cost = £98,567,000

Total Funding = £81,615,000

Secured Funding = £38,348,000

Expected Funding = £43,267,000

Funding Gap = £16,952,000

Summary of total costs/funding for all transport projects (2017-2031)

Total Cost = £9,963,662,000

Total Funding = £7,680,738,000

Secured Funding = £435,334,000

Expected Funding = £7,245,404,000

Funding Gap = £2,282,924,000

² Mayor of London, Mayor's Transport Strategy, draft for public consultation 2017

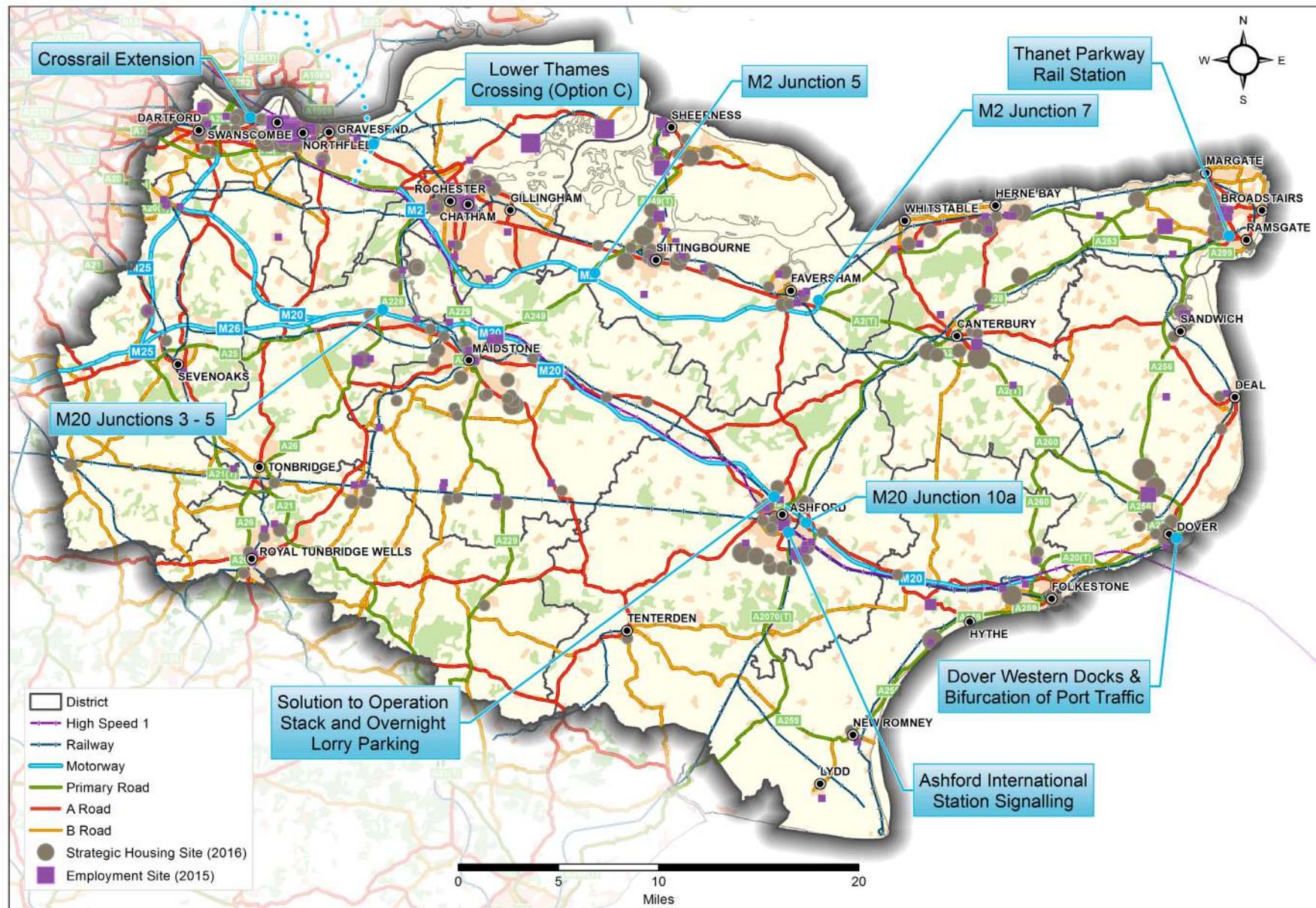


Figure 5.1: Strategic transport priorities in Kent and Medway

5.2 EDUCATION

Kent and Medway's education offer is diverse, with provision that includes nurseries, pre-schools, community schools, academies, free schools, colleges, foundation schools and voluntary-aided schools.

The GIF education section focuses on the following areas:

- Early years
- Primary education
- Secondary education and Special Educational Needs (SEN)
- Further education.

The GIF draws upon information from the following sources:

- KCC's Kent Commissioning Plan (KCP) 2017-21
- Medway's School Organisation Plan 2011-16 (new plan due 2018)
- KCC's GIF Single Forecasting System
- Kent and Medway Area Review (Further Education)
- KCC Business Intelligence.

STRATEGIC HEADLINES

- The Government's extension to 30 hours of free early education, for 3 and 4 year olds, is forecast to exhaust current childcare surpluses in the next two years.
- Kent and Medway's target to maintain a 5% surplus in primary and secondary schools has been broadly achieved in 2016/17.
- The baby boom of the last decade is starting to come through into secondary schools, causing significant growth pressures.
- Issues with Government intervention in supply of essential school places whilst not having any school place planning responsibility.
- There remain significant challenges in receiving sufficient Government funding to deliver school places.

Summary of total costs/funding for all education projects (2017-2031)

Total Cost = £1,183,517,000
Total Funding = £643,804,000
Secured Funding = £239,473,000
Expected Funding = £404,331,000
Funding Gap = £539,713,000

EARLY YEARS

CURRENT SITUATION

Early Years and Childcare provision in Kent and Medway is mainly delivered by the private, voluntary and independent sectors who liaise closely with KCC and Medway Council.

Free Early Education is available for all children aged three or four years. It constitutes 30 hours per week accessible over a minimum of 38 weeks a year and is free to the parent at the point of delivery.

HEADLINES

- Take-up of 'Free for 2' places continues to rise, and all districts, except Gravesham, have a surplus of childcare places.
- Research carried out by KCC's Business Intelligence predicts that the current surplus of free early year education places for three or four year olds will be exhausted by the end of 2018.
- The take-up of available places and vacancies is a constantly changing picture, affected by both parental demand and open-market conditions.

Long-term GIF forecasts¹ predict that early years growth will be approximately 8.2% across Kent and Medway from 2016 to 2031. This is broken down further in Figure 5.2.

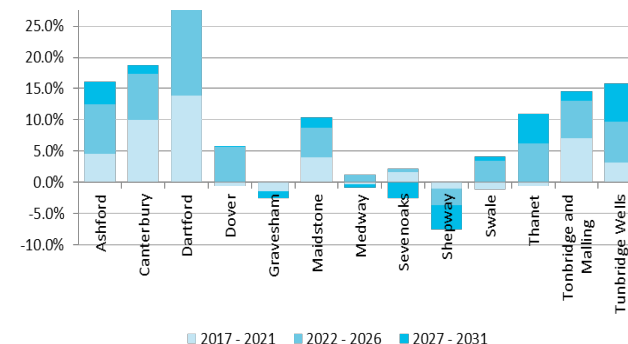


Figure 5.2: GIF forecast early years growth (0-4 year olds) - 2016 to 2031

The supply of free childcare places will be kept under review as new housing developments are built and the demand for places increases. Local authorities will be looking to develop contributions to mitigate the impact of new developments where there are local deficits in childcare places. This is to provide nursery accommodation and an agreement to secure community rental or leasehold accommodation availability for childcare providers for children aged 0-4.

Summary of total costs/funding for early years projects (2017-2031)

Total Cost = £61,056,000
Total Funding = £80,000
Secured Funding = £0
Expected Funding = £80,000
Funding Gap = £60,976,000

¹ These forecasts include children aged 0-4 that are predicted to take up a space in an early years facility.

PRIMARY EDUCATION

CURRENT SITUATION

Since 2010, KCC has added 11,200 primary school places or the equivalent of 53 new 1FE schools, which has been sufficient to meet demand. However, future growth forecasts show that pupil numbers will continue to rise throughout the GIF period. In Medway, pupil numbers have increased and are at their highest since 2002. At present, there is enough capacity built into the system through the capital programme until 2018. Since 2013, Medway has provided 2,515 places.

HEADLINES

- KCC's target of maintaining at least a 5% surplus was broadly achieved (although the overall figure for 2016/17 was 4.6%).
- In 2015/16 there was a net surplus of 6,300 places in Kent (+5% of capacity).

Long-term GIF forecasts² suggest that the number of primary school-age children (4-10 year olds) will rise by 10.5% across Kent and Medway, from 160,000 in 2016 to 177,000 by 2031, with growth most significant in Dartford (39.2%) and Ashford (16.1%). This growth is presented in Figure 5.3.

FUTURE REQUIREMENTS

The Kent Commissioning Plan identifies the following needs in order to maintain sufficient capacity in primary schools - see table. This extra capacity will be a mix of expansion of existing schools, and the commissioning of new schools. Medway's current capital project will provide sufficient capacity to meet demand over the next 5 years.



Figure 5.3: Forecast primary age pupil growth (4 to 10 year olds) relative to 2016

YEAR	REQUIREMENT ³
2017/18	9.5FE permanent 150 Year R places 30 Year 2 & 3 places
2018/19	12FE permanent 30 Year R places
2019/20	13FE permanent
2020/21 – 2022/23	49FE permanent

Summary of total costs/funding for primary education projects (2017-2031)

Total Cost = £393,439,000

Total Funding = £247,502,000

Secured Funding = £173,032,000

Expected Funding = £74,470,000

Funding Gap = £145,937,000

² These forecasts include ALL children aged 4-10 rather than just those that access a state-controlled school ; ³ Excludes Medway

SECONDARY EDUCATION AND SPECIAL EDUCATIONAL NEEDS (SEN)

CURRENT SITUATION

The baby boom that has occurred during the last decade is starting to come through into secondary schools, which is expected to cause significant growth challenges.

The Kent Commissioning Plan forecasts show that the number of secondary age pupils (years 7-11) in Kent schools is expected to rise significantly, from 78,000 in 2015-16 to 93,700 in 2022-23. Medway secondary school pupil numbers are also expected to rise from 18,661 (2015-16) to 21,635 (2023-24).

As of January 2016, there were 7,043 Kent pupils with special educational needs (SEN), i.e. those with a Statement or Education Health and Care Plan (EHCP). There has been a 6% increase in the number of pupils with Statements during the last year. As pupil numbers rise, the need for specialist provision will rise proportionally.

HEADLINES

- Additional new school places for September 2016 were delivered, with the majority within the secondary education sector for the first time in many years.
- The programme to refurbish or rebuild all special schools has continued and is nearing completion.
- KCC secondary schools operated a net surplus of 8,767 places in 2015/16. However, forecasts show that this will become a net deficit of 5,451 places by 2022/23.
- Pupils with an EHCP are moving through to secondary and there are pupils for whom local provision cannot be found, which is resulting in these pupils travelling greater distances daily.



Figure 5.4: Forecast secondary age pupil growth (11 to 15 year olds) relative to 2016

- Forecasts indicate that there will be significant pressure for secondary provision within special schools from 2018-19 onwards.
- Capacity for non-selective education in Medway exists until 2020, and capacity for selective education exists until 2019.

by 2031. This growth is forecast to be exceptionally high in Dartford (53.7%) and generally higher in the north and west of the County.

Long-term GIF forecasts⁴ that show secondary school age (11 to 15 year olds) numbers will increase significantly, up 22.6% across Kent and Medway from 105,000 in 2016 to 128,000

⁴ GIF forecasts include ALL children aged 11 to 15 rather than just those that access a state-controlled school; ⁵ Excludes Medway

FUTURE REQUIREMENTS

Medway has identified £50m of secondary education expansions required by 2021. Also, the area will need 6 FE schools by 2020 and 10 FE schools by 2022.

The Kent Commissioning Plan identifies the following needs in order to maintain sufficient capacity in secondary schools:

YEAR	REQUIREMENT ^s
2017/18	10FE permanent
2018/19	26FE permanent
2019/20	17FE permanent 60 Year R places
2020/21 – 2022/23	26FE permanent 210 Year 7 places

Summary of total costs/funding for secondary and special education projects (2017-2031)

Total Cost = £644,622,000

Total Funding = £356,422,000

Secured Funding = £66,441,000

Expected Funding = £289,981,000

Funding Gap = £288,200,000

FURTHER EDUCATION

CURRENT SITUATION

A key priority for Kent and Medway is to ensure every young person up to age 19 is engaged in purposeful and effective learning and training.

Kent facilitates this through apprenticeship schemes, vocational training, school sixth forms and further education colleges.

The Kent and Medway Area Review for Further Education shows that whilst the quality of provision is good, there are a number of areas which have been identified for improvement, including:

- Ensuring the mix and balance of provision, including apprenticeships and adult re-training, meets the future skills needs and priority sectors for the area;
- Providing more opportunities for higher and degree-level apprenticeships to meet the current and future needs of employers and to resolve issues of skills gaps and the increasing demand for high-level skills;
- Ensuring pupils at age 16 and their parents are fully informed about the full range of options available to them post 16;
- Ensuring the financial viability of FE provision and the local offer in the Kent and Medway area.

HEADLINES

With the significant increase in the numbers of primary school-aged pupils in recent years, the roll numbers in school sixth forms are also likely to increase. However, there appears to be sufficient sixth form capacity for the medium term across each district to both accommodate future pupil increases and increased participation.

Since 2009, the number of under-19 apprenticeship starts has increased from 1,800 in 2009 to 2,560 in 2014/15. By the third quarter of 2015/16 there were 2,480 starts and it is expected that the total will be the highest ever by the end of 2015/16.

GIF forecasts estimate that the Further Education cohort (16-18 year olds) will grow by 13.4% from 2016 to 2031 but not all of this growth will need to be accommodated by the Further Education estate within Kent and Medway.

FUTURE REQUIREMENTS

The Kent and Medway Area Review provides a range of recommendations for improving the Further Education offer in Kent and Medway, including:

- Canterbury College and East Kent College to merge by the end of 2017;
- KCC and Medway Council to lead collaborative initiatives to improve the effectiveness of transition arrangements between schools and colleges;
- KCC and Medway Council to establish a strategic planning forum for Kent and Medway to meet the SEN and high needs demand;
- Kent Further Education (KFE) to establish a strategic forum to deliver the recommendations from the area review and have oversight of skills provision in the area;
- A number of expansions are planned, including the Hadlow College Campus in Ashford and a new Arts Centre at the Dartford Campus of North Kent College.

Summary of total costs/funding for further education projects (2017-2031)

Total Cost = £84,400,000

Total Funding = £39,800,000

Secured Funding = £0

Expected Funding = £39,800,000

Funding Gap = £44,600,000

SKILLS CAPITAL FUNDING

Skills capital funding has been launched to Further Education Colleges and providers to support skills and training across the South East, with a particular focus on science, technology, engineering and mathematics (STEM) in the growth sectors. In supporting employment more widely, the South East Local Enterprise Partnership also wishes to see increases in those skilled for - and progressing in - sectors where there is growing employment demand, such as health and social care and other sectors named in the SELEP's Strategic Plan.

5.3 HEALTH AND SOCIAL CARE

The content for this chapter reflects a range of existing documents including:

- Kent and Medway Case for Change (2017)¹;
- The draft Sustainability and Transformation Plan (STP) (2016)²;
- Clinical Commissioning Group (CCG) Strategic Commissioning Plans;
- Kent's Accommodation Strategy for Adult Social Care - Better Homes: Greater Choice (2016)⁵;
- Medway Adult Social Care Strategy 2016-2021.

As Kent and Medway works towards an STP, future GIF iterations will be able to align infrastructure calculations with the STP priorities using a more structured approach and a demand modelling tool.

The Social Care Act (2012) preceded the adoption of the Joint Health and Wellbeing Strategy for Medway 2012-2017 which set out 5 strategic themes, including:

- Give every child a good start;
- Enable our older population to live independently and well;
- Prevent early death and increase years of healthy life;
- Improve physical and mental health and wellbeing;
- Reduce health inequalities.

CHALLENGES AND CHANGE

As the population grows, with more people living longer, demands on the services are increasing, making it harder to keep up with rising costs. Challenges vary across CCG areas; however, some key themes facing the County are:

AN AGEING POPULATION

Older people (aged 80+) are the fastest-growing group of people in Kent and Medway. Older people have a higher level

of service use compared to other age groups, particularly hospital admissions and use of community services.

LOCAL CARE WORKFORCE CHALLENGES

Fragility within local care is characterised by low numbers of GPs and practice nurses per head of population, high vacancy rates and high stand-in use. Local care is struggling with practices closing, workforce issues and variable infrastructure.

THE TRANSFORMATION AGENDA

Health and social care commissioners, and providers across Kent and Medway, have created a five-year STP to set out how Kent and Medway services need to change over the next five years to achieve the right care for people in decades to come.

The work will be overseen by the Clinical Board, which includes:

- General practitioners;
- Hospital consultants;
- Nurses;
- Public health professionals;
- Social care leads;
- Pharmacists; and
- Other clinical experts and geographic areas (e.g. East Kent Strategy Board).

The STP will identify actions to improve health and well-being, provide better standards of care as well as better use of staff and funds, with the aim of increasing efficiency to manage increasing demands.

Key priorities will be reducing the need for health and social care through self-management, ill health prevention and earlier diagnosis.

MAXIMISING THE ESTATE

Compared with England averages, the hospital estate within

Kent and Medway is relatively new and fit for purpose.

There are new public finance initiative (PFI) hospitals - Tunbridge Wells Hospital in Pembury, Darent Valley Hospital in Dartford and the Gravesham Community Hospital. The William Harvey Hospital and the Kent & Canterbury Hospital have the oldest and least fit-for-purpose estate (although still in line with the national average).

There is a large proportion of mental health estate that is dated and not fit-for-purpose (e.g. Thanet Mental Health Unit). At present, there is not a complete picture of the GP estates to understand their quality. CCGs are at different stages of assessing the quality of GP practices in each CCG area.

Engagement through local plan consultations is needed to ensure that there are adequate primary care services planned as part of future developments and adequate Section 106 and CIL contributions are secured.

Furthermore, it is understood that there is a high level of under-utilisation within the community estate. In many community hospitals, for instance, up to half of the bed spaces are not used.

PREVENTION AND INTEGRATION

A focus on prevention and early intervention is very important in improving health and well-being for local people, particularly those in more deprived areas. Despite this, only 2% of health and social care funding is spent on public health in Kent and Medway.

A suite of preventative measures during and beyond the five-year STP period is likely to bring a substantial financial and societal benefit to the Kent system, if delivered at the pace

CASE STUDY: EBBSFLEET GARDEN CITY – HEALTHY NEW TOWN PROJECT

In February 2016, it was announced that Ebbsfleet Garden City would become one of the country's ten beneficiaries of the healthy new town project. The Ebbsfleet Healthy New Town development offers a unique opportunity to bring together health and regeneration. **Dartford, Gravesham and Swanley** Clinical Commissioning Group is leading the Ebbsfleet Garden City Healthy New Town project, which represents a significant opportunity to improve the health of local people and build a new healthy community that promotes healthy lifestyle choices.

The new development will provide an attractive environment that promotes active and sustainable healthy living. There will be support offered to people who have dementia and community cohesion encouraged through design. Multi-functional green spaces, high-quality leisure facilities and healthy eating venues will be developed alongside active transport links, integrated cycle paths and walking routes.

New models of care, built around people, not organisations, will embrace the third sector and local community networks, creating opportunities for co-located services that support strong multi-generational communities.

and scale with the participation of the wider health, social care and public sector workforce. Preventative measures could include green space, outdoor gyms etc. that are available for the community to use to keep active and healthy.

HUB MODELS

The local care model plans to transform the locally based provision of care through the integration of primary, community, mental health and social care and at the same time move some elements of traditional acute hospital care into the community. This allows patients to get the right joined-up care that they have consistently told services they want in the right place, and make the best use of available resources. The intent is to develop local care by scaling up primary care in clusters, based on patients registered with a GP within a defined locality. The model proposes enhancing primary care by wrapping community services around these groupings of GP practices to support the communities they serve, based on populations of 30-50,000 registered patients and also to commission and manage higher-acuity and other out-of-hospital services at scale.

This growing focus on bringing local care into a single point within the community means the creation of local care hubs. In order to develop hubs, the preferred approach would be to relocate an existing practice or merge a number of practices into a new facility that, with the wider growth planned, will eventually become a hub facility or a larger GP practice that works at scale. This will depend on the population being served and the accessibility for patients. Hub working will not replace GP services, but will be additional to GP services.

In Kent and Medway, the picture of existing health services will require significant redesign and modernisation to move towards an integrated care strategy. This will place additional pressures on consolidation and refreshing existing healthcare infrastructure. In recognition of this, there will be additional pressures to consolidate existing healthcare infrastructure. An integrated Health and Social Care model could look like the proposed vanguard development at Estuary View in Whitstable (see case study).

In order to meet the future adult social care needs, there will be a changing requirement on the services provided by nursing care homes and extra care housing. It is anticipated that a significant sum will be required to modernise the healthcare model within Kent and Medway to provide fit-for-purpose facilities along the lines of the integrated Estuary View model.

WHAT COULD THIS MEAN FOR KENT AND MEDWAY?

The “Delivering better healthcare for Kent” discussion document supports and encourages community integrated health and social care. KCC is considering how the lessons learned from Estuary View can be applied to the delivery of future health and social care facilities in Kent.

Theoretically, the health and social care village hub is expected to serve a population of between 40 and 50,000 people, although many of the services listed are accessed from a larger population base. The additional population forecast in Kent and Medway to 2031 would require the equivalent of 9 to 10 additional Health & Social Care Villages, equivalent to up to £300 million in costs.

ADULT SOCIAL CARE

In “Kent’s Accommodation Strategy for Adult Social Care (Better Homes: Greater Choice)”¹⁵, estimates show that 30% of beds in care homes are occupied by people who could be better treated in their own homes or supported accommodation, such as extra care housing. It also predicts greater focus on care home provision for dementia services, with and without nursing care. Design is crucial. The vision is that people should live independently in their own home, receiving the right care and support. There is real need for investment from the independent sector for larger, modern, fit-for-purpose services designed for people with complex dementia. However, there is an overprovision of standard general frailty care home provision, particularly around the East Kent coast.

CASE STUDY: ESTUARY VIEW MEDICAL CENTRE, WHITSTABLE: INNOVATIVE ASSET MANAGEMENT FOR HEALTH AND SOCIAL CARE

Estuary View in Whitstable is an integrated medical centre providing an example of maximising investment in capital assets. It is owned and managed by Whitstable Medical Practice (WMP), an NHS GP Partnership. Construction was completed in 2009 at an estimated cost of £7 million, providing 2,400 m² of floor space and including a variety of co-located facilities.

The existing medical centre has already seen reduced costs to the NHS, with a two-year study highlighting **£1.6 million** in savings. This is versus standard NHS tariffs achieved through lower tariffs, use of GPs with a special interest, fewer outpatient follow-ups and A&E avoidance. Many clinics have been added since this survey, which will have enhanced the level of savings.

WMP has expansion plans to develop the existing Estuary View Medical Centre into a Community Integrated Health & Social Care Village. Full planning permission has been granted as part of this complex for a 101-suite care facility and a 102-suite acute care home. This would include a co-located base for integrated community nursing and social care teams. It is estimated that the cost of delivering the integrated Health & Social Care Village would be between £20 and 30 million.

The community hub model also has the potential to deliver council services and complementary social infrastructure, including dentists, opticians, crèche, library space, Citizens Advice and meeting rooms.

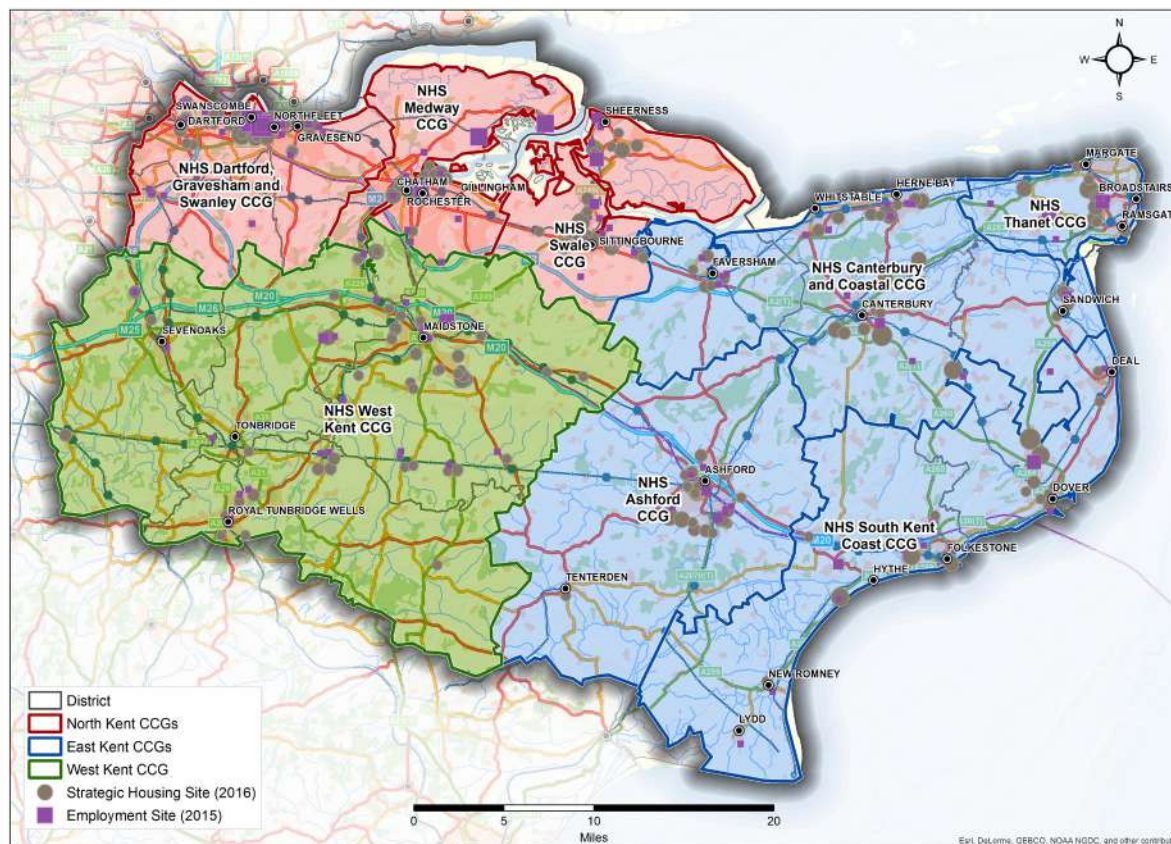


Figure 5.5: Kent and Medway CCG areas

For Medway there will be an increase in the number of younger adults with learning disabilities and an increase in the number of older adults. These adults from age 85 onwards are likely to have social care needs, including dementia. This increase is projected to grow exponentially to 2035.

The emerging Health and Social Care infrastructure costs that have been identified to date, arising directly from growth, are as follows:

Total Cost = £2,763,974,000

Total Funding = £1,825,324,000

Secured Funding = £9,688,000

Expected Funding = £1,815,637,000

Funding Gap = £938,648,000

¹ <http://kentandmedway.nhs.uk/stp/caseforchange/>; ² <http://kentandmedway.nhs.uk/resources/kent-medway-sustainability-transformation-plan/>; ³ http://www.kent.gov.uk/_data/assets/pdf_file/0018/14634/Kent-social-care-Accommodation-Strategy.pdf; ⁴ Delivering Better Healthcare for Kent; ⁵ Kent's Accommodation Strategy for Adult Social Care (Better Homes: Greater Choice)*

5.4 COMMUNITY AND CULTURE

Kent and Medway's community and cultural services are diverse and encompassing for the population across the County.

The GIF community and culture chapter focuses on the following areas:

- Library Services
- Sports and Recreation
- Community Learning and Skills (CLS)
- Creative and Cultural.

Summary of total costs/funding for community and culture projects (including youth services) (2017-2031)

Total Cost = £398,991,000

Total Funding = £270,865,000

Secured Funding = £15,772,000

Expected Funding = £255,093,000

Funding Gap = £128,127,000

LIBRARY SERVICES

CURRENT SITUATION

Library services in Kent are organised by the County Council's Library, Registration and Archive (LRA) Service. LRA is currently developing a future approach for library services focused on outcomes that make a difference to people's lives. The service is delivered through library buildings across the County, the mobile library service, an online offer, and for those unable to use these options, a range of outreach services such as the home library and postal loan services.

As well as books, there is also access to ICT, a place to meet others and a range of events and activities for all ages.

Through these services, people improve their literacy and foster a lifelong love of reading. They are also supported in finding information, developing the skills to use online channels and becoming more active citizens.

INFRASTRUCTURE PROJECTS

The list below sets out key library investments to support population growth to 2031:

- Chilmington Green – capital cost to build library space in a new community hub in Ashford, contributions towards Stanhope Library, Ashford Gateway and the mobile library services.
- Library expansion at Queenborough – Development of library services in Queenborough and Rushenden, Swale.
- New Cultural and Learning Hub in Tunbridge Wells – new library provision as part of the wider redevelopment of the existing museum, art gallery, library and adult education centre.
- Southborough Community Hub – new library provision as part of the wider community space, including a replacement theatre and town council offices.
- Sittingbourne Town Centre – redevelopment with a new multi-service centre, including a library.
- Cranbrook Community Hub - new library provision under discussion, as part of the wider community space, including town council offices and multi-purpose indoor meeting space.
- Herne Bay Library - redevelopment including co-location with Canterbury City Council and multi-purpose use of the building.
- Medway - build upon and develop the existing library to cement the success of the Community Hub developments at Strood, Twydall, Chatham, Gillingham, Rochester and Hempstead.

Summary of total costs/funding for library projects

(2017-2031). *The majority of the costings are focused on the maintenance of library services in Kent and Medway.*

Total Cost = £9,467,000

Total Funding = £4,911,000

Secured Funding = £815,000

Expected Funding = £4,096,000

Funding Gap = £4,556,000

SPORTS AND RECREATION (INDOOR AND OUTDOOR)

Community indoor sports facilities, outdoor sports and open play spaces/pitches, and children's playgrounds in Kent & Medway, comprising of both public and private facilities, are owned and operated by a mixture of private sector, voluntary organisations, local authorities and education establishments. Some of these existing facilities were built in the 1960s and 70s and consequently are in need of major modernisation.

HEADLINES

COMMUNITY AND INDOOR SPORTS FACILITIES

- Swale, Thanet and Gravesham have the largest gaps in indoor sports provision, with the supply below the Kent and Medway average.
- There are gaps in current facility distribution against the focus areas of housing growth, seen in Maidstone, Thanet, North East Canterbury and North West Medway.
- Ashford, Canterbury, Sittingbourne and Dartford all have relatively strong provision of indoor sports where future housing growth is projected.
- Medway Council is currently developing a new sports facility strategy with an update planned for 2018.
- Dover District Leisure Centre is currently under construction and due to open early 2019.

OPEN SPACE AND RECREATION

- Shepway, Swale and Medway have the largest gaps in outdoor sports provision, with the supply below the Kent and Medway average.
- Ashford, Sevenoaks and Tonbridge and Malling have the highest levels of outdoor sports provision.
- The large urban centres of Maidstone, Ashford, Canterbury and northern parts of Dartford and Gravesham all have strong provision of existing outdoor recreational facilities.

Sport England has changed its approach to capital funding and now has a considerably reduced ability to fund sport infrastructure projects. This is particularly the case for community sporting facilities, but will be less acutely felt for sport infrastructure costing £1mn or more. However, the vast majority of the required infrastructure identified within this framework is of a value under £1mn and the opportunity to fill this funding gap has become much more challenging since 2015. This is in response to falling lottery sales, and a focus on informal sport being the best way to support the least active people to start being active.

Many schools, universities and colleges allow the community to use their facilities. However, increasingly, some Free Schools and Academies do not. Some of the discrepancy between demand and under-supply could be met by those education establishments being encouraged to be more willing to do so or being required to do so when applying for planning permission.

Summary of total costs/funding for sports and recreation projects (2017-2031)

Total Cost = £337,633,000

Total Funding = £235,676,000

Secured Funding = £10,500,000

Expected Funding = £225,176,000

Funding Gap = £101,957,000

COMMUNITY LEARNING AND SKILLS (CLS)

CURRENT SITUATION

Community Learning and Skills (CLS) is delivered by KCC, meeting central and local Government priority objectives in areas such as social inclusion and social mobility, personal health and well-being, skills and employability. Medway Adult Education service also delivers this service (including; community learning, employment skills, basic skills, volunteering and supported learning).

While CLS is wholly owned by KCC, its income is primarily derived through contracts with Central Government departments, namely the Department for Business, Energy & Industrial Strategy and the Department for Education. Through the two funding streams, the following education and learning opportunities are provided:

- **Community Learning** - Kent Adult Education
- **Apprenticeships** - Kent Training & Apprenticeships
- **Traineeships** - Kent Training & Apprenticeships
- **Basic Skills** (English, Maths, Information Technology and Employability) - Skills Plus.

CLS operates from twenty dedicated sites and in numerous community locations throughout Kent. CLS delivers a broad programme of vocational and non-vocational courses, each strand targeting specific audiences. Many courses work towards accreditation, including GCSEs.

CLS BRANDS OPERATING IN KENT AND MEDWAY

- **Kent Adult Education** offers a varied programme to adults 19+ seeking additional skills, personal development or learning for pleasure and well-being. Courses seek to widen participation and engage with communities to increase skills and social mobility. Family programmes work to enhance parenting skills and enable parents and carers to support their children's education and development.

- **Kent Training and Apprenticeships** offers three strands to enable young people (16-19) to enter work via study programmes, traineeships and apprenticeships. Apprenticeships for people aged 21+ are also available.
- **Skills Plus** delivers English and maths to adults aged 19+ from entry-level courses up to GCSE. For those whose first language is not English, a wide range of courses exist to improve their English.

FUTURE REQUIREMENTS

In line with KCC Asset Management Strategy, the CLS property estate is currently under review. Investment is planned to acquire better education and learning facilities and to accommodate growth in sectors that are aligned to national and local priorities. The geographical areas in which investment is being planned are:

- Tunbridge Wells
- Tonbridge
- Sevenoaks
- Thanet
- Shepway
- Maidstone.

The most significant projects are the Lifelong Learning Centre at Eastern Quarry (£1.46mn) and CLS services at both the Sittingbourne Gateway (£1.2mn) and at the Tunbridge Wells Cultural Hub (£1.2mn).

Summary of total costs/funding for CLS projects (2017-2031)

Total Cost = £3,336,000

Total Funding = £2,261,000

Secured Funding = £1,892,000

Expected Funding = £369,000

Funding Gap = £1,075,000

CREATIVE AND CULTURAL

CURRENT SITUATION

Incorporated within the NPPF is the objective of promoting cultural well-being. The Industrial Strategy White Paper 2017 has identified the Creative Industries as one of nine growth sectors. Employment in the creative industries sector is growing four times faster than in all other industry sectors.

The Kent and Medway Cultural Strategy 2017-2027 'Inspirational Creativity, Transforming Lives Every Day' commits to "*Embed culture and the creative economy firmly within planning frameworks...cultural provision and good design is at the heart of all new developments and integral to the growth of strong, resilient and successful communities.*"

Ambitions for economic growth need high-quality places where people choose to live, not soulless dormitory towns. Developers are recognising the value culture brings to new developments.

Participation in creative activity generates aspiration and innovation: some communities in Kent (North Kent, Dover District, Ashford, rural Shepway) have poor access to cultural infrastructure.

HEADLINES

- At present, up to 92% of the creative & digital sector workforce in Kent is freelance¹. Reductions in commuting and increased local spend can be enhanced by provision of shared workspace close to housing and town centres.
- With predictions that 30% of London's creative sector workspace is disappearing in the next five years², London is moving east and the creative and digital sectors are leading

the way. The number of creative and digital businesses located in Kent and Medway has grown 82% in five years; in Gravesham growth is 150%; Dartford is 121%³.

- Land values and conversion of commercial spaces to residential use is preventing workspace development for digital/tech start-ups in Kent's strongest growth clusters- Tunbridge Wells (e.g. The House) and Sevenoaks⁴.
- Redundant commercial and retail spaces, underused public assets and seaside buildings from a past era blight the landscape and their values restrict development. Such buildings - Thanet Press Site, Margate being an example - are often intrinsically attractive to the creative sector who, incentivised to invest with long-term leasehold/freehold security, offer economic activity in areas of weak growth and high unemployment.
- The Thames Estuary Production Corridor proposes large-scale cluster development of world-class production facilities with a digital super-highway for the creative and digital industries. It will re-purpose redundant commercial spaces in North Kent and Medway, provide skills training, employment and provide a national focus for innovation and the knowledge economy.
- Investment planned in West Kent, notably £100mn investment in a new Cultural & Learning Hub and state-of-the-art 1,200 space theatre to support the local cultural and creative economy (emerging costs not included in totals).

FUTURE REQUIREMENTS

Residential developments such as Ebbsfleet and Otterpool include consideration of access to cultural infrastructure as

part of master planning. This could be in the form of on-site facilities (shared with other community services) and transport options to nearby cultural 'hub' towns, particularly to support the night-time economy.

Areas of future development could include:

- Cultural programming to contribute to early activation of residential developments, to add value and generate social cohesion;
- Enabling access to good-quality cultural provision for all of Kent's communities. Investment in the Tunbridge Wells Culture and Learning Hub provides an example of how shared spaces can deliver opportunities for growth in cultural provision;
- High-quality design, public realm and use of public art to create welcoming and appealing places to live;
- Shared workspace to be considered as part of residential developments to support freelance and home working;
- Redundant commercial and other assets supported by planning policy and promoted to the creative and digital sector to relieve pressure on Kent's hotspots where growth is stalling;
- The Kent Creative Workspace Report identifies Kent and Medway's Thames Estuary area as a 'creative opportunity area' requiring the alignment of planning and investment policy to deliver the sector growth.

Summary of total costs/funding for creative and cultural projects (2017-2031)

Total Cost = £42,725,000

Total Funding = £24,180,000

Secured Funding = £0

Expected Funding = £24,180,000

Funding Gap = £18,545,000

¹The Impact of the Creative Economy in the South East, Shared Intelligence 2016 ; ²GLA Creative Workspace Study 2015;

³Mint Business List 2014-17; ⁴Kent Creative Workspace Report 2014

5.5 UTILITIES

ENERGY

CURRENT ENERGY CONSUMPTION

Gas and electricity combined account for approximately 54% of total fuel consumption. Petroleum products account for 41% of total consumption, the large majority of which is associated with road and rail transportation. Bioenergy and waste, manufactured fuels, and coal combined account for just over 4% of total fuel consumption.

HEADLINES

Total fuel consumption for Kent and Medway in 2015 is shown in Figure 5.6 by fuel type and by district in Figure 5.9. Figure 5.8 shows the breakdown of fuel use by sector.

- Since 2012, gas consumption has fallen by 10% and electricity by 20%, across Kent and Medway;
- There is a greater need for dispersed, low-carbon power sources and battery storage;
- There is 187.9 MW of proposed large-scale renewable energy projects in Kent and Medway (majority solar projects).

PREDICTED ENERGY CONSUMPTION TO 2031

Figure 5.7 shows the projected annual gas and electricity sales from 2014/15 to 2030/31, for current dwellings and projected new dwellings in Kent and Medway.

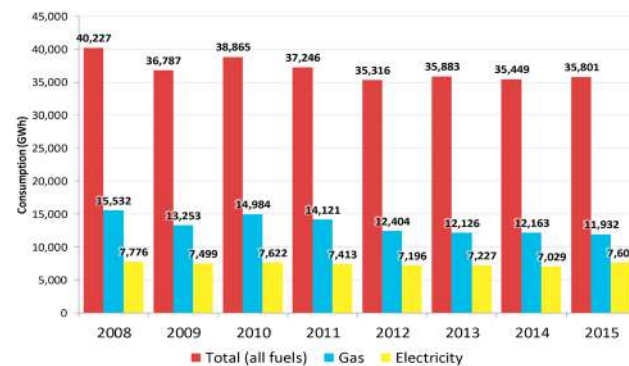


Figure 5.6: Total fuel consumption in Kent and Medway 2015

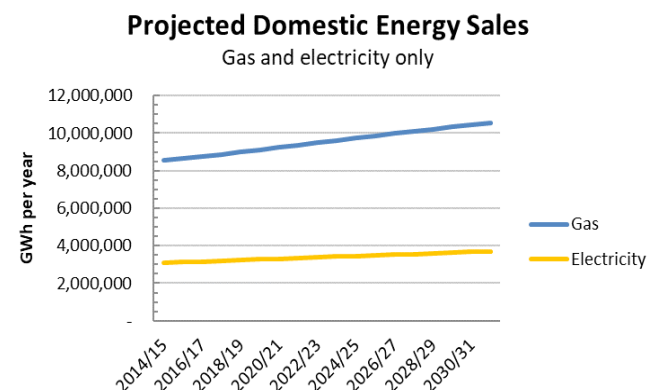


Figure 5.7: Project domestic energy sales in Kent and Medway to 2031

Over this period of time, gas demand in Kent and Medway is expected to increase by approximately 23% (from 8,556 GWh per year to 10,550 GWh per year) and electricity demand is expected to increase by approximately 19% (from 3,101 GWh per year to 3,699 GWh per year).

By 2031/32, nearly one in five homes is likely to have been built after 2015. Therefore, the rate at which Kent and Medway minimise energy demands in the domestic building sector is likely to be highly sensitive to the energy efficiency of those new buildings.

FUTURE REQUIREMENTS

The energy system in the UK and Kent is changing. Two-thirds of the UK's existing coal, gas and nuclear power stations are set to close by 2030 and any future power stations must be largely decarbonised if the UK is to achieve its legally binding targets of cutting CO₂ emissions by 80% by 2050.

To meet the rising pressure on energy demand, new and more diverse sources of electricity generation will need to develop. There will be a need for an increased number of smaller, dispersed, low-carbon-generation power sources, often located near to people's homes and businesses. Due to the variable nature of this generation, there will also be an increased need for technologies, such as battery storage, to manage seasonal and diurnal variations.

Demand for electricity is also changing and increasing; for example, as a result of the electrification of heat and transport, as highlighted in the 2050 chapter of the GIF.

Changing supply and demand, though an enormous opportunity, also presents significant challenges to our existing system nationally and locally. It will require large amounts of investment in infrastructure and the transmission and distribution networks.

NEW GENERATING CAPACITY

Renewable energy generation in Kent has increased significantly since 2012, with the currently installed capacity of solar, wind, waste and CHP being over 1,800 MW, compared to approximately 230 MW in 2012. The majority of the capacity has been delivered through solar and wind installations, with wind contributing over 1,000MW and solar over 450MW.

FUEL CONSUMPTION (GWH)	NON-DOMESTIC	DOMESTIC	ROAD TRANSPORT	RAIL	BIOENERGY & WASTE	TOTAL BY FUEL TYPE
Gas	3,376	8,556	-	-	-	11,932
Electricity	4,504	3,101	-	-	-	7,605
Bioenergy & Waste	-	-	-	-	897	897
Coal	455	53	-	9	-	517
Manufactured fuels	41	16	-	-	0	57
Petroleum products	1,102	609	13,034	43	0	14,788
Total by sector	9,477	12,335	13,034	51	897	35,794

Figure 5.8: Total fuel consumption by fuel type in Kent and Medway 2015

Wind energy capacity is mostly from large-scale installations, although there is a small amount of small-scale wind energy delivering 5.5MW of installed capacity in Kent.

Proposed scale renewable energy projects could make up 187.9MW. The majority of these are for solar projects (small-scale projects have not been accounted for in these figures as the data is not freely available at this time).

CONSTRAINTS AND FUTURE INVESTMENT

Energy security is vital to the development and growth of Kent and Medway in the coming years. However, much of the County is subject to electricity grid network constraints, which can inhibit supply and demand.

The push to 'decarbonise' energy, as we see more heat generated by electricity, greater numbers of electric cars and the associated energy infrastructure, will lead to an increased demand on the electricity grid.

A drive towards local generation of renewable energy will further ramp up pressure on the grid network. It will be essential to map existing electricity and gas grid constraints against future development to identify potential issues early, as well as potential local generation solutions such as district heating systems.

Looking forward, the County could consider an integrated circular energy 'system' that is balanced and provides energy that is affordable, environmentally sustainable and secure. A smart and flexible system will provide and use energy only when it is needed and as close to the customer as possible to minimise transmission waste and maximise use of waste heat.

Summary of total costs/funding for energy projects (2017-2031)

Total Cost = £423,511,000

Total Funding = £423,511,000

Secured Funding = £100,187,000

Expected Funding = £323,324,000

Funding Gap = £0



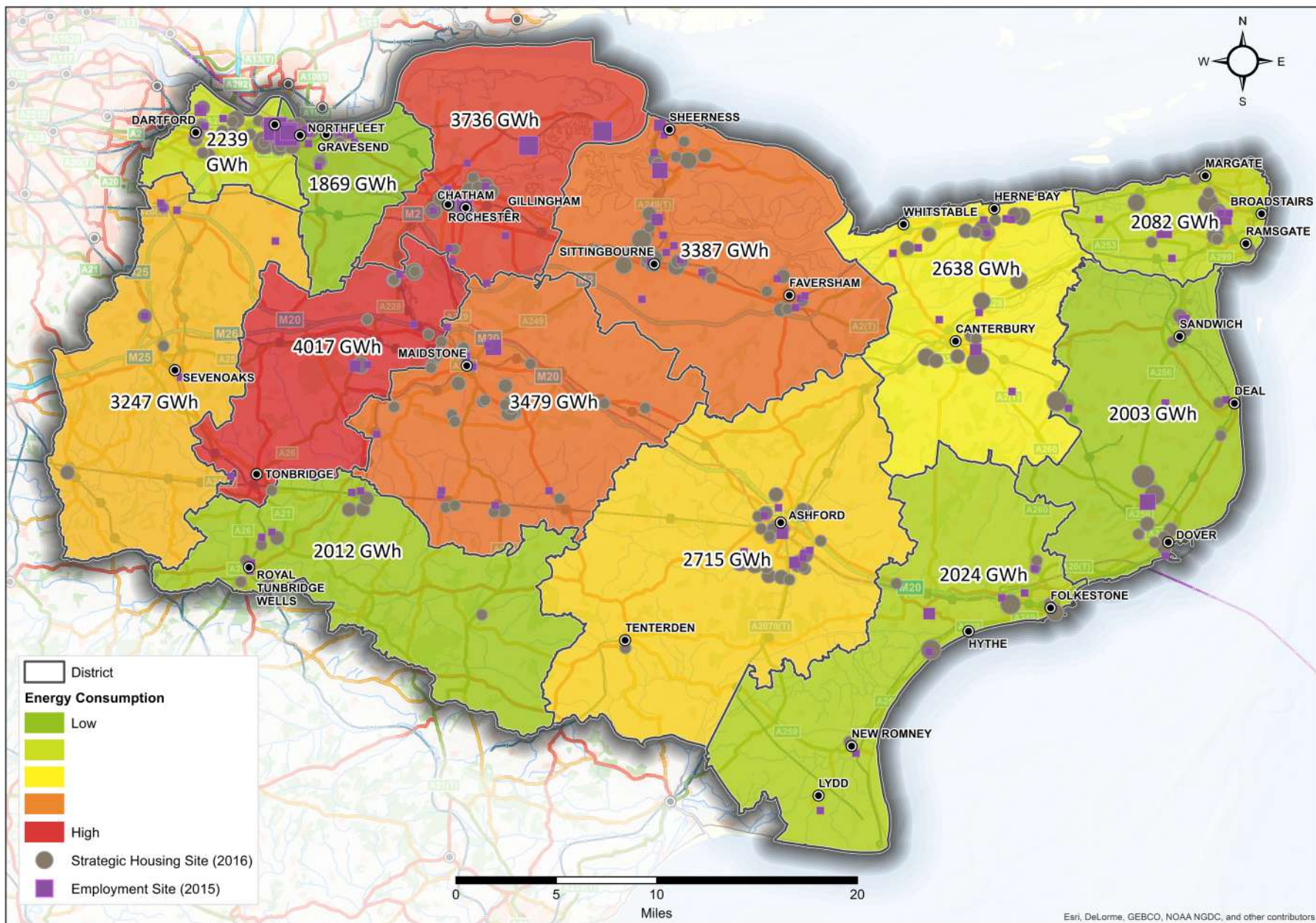


Figure 5.9: Energy consumption per district (2014 statistics); (Source: Department of BEIS; total final energy consumption at regional and local authority level)

BROADBAND

CURRENT SITUATION

Broadband Delivery UK (BDUK), part of the Department for Culture, Media and Sport, has set targets for 95% of properties in the UK to have access to superfast broadband by 31 December 2017.

The target is being delivered through a combination of:

- Market-led investment by broadband infrastructure providers (e.g. BT Openreach, Virgin, Gigaclear); and
- Programmes funded by BDUK and KCC to upgrade areas of market failure (i.e. where there are no plans for market-led investment) by retrofitting superfast broadband provision into existing business and residential premises.

The investment has already meant that 94.5% of homes and businesses across Kent and Medway can now access superfast broadband of at least 24mbps. The current Kent and Medway BDUK project is aiming to bring superfast broadband to 95.7% of homes and businesses by September 2018.

HEADLINES

- Too many homes are being built without access to decent, high-quality broadband, which is inconsistent with Government's policy of extending the availability of full-fibre connections to meet future needs.
- Opportunities are being missed to install 'future-proofed' fibre-to-the-premises broadband at a minimal cost.
- The failure to plan for broadband connectivity in many new developments is creating distress for new occupants, as well as new areas of market failure. This is due to:
 - A general reluctance of broadband infrastructure

providers to invest their own funds in retrofitting new sites;

- A general reluctance of developers to pay for retrofit costs where issues around poor connectivity have been identified by residents.

FUTURE REQUIREMENTS

It is essential that new-build properties are able to access high-quality and 'future-proofed' broadband connectivity. In contrast to the retrofit process, ultra-fast fibre-to-the-premises connectivity can be easily installed at the point of build, offering homes and businesses 'future-proofed' broadband speeds of over 300mbps.

To prevent areas of market failure and lack of connectivity, national regulation is required to deliver this. However, there is currently little incentive for developers to guarantee such connectivity. Buyers often assume that this infrastructure is included and therefore there is little additional return for a developer that invests in the additional infrastructure from the outset. Latest analysis for Kent new builds show that approximately 40% of new homes are being delivered with sub-superfast broadband connections.

Digital infrastructure will form the bedrock for driving Kent's prosperity and supporting innovation and smart infrastructure to 2050. There is a need to implement stronger incentives and regulations to ensure that new development is taking this new connectivity into account and driving innovation in the provision of digital connectivity.

If broadband connectivity is not installed at the point of build, it is estimated that the costs of retrofitting these new residential properties from 2017-2031 would be:

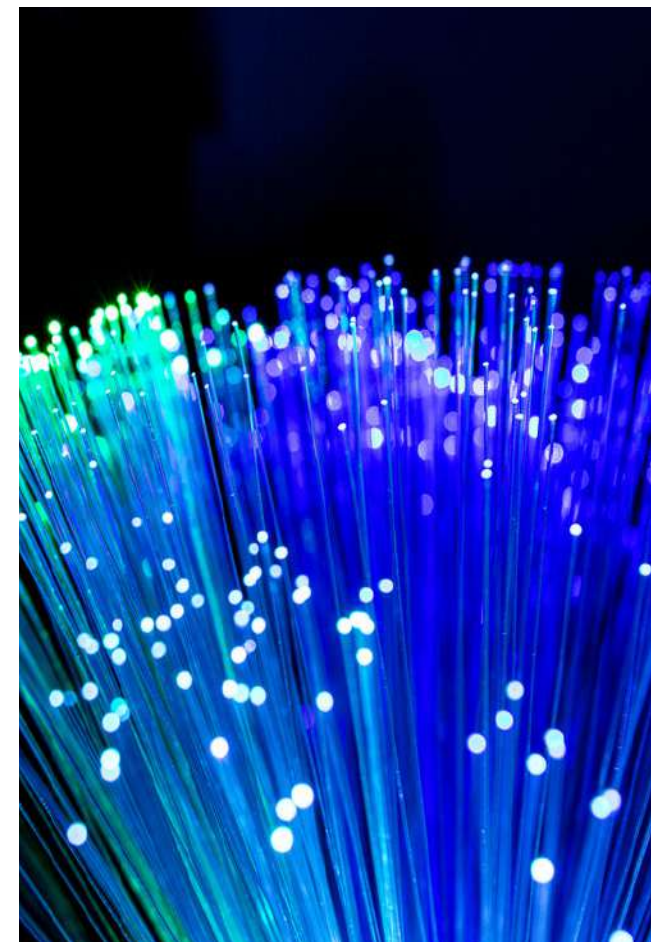
Total Cost = £18,259,000

Total Funding = £0

Secured Funding = £0

Expected Funding = £0

Funding Gap = £18,259,000



WATER AND WASTE WATER

CURRENT SITUATION

The provision of new housing, jobs and associated infrastructure presents challenges to the water environment through the need to provide clean water supplies and to manage increased amounts of waste water. Additional demand needs to be met from the abstraction of existing groundwater or surface water resources, or through the development of new resources. Kent and Medway is already in an area of serious water stress.

KCC commissioned a study - Water for Sustainable Growth (WfSG) - to assess the impact of growth on the water environment and to identify sustainable measures required to manage water environment impacts to 2031. The study aims to support spatial planning decisions, as well as the strategic planning of water service infrastructure in the medium to long term.

HEADLINES

The WfSG study indicates the following current pressures on water and waste water provision:

- Long-term groundwater abstraction pressures from the chalk affecting the Darent Catchment;
- Significant pressure from waste water discharges in the Medway catchment;
- Abstraction and discharge pressures within the Stour and Rother Management Catchments;
- Concerns for investment at the waste water treatment works at Paddock Wood, Tunbridge Wells, Leeds, Edenbridge and Biddenden, and for the phasing of growth within the catchments of these.

Waste water generated by new development needs to be treated and returned to the environment without impacting

the water quality and ecosystems of water bodies. At present, there is no consistent approach to the management of waste water, in particular for waste water treatment, discharge and the planning of environmental capacity within the water environment.

FUTURE REQUIREMENTS

The WfSG study identifies three key drivers that Kent and Medway will have to plan for, to 2031:

1. Water availability: changes in land use, climate change and population growth are all likely to exacerbate water availability and increase the economic impact of water scarcity;
2. Legislative Compliance: water abstraction and waste water discharges can impact the status of water bodies and water-dependent ecological sites;
3. Strategic Planning: early steps can be made in the spatial planning process and planning of water services infrastructure to jointly deliver sustainable solutions.

Without significant investment by 2030/31, all except one Water Resource Zone (WRZ) in Kent and Medway are predicted to have a negative supply and demand balance; largely as a result of increased demand from a growing population, but also climate change effects leading to more extreme weather events.

Figure 5.11 demonstrates the supply and demand balance to 2031, before any measures are included to balance the deficit or surplus of water supply.

There are already significant abstraction pressures on the

water resources in Kent and Medway and the need to provide further resource presents a significant challenge to the water companies.

Medway has carried out an initial assessment of infrastructure needs and produced an Infrastructure Position Statement in 2017. Part of this work examined water supply and waste water treatment. The findings from this work suggest that supply is balanced until 2021-22 and then a deficit will emerge.

The WfSG study sets out recommendations for different stakeholder partners to undertake, in order to address the challenges and demands:

- Water companies operating in Kent and Medway should ensure that population growth is taken into account in the 2019 Water Resource Management Plan updates;
- All Local Planning Authorities should consider adopting the Building Regulations optional standard for water use as the preferred policy target for new development (with respect to water efficiency); and
- Water supply companies should consider enhanced programmes of retrofit of existing properties with water-efficient fixtures and fittings.

Summary of total costs/funding for water and waste water projects (2017-2031)

(These are based on average connection costs for new dwellings plus costs identified by the WfSG study for overcoming locally specific waste water constraints)

Total Cost = £332,600,000

Total Funding = £332,600,000

Secured Funding = £2,320,000

Expected Funding = £330,280,000

Funding Gap = £0

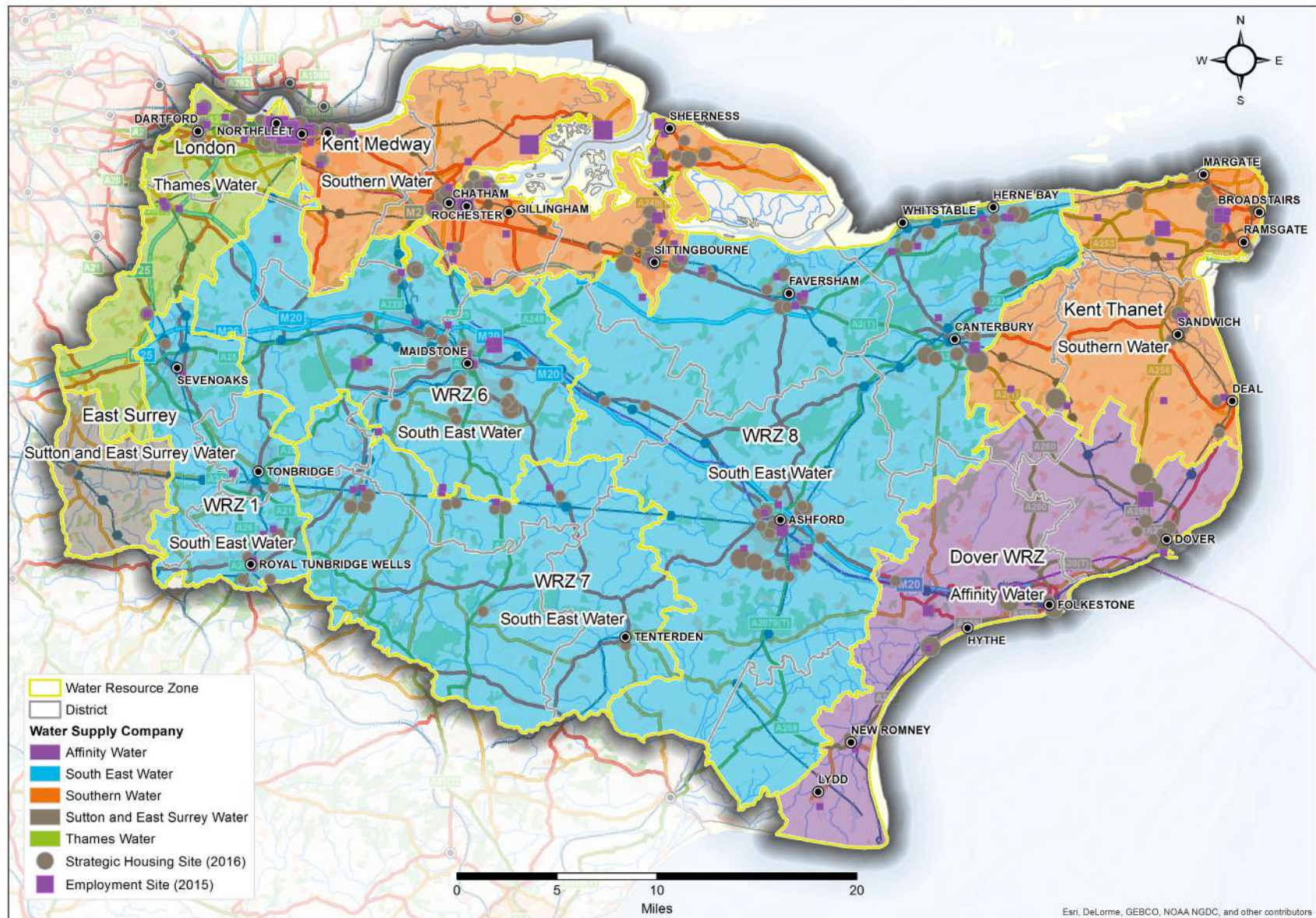


Figure 5.10: Water supply companies in Kent and Medway

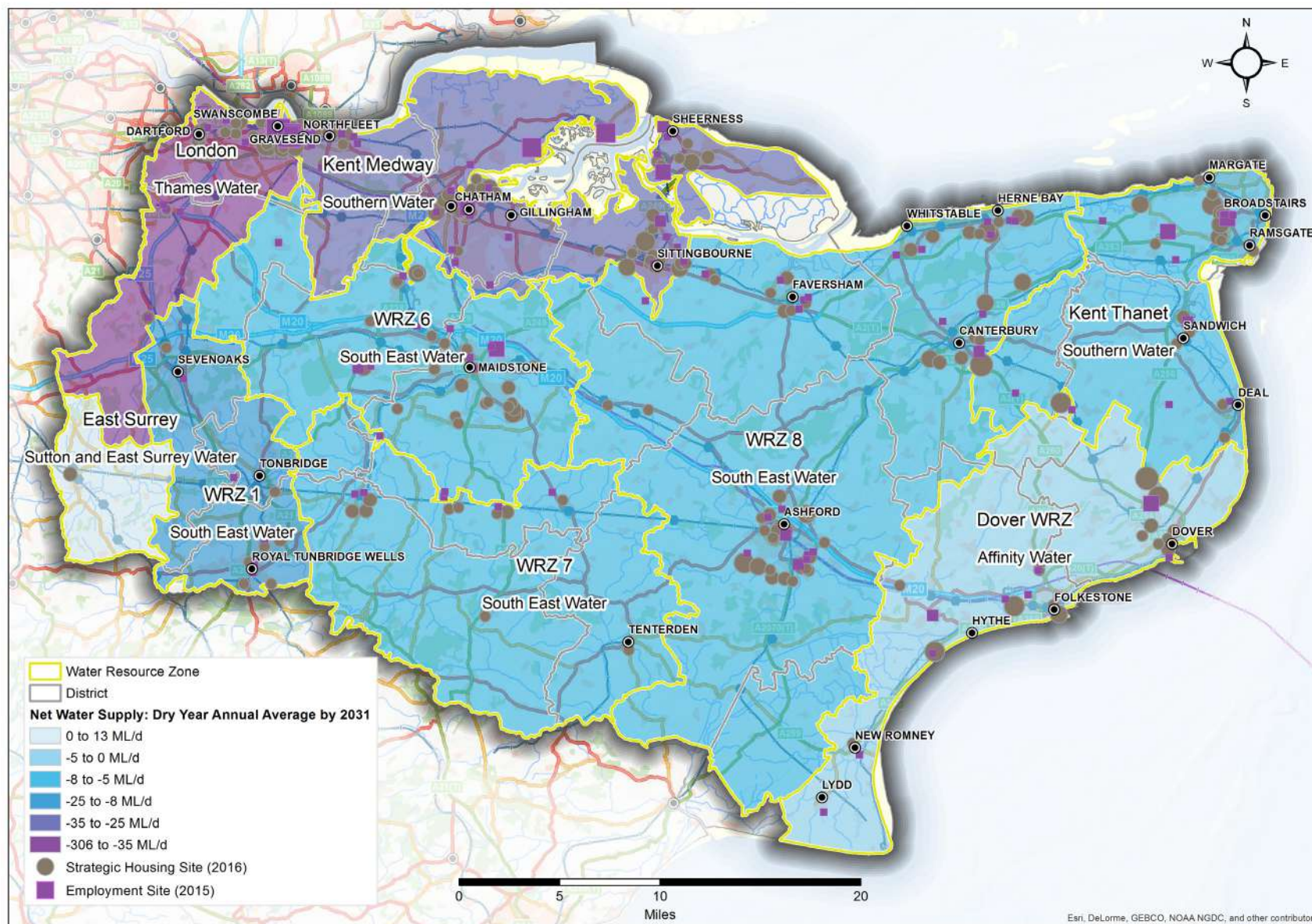


Figure 5.11: Net water supply: Dry year annual average by 2031

HOUSEHOLD WASTE

CURRENT SITUATION

Kent County Council Waste Management operates as the Waste Disposal Authority (WDA). KCC currently provides eighteen household waste recycling centres (HWRC). These sites provide facilities for reuse, recycling and safe disposal for a range of materials delivered by Kent residents.

Co-located at six of these sites are Waste Transfer Stations (WTSs) for the deposit and bulk loading of waste collected by the district/ borough councils. There are also two transfer stations contracted at Allington and Hersden. KCC also manages and maintains nineteen closed landfill sites, to ensure that they comply with environmental standards.

Medway provides three HWRC and has responsibility for the collection, treatment and disposal of municipal waste in Medway. Medway Council must also sustainably plan for the capacity necessary to process other waste streams in the area, including commercial and industrial waste, construction, demolition, excavation waste and hazardous waste.

HEADLINES - KEY FACTORS AFFECTING DELIVERY

- Waste growth - as housing growth and population increases, there will be a rise in waste volume. Projections suggest an increase of 20% in household waste by 2031.
- Market provision - the waste collection and disposal service is becoming more commercially volatile.
- Legislation and performance targets - waste services are currently influenced primarily by legislation, targets and re-

quirements that are passed down from the European Union and transposed into national law, policies, and strategies. The future of waste legislation performance targets will be part of Brexit. Existing EU recycling targets will continue to apply once the UK has left the EU. The Government may consult on changes to regulatory frameworks in the future.

Whilst Kent currently achieves self-sufficiency for each of the waste streams, new facilities will need to be developed for each stream if it is to remain net self-sufficient throughout the Minerals and Waste plan period to 2030.

ACTIVITY SINCE LAST YEAR

- The redevelopment of Sittingbourne Waste Transfer Station, including the introduction of a food waste compactor and a second weighbridge and new site offices.
- Lowering of the carriageway under Gas Road Bridge on the approach to Sittingbourne Household Waste Recycling Centre (HWRC) and Waste Transfer Station (WTS) to allow for the entry of haulage vehicles servicing the facility.
- Re-engineering of the river embankment along Richborough closed landfill site.
- Upgraded maintenance to the gas control system at Cryalls Lane closed landfill site.

KEY DELIVERABLES FOR THE NEXT FIVE YEARS

Alongside municipal waste, Medway Council must also sustainably plan for the capacity necessary to process other waste streams in the area, including: commercial and industrial waste, construction, demolition and excavation waste and hazardous waste. At present the service has not identified any capacity is-

sues or infrastructure improvements are needed other than routine maintenance in the short term. However, in the long term, waste services will review the capacity of HWRC sites to cope with the potential increased demand resulting from development.

KCC Waste Management is in the process of undertaking a Household Waste Recycling Centre and Waste Transfer Station Infrastructure Review, to determine the requirement of sites to ensure strategic location and capacity (based on waste growth) in a phased approach at 2020, 2025, and 2030.

Consideration will need to be given to retaining the eighteen Household Waste Recycling Centres and six Waste Transfer Stations, as well as increasing Waste Transfer Station provision in East and West Kent, and increasing Household Waste Recycling Centre provision in West Kent.

The key infrastructure projects for 2017/18 are:

- Tunbridge Wells (North Farm) Household Waste Recycling Centre (HWRC) and Waste Transfer Station (WTS) – permanent repair to the WTS following fire damage in 2016 and upgrades to infrastructure including building/ site drainage and replacement of the concrete base used for waste handling and storage;
- Re-engineering and repair works to the Gas Control and Ground Water protection systems at Cryalls Lane closed landfill site;
- Works to upgrade the environmental performance of the leachate treatment plant at Sturry Road (Canterbury), a closed landfill site.

FUTURE REQUIREMENTS

- Based on household numbers alone, the tonnage accepted at every Waste Transfer Station is predicted to increase by 2030.
- The contract with Kent Enviropower Limited for the Allington Waste for Energy contract runs until 2030, meaning that there is provision for the recovery of energy from waste until the end of the GIF period.
- KCC Waste Management will undertake a review of provision of onwards waste disposal infrastructure for household waste in 2018/19.
- Lack of investment or recycling infrastructure in parts of Mid Kent and all of East Kent results in high haulage costs and highway network congestion. In these regions of Kent, there is a need for materials recycling facilities, food processing and composting facilities.
- Environmental permitting changes have added pressure to new construction and existing infrastructure.
- The UK has to find different markets or ways to deal with waste, either through increasing recycling or by sending more waste to energy recovery in the UK.



Figure 5.12: KCC and Local Authority Waste Recycling Centres

Summary of total costs/funding for household waste projects and mineral and waste projects (2017-2031)

Total Cost = £252,900,000

Total Funding = £238,125,000

Secured Funding = £0

Expected Funding = £238,125,000

Funding Gap = £14,775,000

5.6 NATURAL ENVIRONMENT

NATURAL AND GREEN INFRASTRUCTURE

CURRENT SITUATION

Green infrastructure has the potential to deliver a wide range of benefits, including recreation, biodiversity, health, climate change mitigation and adaptation, sustainable travel and water quality.

There is strong economic evidence to show that green infrastructure is an essential component of building communities where people want to live, in attracting and retaining businesses and in tackling obstacles to economic growth in ways which enhance the environment.

Green infrastructure is also less expensive than 'grey infrastructure' (pipes, ditches, detention ponds) and improves quality of life and health and well-being. Green infrastructure can no longer be viewed as a 'nice to have' option but instead is a fundamental part of building communities and resilience for the future.

HEADLINES – WHAT KENT AND MEDWAY CURRENTLY HAVE

- 45,000 ha of broadleaf woodland.
- 116 sites of national and international importance for nature conservation.
- The Kent Downs and High Weald Areas of Outstanding Natural Beauty cover approximately 32% of the County.
- 3,030 ha of parks, gardens and amenity greenspace.
- The Public Rights of Way (PRoW) Network extends to 4375 miles (7000 km) across Kent.

- The PRoW network represents 42% of Kent's highway network.

IDENTIFIED INFRASTRUCTURE PROJECTS

- Green corridors around Ashford.
- Green and blue infrastructure improvements in Maidstone Borough.
- A range of green infrastructure provision and enhancement in Canterbury and Dover.

FUTURE REQUIREMENTS

Green infrastructure planning and delivery is essential in underpinning future sustainable economic growth. All of Kent's local authorities have carried out green infrastructure network planning at a strategic level, but there is a need for increased green infrastructure and better connections across the County. There is also a need for better planning of green infrastructure so it can help meet the challenges faced from future risks arising from climate change, in particular extreme weather events.

Investing now in green infrastructure can help reduce some of the future burdens on other infrastructure, such as health and flood management. Investment will be needed to:

- Provide significant quantities of new greenspace for Kent and Medway's residents, so that future generations have the same level that current residents enjoy;
- Provide robust green infrastructure planning so that local authorities can provide and manage green infrastructure which fully supports adaptation to climate change, improves flood management and prevention, improves urban air quality and provides the other important benefits which underpin sustainable economic growth;
- Continue to ensure that people can enjoy recreational activities, and the health and well-being benefits these

provide, without causing harm to Kent's most sensitive wildlife habitats and species;

- Improve the connectivity of habitats to provide robust ecological networks;
- Provide new allotments to provide for an increased population;
- Provide green infrastructure as an intervention to ensure healthier communities.

If local authorities are to meet their locally set standards with an increased population in 2031, the following will be required:

- 404 hectares of parks and gardens;
- 782 hectares of amenity greenspace;
- 135 hectares of allotments; and
- 1,126 hectares of natural and semi-natural greenspace.

Summary of total costs/funding for natural and green infrastructure projects (2017-2031)

Total Cost = £38,971,000

Total Funding = £20,335,000

Secured Funding = £16,089,000

Expected Funding = £4,246,000

Funding Gap = £18,636,000

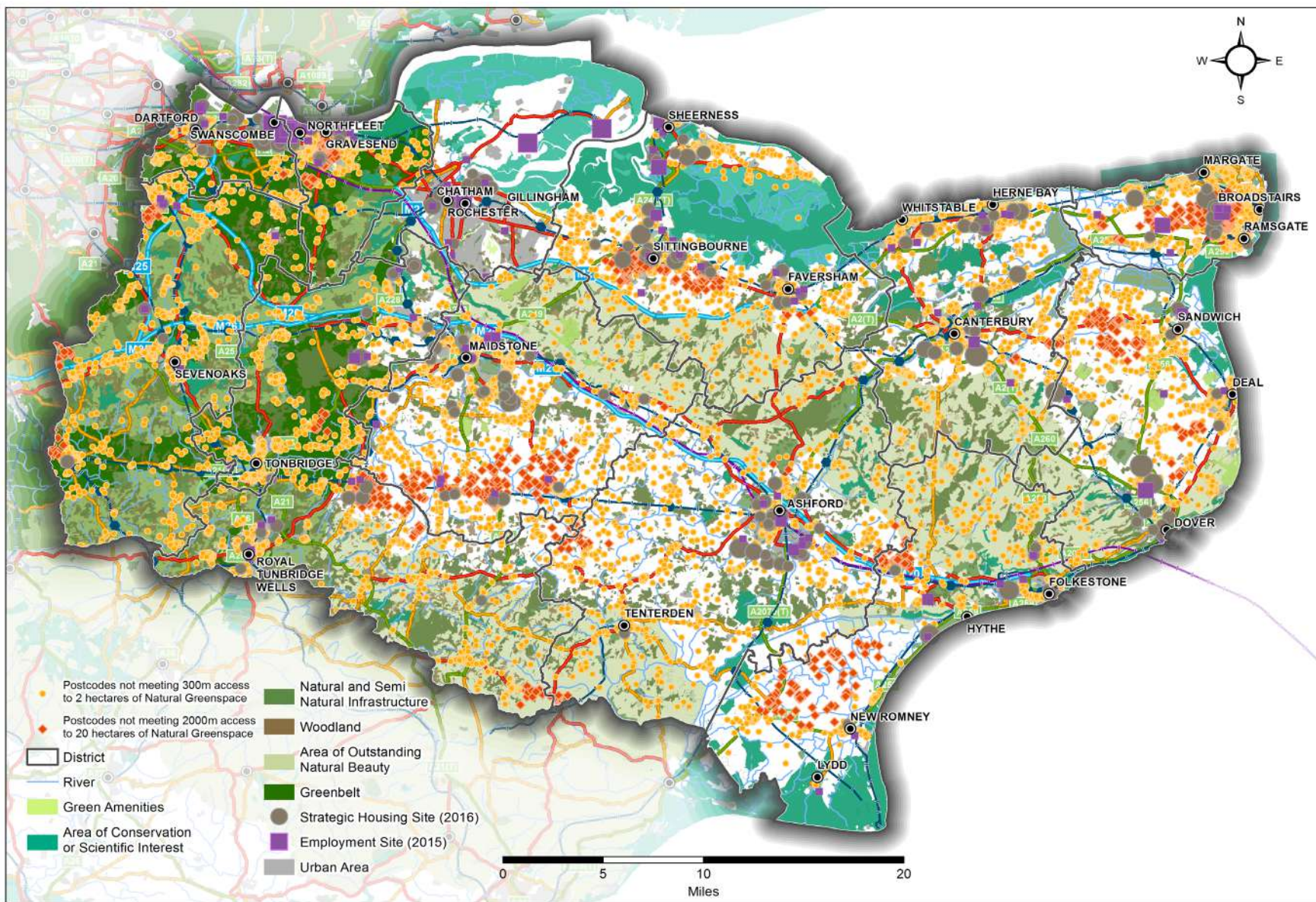


Figure 5.13: Natural and green infrastructure provision in Kent and Medway

FLOOD PROTECTION

CURRENT SITUATION

Kent and Medway have one of the highest flood risks in England, with risks of flooding from coastal, fluvial, surface water and groundwater in the County. Surface water is behind the majority of flooding incidents and there have been 2,500 historical flood events in Kent and Medway since 1986.

- Approximately 60,000 homes at risk of fluvial and tidal flooding.
- 22,000 homes at risk of surface water flooding.

The chalk aquifers in Kent and Medway present a risk of groundwater flooding, notably in the Nailbourne Valley in Canterbury. An example of management includes the Kent Local Flood Risk Management Strategy that exists to identify objectives to manage local flood risk to local communities.

HEADLINES

The Environment Agency (EA) has currently identified 79 flood defence projects in the future pipeline. The risks associated with climate change and increased building on flood plains will need to be managed in the future, as the population continues to increase. The EA is also currently developing the Medway Estuary and Swale Strategy for the River Medway.

Flood risk management can only progress with sufficient capital funding. There needs to be better follow-through of policy into the policy drivers (e.g. funding and more compatibility between the various funding drivers in different sectors).

ACTIVITY SINCE LAST YEAR

The River Medway Flood Partnership was introduced in January 2017 to enable a collaborative approach to supporting flood risk and watercourse management. The partnership is working to ensure that multiple capital investment programmes are aligned with local planning policies and highway authority investments.

Working with the partnership, the EA has completed its initial assessment of the flood risk management option for the River Medway to provide protection for Tonbridge, Hildenborough, Yalding, Collier Street and the surrounding areas.

The initial assessment was undertaken to consider a wide range of options, including flood storage, to ensure the best solution is found for these areas. The outcome of this work is to increase the capacity of the Leigh Flood Storage Area, provide an embankment to protect Hildenborough and deliver property and community-level resilience measures for Yalding, Collier Street and other communities in the Middle Medway.

The EA and its partners are now working on an outline business case, which will lead to the full business case being submitted to Defra in 2018. Once approved, the project will then move to the detailed design phase in 2018-2019. Currently, the indicative funding programme shows construction between 2019 and 2022.

KEY INFRASTRUCTURE PROJECTS

- Flood risk and coastal erosion protection for the Romney Marshes, from Folkestone to Cliff End.
- Leigh Flood Storage Area and flood defences to protect Hildenborough and property/commercial resilience for Middle Medway.

- Great Stour Flood Alleviation Scheme: the EA is working on a flood defence scheme for Canterbury and Fordwich to protect against flooding from the River Great Stour. The scheme protects over 400 properties at risk of flooding from the 1 in 100 year event.

FUTURE REQUIREMENTS

The Thames Estuary 2100 project is one of the most important strategic projects tackling flood risk management in Kent and Medway. The project addresses the implications of climate change, sea level rise and ageing flood defences along the Thames Estuary, including Dartford, Gravesham and Medway.

Sustainable Drainage Systems (SuDS) offer opportunities to mimic natural drainage that can reduce flood risk and offer other benefits, such as amenity space and habitats. The lack of a formal adoption mechanism by a recognised authority with a funding stream is a barrier to the delivery of effective SuDS. This is impeding the delivery of the most cost-effective drainage techniques that have the potential to enhance the local environment.

Looking ahead, there needs to be far more integration of water policy – such as taking a catchment approach, where all measures are considered collectively. Water policy needs to be imbedded into infrastructure delivery as a fundamental principle; where developments incorporate water efficiency measures and ensure water discharges are clean and do not increase flood risk.

Summary of total costs/funding for flood defence projects (2017-2031)

Total Cost = £999,929,000

Total Funding = £984,017,000

Secured Funding = £1,311,000

Expected Funding = £982,706,000*

Funding Gap = £15,912,000

*Dependent on the scheme design delivering the benefits as outlined when the project is entered on this programme.

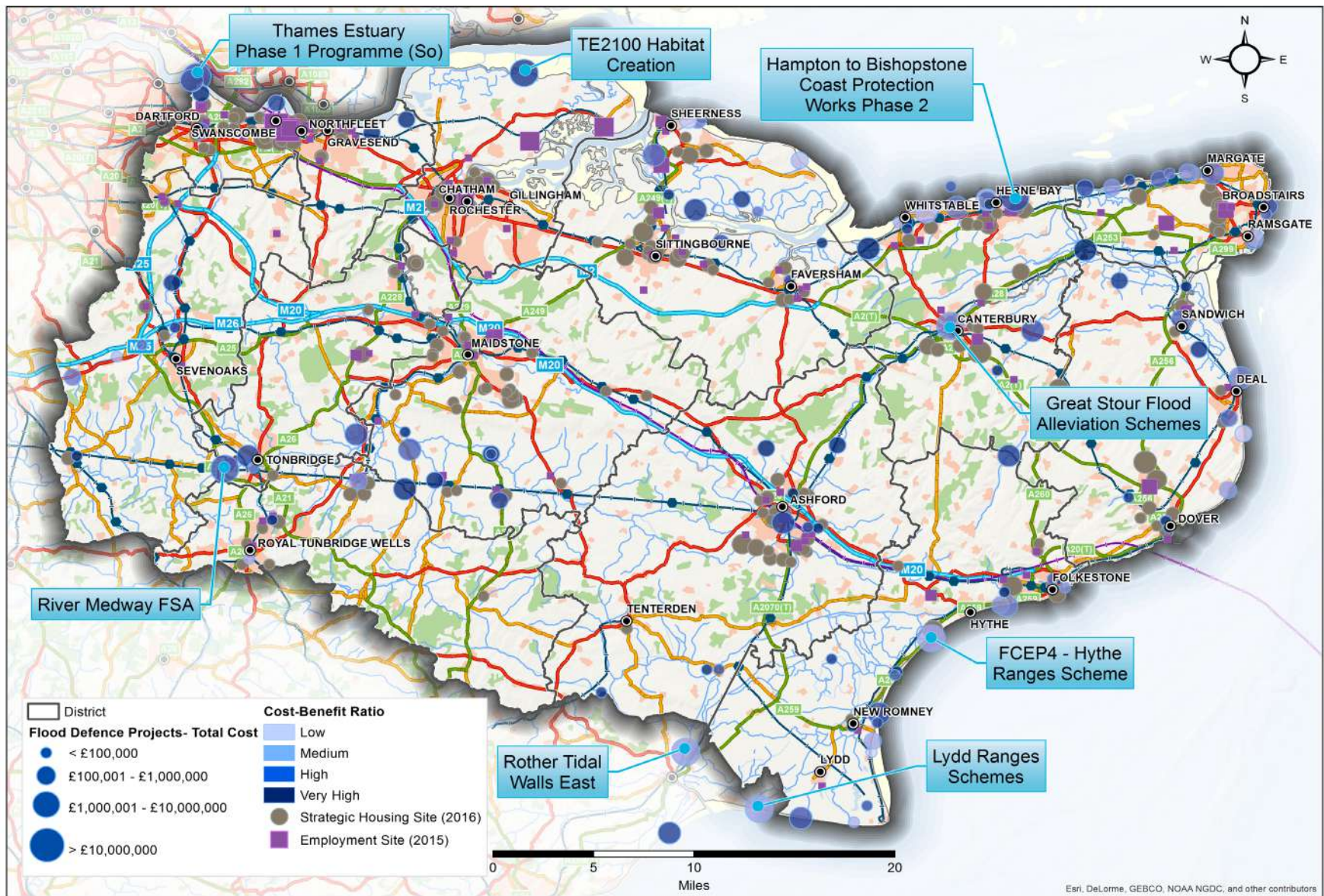


Figure 5.14: Major flood defence projects in Kent and Medway

6. RENEWAL OF EXISTING INFRASTRUCTURE



Leigh Flood Barrier, Tonbridge

BALANCING MAINTENANCE AND REPAIR OF EXISTING ASSETS WITH CONSTRUCTION OF NEW ASSETS

Maintenance of infrastructure is often overlooked in current infrastructure funding regimes – whether as part of Central Government funding or for the current mechanisms for value capture.

HIGHWAYS MAINTENANCE AND ASSET MANAGEMENT

There are significant challenges in maintaining a safe and reliable highway network during a time of diminishing resource, ageing assets, growing backlogs and increasing public expectation. To address this challenge, Kent has adopted a new Highway Asset Management approach, which seeks to ensure monies are spent effectively across the network.

The estimated value of KCC highway assets (including land) is £25bn. The rate at which these highway assets are deteriorating exceeds the current rate of investment in maintenance. The resulting maintenance backlog of KCC roads is estimated to be around £630mn; from knowledge of this asset and deterioration modelling, KCC estimates that this will rise to **around £1bn** over the next ten years, even if the current level of investment is maintained.

Within KCC assessments of the annual investment need for maintenance in 2016/17, priorities and service levels have identified an **annual capital requirement gap of £45mn**. In addition to these backlogs and funding shortfalls, KCC has a number of priority schemes that meet with the intervention levels but are currently unfunded, totalling around £31mn.

Given the substantial and increasing costs associated with asset maintenance, it is essential that opportunities for sourcing funding for maintenance purposes are maximised and the costs are considered in the planning and provision of new infrastructure. A proactive approach would assist in obtaining the essential funding required to meet future demand, as well as help to avoid the unnecessary decline in necessary infrastructure.

An equitable and adequate funding regime is needed, which reflects the needs of the expanding road network. The current disparity in funding between regions, which experience vastly differing traffic levels, and between the Highways England and local highway network, is unsustainable. For example, Highways England's network received an allocation of £15bn in the first Road Investment Strategy (2015-20). This equates to approximately £200,000 per mile per year¹. KCC's network receives £25mn per year for maintenance and £6.8mn from the integrated transport

block (small schemes, safety critical, etc.), which equates to only £6,000 per mile per year².

PUBLIC RIGHTS OF WAY

The County Council formally adopted the 'asset management principles' for the management of its PProW network in February 2008. Kent was the first Highway Authority to adopt asset management principles for the maintenance of its PProW network.

The asset includes:

- **3,046 bridges** - a combination of simple short-span sleeper bridges, kit bridges, culverts, more complex longer-span bridges, through to a footbridge crossing the railway at Ashford and a footbridge crossing the M20
- Path furniture (signposts, stiles, gates, steps, barriers, etc.) – **32,000 items**
- Aggregate surfacing and repair of bridleways and byways - **256 miles**
- Metalled PProW resurfacing and repair - **460 miles**.

The asset management plan was developed to ensure that investment in the PProW network by the County Council delivers:

- Maintenance programmes that meet the County Council's statutory obligation to maintain PProW.
- Maintenance programmes that meet the policy objectives of the County Council.
- A PProW network that is fully utilised and protected for future generations.
- Consistent levels of service.
- Optimum lifespan for the infrastructure.
- Maximum efficiency from the investment.

The PProW Asset Management Plan currently places the value of the asset at **£107mn** with an annual requirement for maintenance expenditure to meet the County Council's obligations

in full of £2.4mn, of which 90% (£2.1mn) is identified as capital expenditure. The asset value and annual requirement are based on an optimistic view of likely asset life and performance.

CYCLE ROUTES

Kent manages the maintenance of off-road cycle tracks and the clearance of vegetation along routes to allow their use by bicycles. These routes are normally away from main routes and travel across rural areas.

DRAINAGE SYSTEMS

KCC carries out planned maintenance on main roads – these are mostly A roads and the key routes that connect Kent's towns and villages.

Once every 12 months, KCC cleans roadside drains as part of the planned programme. This is the most cost-effective way to work on these roads and helps reduce the disruption for local residents.

Once every 6 months, KCC cleans drains in over 250 locations in Kent that are particularly vulnerable to serious flooding when the drains become blocked.

KCC also maintains a small number of ponds and lagoons that hold water drained from the highways.

KCC owns and maintains 14 pumping stations across the county. Each pumping station is routinely inspected and serviced every 12 months.



¹Highways England's network is 4,300 miles - equates to £3.5 million per mile over 5 years or £697,674 per mile per year (as a national average). Dividing mileage by 3 lanes in each direction on motorways and trunk roads, HE is funded with c £200,000 per mile of road; ²KCC's total of £31,867,000 (2016/17) – assumes 1 lane in each direction - equates to £6,000 per mile pa for 5,400 miles of local roads.

HEALTH AND SOCIAL CARE MAINTENANCE

The condition, suitability and the ability to expand current provision varies significantly across the County, and the total cost of delivering a fit-for-purpose infrastructure to support Health and Social care is estimated to require in excess of £6 billion of investment over the life of the GIF.

The backlog maintenance for acute healthcare is **£199,931,871**.

The backlog maintenance is sourced from the Estates Return Information Collection (ERIC) which is collected on behalf of the Department of Health.

Backlog maintenance returns for the mental health and community trust providers are currently unavailable across the whole of Kent and Medway and have consequently not been included.

Figure 6.1: Backlog maintenance for Acute Healthcare provision in Kent and Medway.

Source: 2016/17 Estates Return Information Collection (ERIC)

The collection is to enable the analysis of Estates and facilities information from NHS Trusts in England and is a compulsory requirement. The information is from the 2016/17 ERIC returns for the 4 NHS Trusts that operate in Kent and Medway. Darent Valley Hospital and the Tunbridge Wells Hospitals have a backlog return of 0 as these are PFI hospitals.

ORGANISATION NAME	SITE NAME	TOTAL BACKLOG COST (£)
DARTFORD AND GRAVESHAM NHS TRUST	DARENT VALLEY	0
MEDWAY NHS FOUNDATION TRUST	MEDWAY MARITIME HOSPITAL	76,757,989
EAST KENT HOSPITALS UNIVERSITY NHS FOUNDATION TRUST	WILLIAM HARVEY HOSPITAL	38,410,000
EAST KENT HOSPITALS UNIVERSITY NHS FOUNDATION TRUST	QUEEN ELIZABETH THE QUEEN MOTHER HOSPITAL	52,460,000
EAST KENT HOSPITALS UNIVERSITY NHS FOUNDATION TRUST	KENT AND CANTERBURY HOSPITAL	29,660,000
MAIDSTONE AND TUNBRIDGE WELLS NHS TRUST	MAIDSTONE GENERAL HOSPITAL	2,643,882
MAIDSTONE AND TUNBRIDGE WELLS NHS TRUST	THE TUNBRIDGE WELLS HOSPITAL	0
TOTAL		199,931,871



Estuary View Medical Centre, Whitstable (Clague LLP)

7. SUB-COUNTY OVERVIEWS

NORTH KENT

North Kent is made up of four districts: Dartford, Gravesham, Maidstone and Swale, and Medway as a unitary authority. It borders Thurrock and Essex to the north and the London Borough of Bexley to the west.

Growth ambitions are focused on the positioning of North Kent, developing its culture and creative economy sectors, transport, technology and regenerating its town centres.

The Thames Gateway Kent Partnership (TGKP)* is a partnership comprising the public and private sectors. It champions sustainable growth across North Kent and aspires to create the best conditions to attract investment and deliver sustainable economic growth in North Kent.

The Partnership's vision is for North Kent to be recognised as:

- An area of exciting towns and cities complemented by an outstanding natural environment, providing an exemplar of urban regeneration;
- A thriving business centre attracting leading investors and businesses through its diverse and skilled workforce, high-quality commercial sites and local services, and accessibility to transport links and strategic routes to UK and Continental markets;
- An area of strong, integrated communities with harmony between new and existing businesses and residents – where the benefits of development and investment are shared by the whole community; and
- A vibrant cultural hub with a thriving social scene and civic pride – attracting a growing student population, bringing youth and vigour to the community.



HOUSING GROWTH
(2011-2031):
78,600



TOTAL INFRASTRUCTURE REQUIREMENT
£2,498,810,000



INFRASTRUCTURE FUNDING GAP:
£666,048,000



POPULATION GROWTH
(2011-2031):
186,800



TOTAL FUNDING IDENTIFIED:
£1,832,759,000

St Mary Magdelene Cobham, Gravesham

*Maidstone Borough Council not a member of TGKP at time of writing

NORTH KENT - DISTRICTS AND BOROUGHES

Dartford is the gateway into Kent and the South East, with the Dartford Crossing being a prominent feature of the Borough. It has a strategy in place already delivering new infrastructure and high levels of growth. There is an expected increase of 59% in the size of the Borough (households) up to 2031. This growth is largely being delivered through a number of large brownfield sites set out in the Dartford Core Strategy, supported by Dartford's Community Infrastructure Levy (CIL). In particular, this supports regeneration led by a large increase in population in and around Dartford town centre.

Dartford is a net importer of labour, as more people travel to work from outside than commute out of the Borough. The Borough delivered over 2,000 new homes in the last two years, doubling previous annual completion rates. The boom is reflected in Dartford seeing the one of the fastest rates of home sales in the country, and the highest house price growth on mainland UK in the year to April 2017.

At **Ebbsfleet Garden City**, major mixed use development is planned alongside Ebbsfleet International Station and the major leisure/tourism London Resort proposal will be primarily located at Swanscombe Peninsula. Sustainable forms of travel will require investment in train, bus, cycle and pedestrian infrastructure, with an enhancement of the FastTrack network and potential extension of the Elizabeth Line (Crossrail 1) to Ebbsfleet. Relief for the Dartford Crossing through provision of the Lower Thames Crossing east of Gravesend is very welcome; but with the M25 and A2 carrying strategic traffic through the Borough, continued investment in these routes will be required in order to enable growth and keep Dartford moving.

Gravesham's development strategy for the Borough is to retain and improve the existing stock of housing and suitable employment land, and to make provision for the Borough's objectively

assessed need for at least 6,170 new dwellings. The strategy prioritises development in the urban area as a sustainable location for development by:

- Promoting regeneration by prioritising the redevelopment and recycling of underused, derelict and previously developed land in the urban area;
- The continued development of a new sustainable mixed use community in the Ebbsfleet (Gravesham) Opportunity Area, which will include the provision of high-quality employment floor space;
- Revitalising the Gravesend Town Centre Opportunity Area as a focal point for retail, leisure, cultural and tourism facilities and small scale-office provision to serve the needs of the Borough;
- Bringing forward a range of suitable sites in other parts of the urban area for residential and employment development.

In the rural area, development will be supported within those rural settlements inset from the Green Belt.

Medway has the largest urban area in Kent and Medway, with over 278,000 people, concentrated between the A2 and M2 around the River Medway and its estuary. The Hoo Peninsula is characterised by strategic infrastructure installations and important natural habitats. Whilst there has been significant growth in recent years, this has placed pressures on services and infrastructure and housebuilding rates are still struggling to recover after the recession to meet demand.

Medway has a long-standing regeneration agenda and has seen the successful transformation of many brownfield sites, most notably around Chatham Maritime, with the development of a learning quarter, leisure, commercial and residential areas. The Medway Local Plan 2003 focused growth in the urban area, especially through brownfield site regeneration. Important to this strategy were urban sites such as Rochester Riverside, Strood Civic Centre and Chatham Waters.

AUTHORITY	DOCUMENT	STAGE	EXPECTED ADOPTION (AS OF NOV 2017)
DARTFORD BC	DEVELOPMENT POLICIES PLAN	ADOPTED JULY 2017	
	LOCAL PLAN	REG 18 CONSULTATION	TBC
GRAVESHAM BC	CIL	ADOPTED 2014	
	LOCAL PLAN CORE STRATEGY	ADOPTED 2014	
	SITE ALLOCATIONS AND DM POLICIES	REG 18 CONSULTATION	JULY 2021
MAIDSTONE BC	LOCAL PLAN	ADOPTED SEPT 2017	
	CIL	ADOPTED AUTUMN 2017	
MEDWAY COUNCIL	LOCAL PLAN	REG 18 CONSULTATION	2019
SWALE BC	LOCAL PLAN	ADOPTED JULY 2017	

Maidstone is expected to grow significantly in the coming years. The Local Plan provides for some 17,660 new homes and allocates strategic residential development areas to the North West and South East of Maidstone, with key regeneration sites within the town. Proportionate development is allocated at the Borough's Rural Service Centres of Lenham, Harrietsham, Staplehurst, Headcorn and Marden.

Maidstone Town Centre is the focus for regeneration and retail development, with several initiatives now underway. Strategic employment and commercial development sites are allocated at Junctions 7 and 8 of the M20 motorway.

To facilitate the sustainable delivery of planned development, the Local Plan identifies a number of strategic infrastructure schemes to support planned development, including junction improvements on the M20 (such as J5), new primary schools and new and expanded primary healthcare.

Swale is the point where North and East Kent meet and is named after the narrow channel of tidal water between mainland Kent and the Isle of Sheppey. It is a Borough of some 140,800 people who primarily live in its three main towns: Sittingbourne, Faversham and Sheerness. London is accessible in a little under an hour by high-speed rail services. As a coastal Borough, the Port of Sheerness gives access, via its deep-water berths, to the largest ships in the world, its imports distributed to all corners of the UK.

Over the last 60 years, population growth has been amongst the most rapid in Kent. Now, Swale has the third largest district population in Kent and built development has similarly physically grown. Over the last 20 years, most of the villages and towns in Swale have experienced growth, with growth in the towns the most rapid. In the last 10 years, more employment floor space has been built than anywhere else in the County.

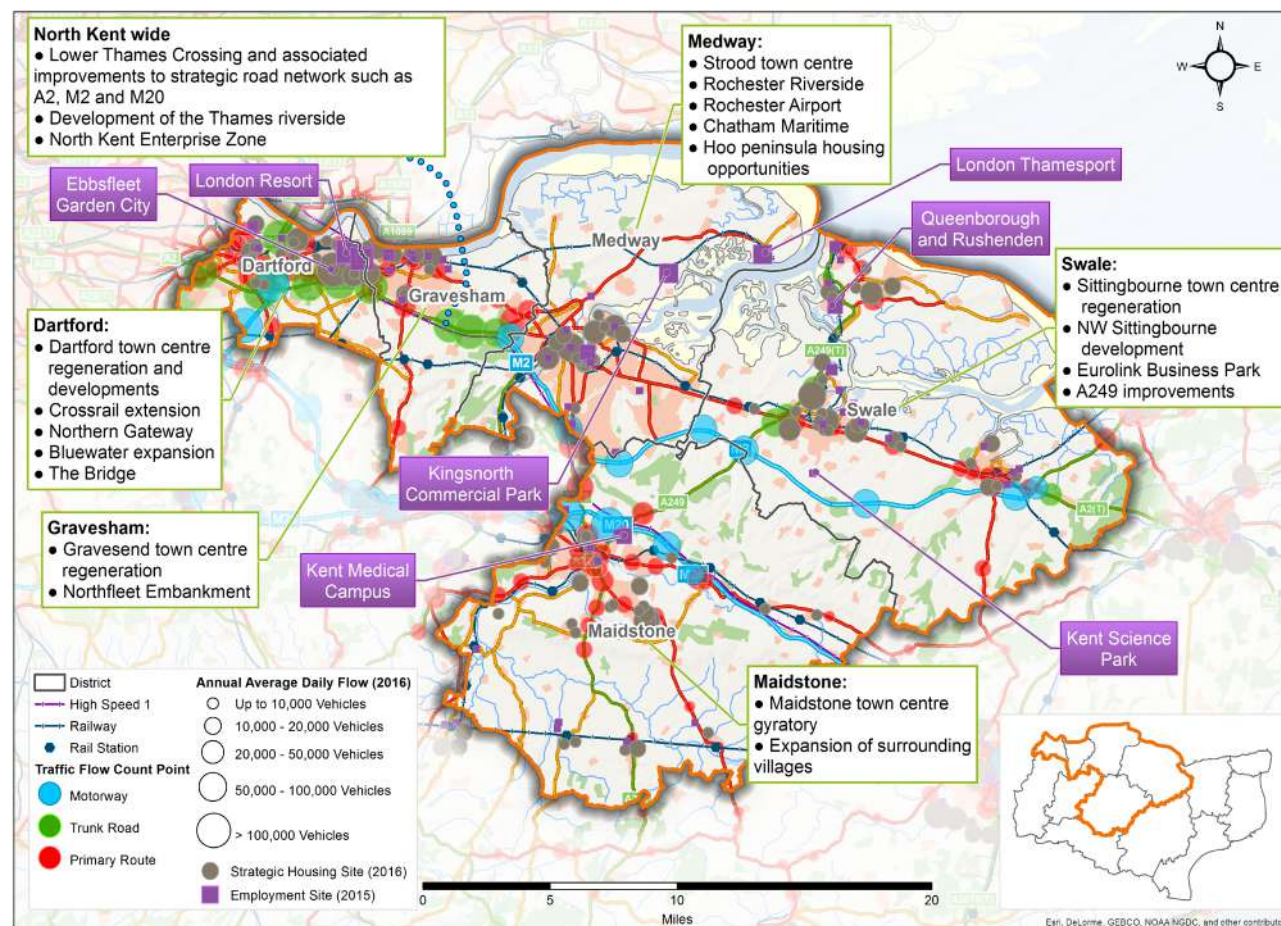


Figure 7.1: North Kent - example strategic projects for economic growth

NORTH KENT OVERVIEW – GROWTH CHALLENGES AND OPPORTUNITIES

Sustainable development of balanced communities will benefit those who currently live/work in Kent and support migration. Community facilities, commercial space and employment opportunities, alongside residential development, will provide for sustainable growth in North Kent.

CHALLENGES	OPPORTUNITIES
Congestion on highway networks in town centres and arterial routes	Excellent high-speed rail and transport links to London
The capacity limitations of the M2, especially in the context of the Lower Thames Crossing	The Wider Thames Estuary is an opportunity for new housing and commercial growth
Rail capacity on the North Kent line is stretched and will shortly be overcapacity with current growth rates	A possible extension of Crossrail to Ebbsfleet (C2E)
An ethnically and socially diverse sub-region, with areas of prosperity and dynamic growth, but also some of the most deprived localities in the South East	Lower Thames Crossing (LTC) has the potential to relieve congestion from the Dartford Crossing
Unemployment remains above the regional average	Development of North Kent's strengths in advanced manufacturing, technology and logistics (both port and non-port related) and science-related activities
Significant annual net migration into the area from London and population growth is placing pressure on local services	Promoting good-value business accommodation and low-value housing accommodation compared to London
Growth has been in retail and hospitality-related sectors, rather than in knowledge industries, with their potential for high value added growth	Extensive tracts of brownfield land are readied for the market for development
Deficiencies have been identified in early years, primary and secondary education, especially in areas of growth (such as Ebbsfleet)	Rochester Riverside will offer mixed-use development served by the new Rochester railway station
There are currently only two Profound, Severe and Complex Needs (PSCN) schools and both are operating at maximum capacity	Ebbsfleet Garden City, developing up to 15,000 homes and 30,000 jobs
Healthcare provision is struggling to keep up with growth	Proactive marketing of North Kent locations as realistic growth hubs for commercial occupiers
New housing in Bexley is enabling pupils to enrol in schools in the west of Dartford	Considerable improvements to the public realm in Maidstone town centre, from Week St to Gabriel's Hill
Significant growth across the North Kent CCG areas, which the healthcare state has struggled to keep up with	
Delays to the Thameslink train service being launched from Maidstone East	

NORTH KENT - INFRASTRUCTURE PICTURE

Key common strategic issues across North Kent:

- Delivering growth in key locations;
- Attracting and retaining investment;
- Focusing on quality;
- Supporting businesses: growth in key industry sectors;
- Supporting businesses: increasing innovation, enterprise and creativity; and
- Improving skills, qualifications and employability.

Essential to this will be ensuring an adequate supply of good-quality commercial space to attract businesses to North Kent and maintaining and growing an adequately skilled workforce meeting the demands of employers.

Transport

- The Lower Thames Crossing has the potential to reduce congestion on the Dartford Crossing, provide opportunities for investment and regeneration, offer safer and more reliable journeys and provide a brand-new transport corridor at a critical part of the road network. The impacts on the surrounding road networks will also need to be managed.
- Highways improvements to support the growth of key projects, including Ebbsfleet Garden City.
- Improvements to rail connections to boost opportunities for residential and commercial growth, whilst supporting current facilities.
- Long term, to reduce journeys and change patterns for modal shift.

Education

- Expansion of existing schools and development of new facilities - ensuring education capacity remains on course with residential development by the expansion of existing schools (e.g. Swales Skill Centre in Sittingbourne) or the

development of new schools (e.g. a lack of further education provision in Swale).

- In order to fulfil some of the deficiencies, Medway Council encouraged academy trusts to make bids for Free Schools to the Education Funding Authority in 2016. Four bids were successful, which secured approximately £60m worth of funding to provide new school places. At present Medway Council is working with partners to identify sites for these schools.
- Proposals are welcome for a secondary special free school to augment both existing special schools serving North Kent.

Health and Social Care

- Medway Model - the expansion of healthy living centres

from four to six, with new investment in Chatham and Strood. The CCG is working closely with Medway Council to enable these schemes to be developed utilising One Public Estate (OPE) and Estates and Technology Transformation Fund (ETTF) funding.

- Three integrated community hubs located in Dartford town centre, Ebbsfleet and Stone. The CCG is working closely with Dartford Borough Council to deliver a fully integrated town centre hub, utilising OPE and ETTF funding; Gravesham utilising Gravesham PFI Hospital; and a replacement facility in Swanley Town Centre. The hubs will provide wider support to GP practices within the neighbourhood, with provision of integrated services, diagnostics and IT, enabling patients to better access healthcare within the community.

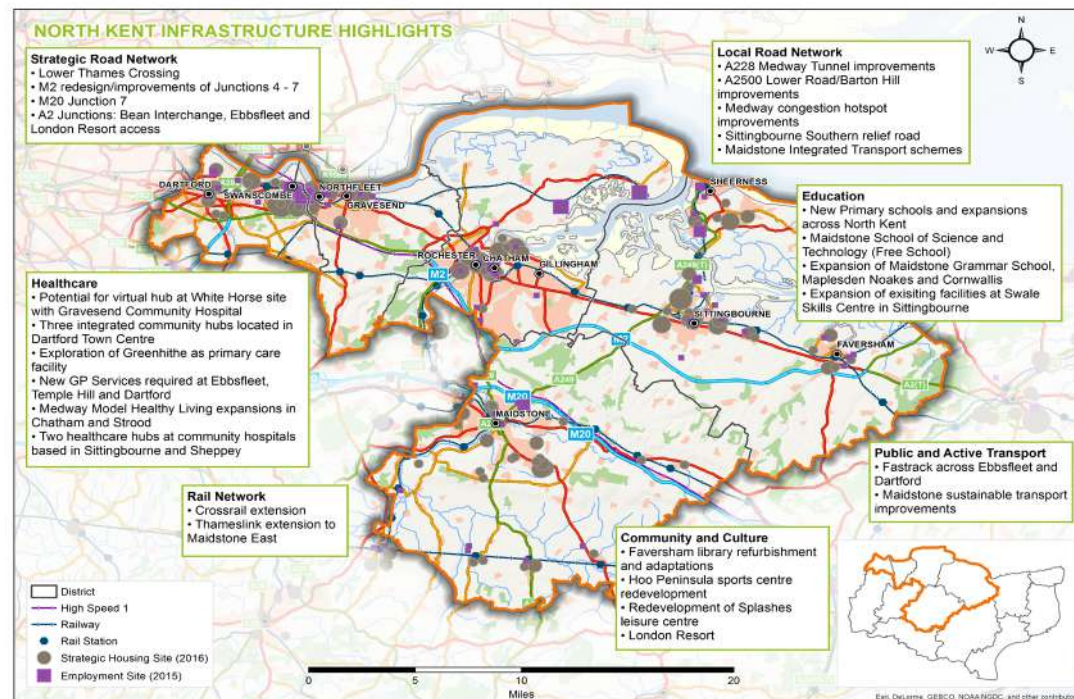


Figure 7.2: North Kent – key projects for each infrastructure sector

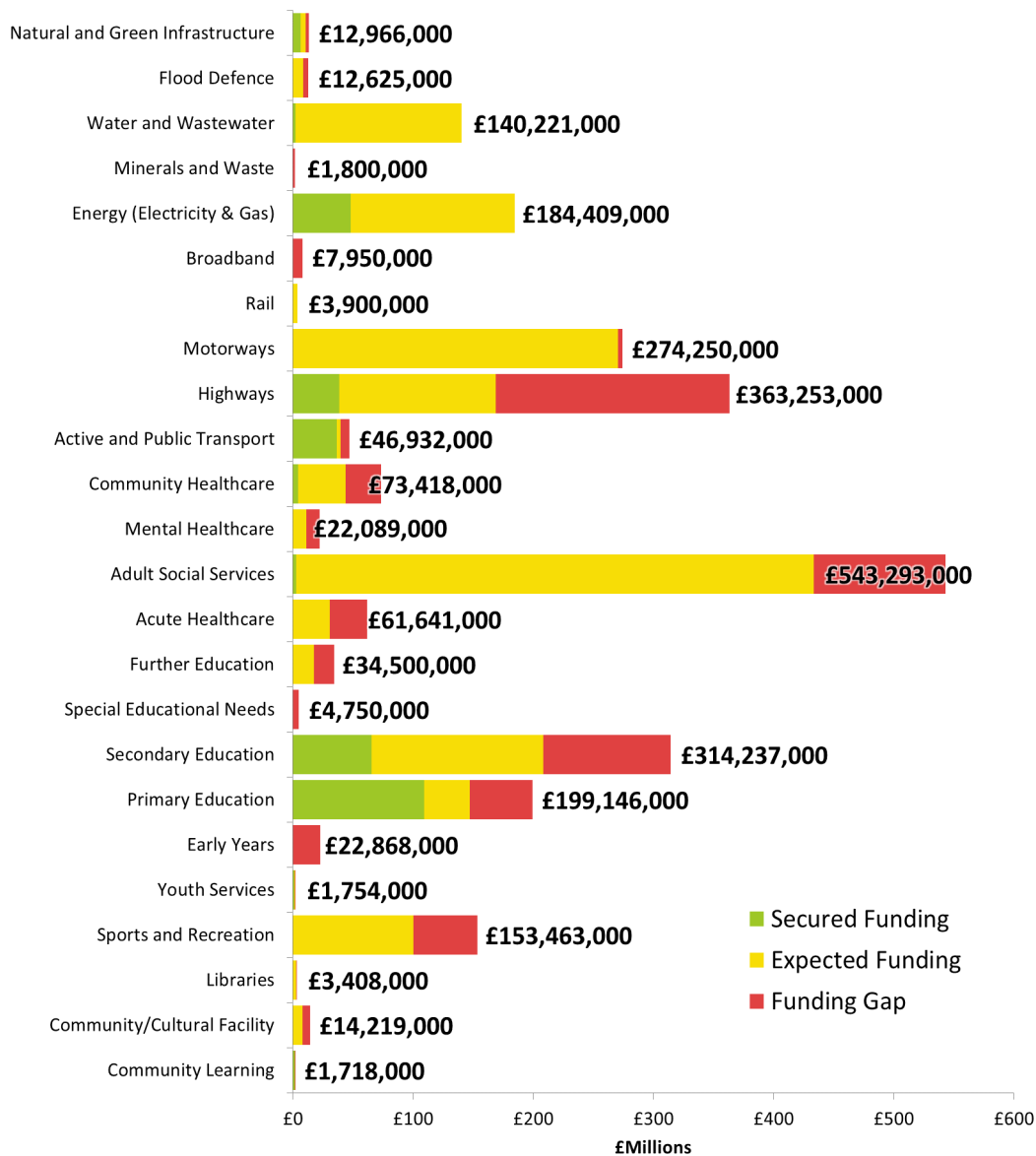


Figure 7.3: North Kent Infrastructure Funding Requirements

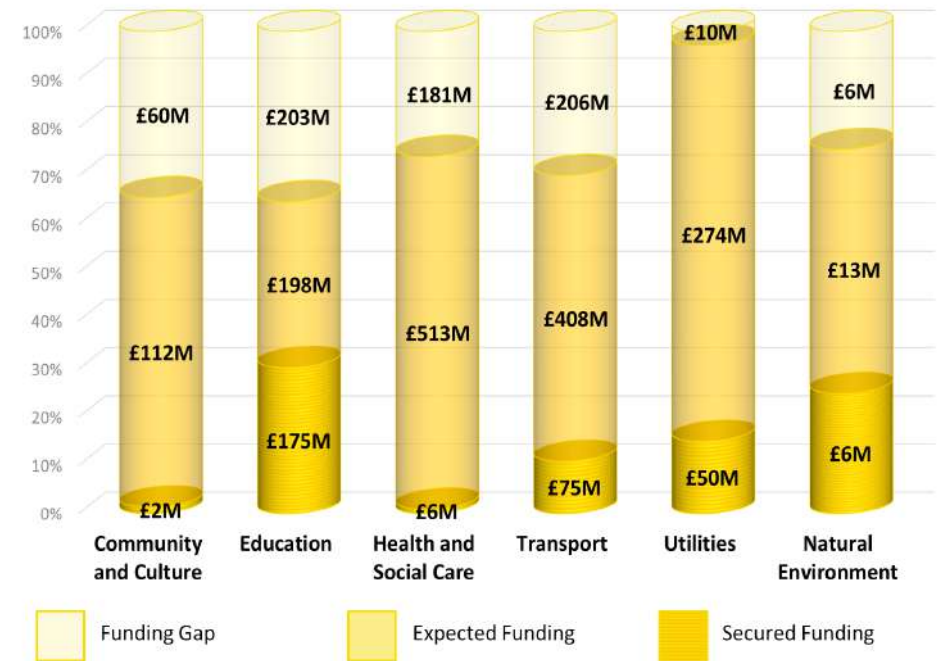


Figure 7.4: North Kent Service Sector Breakdown (Funding vs Gap)

EAST KENT

East Kent is made up of five districts: Ashford, Canterbury, Dover, Shepway and Thanet.

The East Kent Regeneration Board (EKRB) has prepared the East Kent Growth Framework (EKGF) (currently in draft), which sets out an overarching strategic approach for identifying priorities to achieve long-term economic growth across East Kent between 2017 and 2027. The EKGF has been produced through collective working to define the following key objectives for driving continued and sustainable growth across East Kent:

- Unlocking growth through infrastructure;
- Delivery of business space;
- Supporting skills and productivity within business;
- Place making and shaping.

EAST KENT - DISTRICTS AND BOROUGHES

Ashford is the largest Borough in Kent and has the fastest growing population, which has more than trebled in the last 40 years to around 118,000 residents. Ashford Borough Council is preparing a new Local Plan to 2030 with the aim of ensuring that future development within Ashford is well planned and managed effectively, whilst having a positive impact on local communities, the economy and the environment. Whilst the urban area of Ashford is expanding, much of the borough is rural in character and includes protected areas such as the North Downs and the High Weald Area(s) of Outstanding Natural Beauty (AONBs). The Local Plan seeks to balance the need for growth with protection of these important natural assets.

The Local Plan seeks to capitalise on the opportunities offered by the high-speed rail and road links to Europe and London which define Ashford's economic and housing growth. This trend



**HOUSING GROWTH
(2011-2031):
68,600**



**POPULATION GROWTH
(2011-2031):
146,700**



**TOTAL INFRASTRUCTURE
REQUIREMENT
£2,184,157,000**



**TOTAL FUNDING
IDENTIFIED:
£1,591,734,000**



**INFRASTRUCTURE
FUNDING GAP:
£592,422,000**

has led to some 15,000 new homes planned to 2030, as well as facilitating the delivery of a number of strategic infrastructure and economic projects.

Canterbury includes the historic City of Canterbury, the coastal towns of Herne Bay and Whitstable, and attractive countryside and villages. The district has a rich built environment, recognised internationally by the designation of World Heritage Sites by UNESCO comprising the Cathedral, St Augustine's Abbey and St Martin's Church. The Kent Downs AONB covers about a third of the district to the south, together with local landscape designations covering the Blean Woods, one of the largest areas of ancient woodland in England.

The district is an important sub-regional employment centre in East Kent. Canterbury has a strong service and education sector, with four higher and further education institutions. The strong education sector has implications for the population structure and the private rental market, with students competing for rented properties. The manufacturing sector is largely located at the coastal towns and has experienced some decline over the years, although there are several successful business parks at Whitstable and Hersden. Canterbury suffers from congestion at peak times and the A2 junction at Bridge

requires substantial upgrading. Canterbury City Council's recently adopted Local Plan, proposes new relief roads for Herne and Sturry, and a new A2 junction at Bridge to be provided as part of the development of the strategic sites.

Dover comprises the White Cliffs coastline, nationally valued landscapes and spectacular heritage (e.g. Dover Castle). The Port of Dover is a vital international gateway to Europe and there are strategic transport links to London. Housebuilding has increased and strategic infrastructure issues are being addressed, with a major regeneration of Dover town centre and a new leisure centre currently under construction. An Area Action Plan for Dover Waterfront will provide improved connectivity to the town centre and a continuous commercial area to the seafront. Viability issues, particularly in the Dover urban area, place great pressure on the district in meeting its growth requirements. More recently, the district successfully expanded the flagship Enterprise Zone in the Sandwich Discovery Park.

Dover is likely to benefit from the proposed Lower Thames Crossing and, along with the Port of Dover, is pressing for the comprehensive upgrade of the M2/A2 route, including improvements at Brenley Corner and the A2 from Lydden through to the Port of Dover.

Shepway's appeal is primarily based on its connectivity and wide variety of towns, villages and rural environments. The Kent Downs AONB and Romney Marsh has Grade 1 classified agricultural land and both have a rich and diverse influence on the landscape character. Significant areas of the district are low-lying and subject to a high risk of flooding.

The Council is progressing with a Core Strategy Review (CSR) to identify and define strategic site allocations up to 2037, with the following key sites identified to be redeveloped: at Folkestone Seafrost, Shorncliffe Garrison, New Romney Broad Location and the Urban Sports Park, Folkestone. With Government backing for the development of a new locally led Garden Town at Otterpool Park, comprising up to 12,000 new dwellings, a planning application is being prepared by Arcadis on behalf of the site owners, SDC and Cozumel, programmed for submission in spring 2018. Consultation on plans to build a major new lorry area in Kent to the north of M20 J11, to tackle disruption caused by Operation Stack, commenced in August 2016. A decision by Government on the project has been delayed pending the outcome of a Judicial Review that is to sit in December 2017.

Thanet lies at the eastern end of Kent, with the three main coastal towns of Margate, Ramsgate and Broadstairs. There are 32 kilometres of coastline with chalk cliffs and beaches and bays, many of which have been awarded European Blue Flag status. Much of the coast is also recognised for its internationally important habitats, including coastal chalk and significant wildlife populations.

Thanet is the fourth most populated district in Kent, with the second highest population density. Thanet is also a popular area for retired people to live, with the highest number of 65-year-olds and over in the County. The built-up area is densely populated and forms an almost continuous urban belt around the North East

coast. There are areas of countryside between the towns providing open green space in contrast to the urban areas. About 30% of the district is urban, with 95% of the population living in the main urban area around the coast. Through its close proximity to Europe and easy access to London, Thanet plays an important role in East Kent. The Local Plan, which is currently in draft publication, is looking to build on this and has identified its growth potential as a location for business investment.

Thanet has seen substantial coastal regeneration, with investment in the Turner Contemporary, Dreamland and hotel development.

AUTHORITY	DOCUMENT	STAGE	EXPECTED ADOPTION (AS OF NOV 2017)
ASHFORD BC	CORE STRATEGY (2006-2021)	ADOPTED 2008	
	LOCAL PLAN 2030	SUBMISSION FOR EXAMINATION - DEC 2017	SUMMER 2018
CANTERBURY CC	LOCAL PLAN (2011-2031)	ADOPTED JULY 2017	
DOVER DC	CORE STRATEGY AND LAND ALLOCATIONS LOCAL PLAN	ADOPTED 2010/2015	
	LOCAL PLAN (2014-2037)	EVIDENCE GATHERING	SUMMER 2018
SHEPWAY DC	CORE STRATEGY (2031)	ADOPTED 2013	
	PLACE AND POLICIES LOCAL PLAN	REG 19 CONSULTATION - WINTER 2017	SPRING/SUMMER 2018
	CORE STRATEGY REVIEW	GATHERING EVIDENCE	2020
THANET DC	THANET LOCAL PLAN	ADOPTED 2006	2019
	LOCAL PLAN (2031)	REG 19 CONSULTATION - EARLY 2018	

EAST KENT - GROWTH CHALLENGES AND OPPORTUNITIES

Sustainable residential and commercial growth will provide benefits for those who live and/or work within East Kent.

The East Kent Growth Framework identifies 12 spatial priorities, with 36 projects identified as being strategically significant for future economic growth, within these priorities. The 12 spatial priorities are:

1. Ashford Commercial Quarter;
2. Chilmington Green;
3. Romney Marsh Regeneration (commercial);
4. Folkestone Seafront and Town Centre;
5. Dover Port, Town Centre and Waterfront;
6. Whitfield, Dover;
7. Discovery Park, Sandwich;
8. Ramsgate Port, Marina and Waterfront (commercial);
9. Thanet Centre Island and Manston;
10. Margate and Cliftonville Regeneration;
11. Canterbury Knowledge City; and
12. Wincheap, Canterbury.

CHALLENGES	OPPORTUNITIES
Signalling on the Ashford Spurs requires upgrading to operate the new Eurostar Class e320 trains	The Port of Dover is Europe's busiest passenger port and handles 17% of the total UK trade in goods. Western Docks Revival is developing Dover's cargo business with a new cargo terminal and distribution centre to boost productivity and employment
Implications and uncertainties regarding post-Brexit border control management	Otterpool Garden Town demonstrates an exceptional opportunity to enable accelerated growth in quality homes and jobs, helping to address the housing need in Kent
Strategic network improvements to the A2/M2 are required to support the new Lower Thames Crossing, the growth of Canterbury and the ports of Dover and Ramsgate	Good progress in the delivery of new homes, boosting the housing stock options for purchasers
The cost of rail travel, especially to London, is currently high	Growth of higher-value and knowledge-based sectors with skills and training development boosting workforce capabilities
The effects of Operation Stack and the risks associated with its implementation (estimated to cost Kent and Medway over £1.5mn per day)	High demand for managed commercial space for new businesses
Congestion exacerbated by freight traffic and overnight lorry parking	High demand for high-quality, adaptable commercial spaces
High house prices affecting affordability in urban centres	Enterprise Zone East Kent Spatial Development Company, a cross-authority investment vehicle that is developing high-quality business space, such as the Discovery Park
Ageing population challenging healthcare and local community services	Visitor economy boosted by the rural and coastal offer in East Kent
Challenges to the viability of commercial development and limited speculative development	Higher education facilities have ambitious future programmes and masterplans
Low high-grade stock of commercial space has the potential to hinder employment growth	
Housing affordability issues, especially in Ashford and Canterbury, are limiting options for many purchasers, who are forced to move outside these urban areas to live	
An ageing population and the education and healthcare facilities required to support it	
Variations in deprivation	
New schools and school expansions required to support growth aspirations	

EAST KENT - INFRASTRUCTURE PICTURE

The East Kent Growth Framework top priorities are:

- **Strategic network improvements to the A2/M2** required to support the new Lower Thames Crossing, the growth of Canterbury and the ports of Dover and Ramsgate;
- **M20/A20 improvements** including junction 10A, the proposed lorry holding area, HGV overnight parking and access to Dover;
- **Improvements to rail capacity**, speeds, frequency and associated infrastructure, including Ashford SPURS, Westenhanger Station enhancement and Thanet Parkway; and
- **A28 corridor artery** stretching across East Kent from Margate in Thanet to Ashford via the City of Canterbury requires improvements through eight separate but connected transport infrastructure projects to improve road links, address bottlenecks and problems of congestion.

Transport

- Investment in the road network at Westwood Cross to alleviate traffic problems and unlock development sites as well as the port at Ramsgate.
- Rail capacity, speed, frequency and associated infrastructure, including Ashford SPURS, Westenhanger Station enhancement and Thanet Parkway. Dover is also investigating options for additional capacity on the High Speed route and investigating a new Whitfield Station.
- Park and Ride systems are a success in the city and could be future schemes for the coastal towns. Introduction of accessible transport options at the Folkestone harbour redevelopment.
- Improvements to the A260, creating the most easterly link between the M20/A20 and M2/A2 routes.

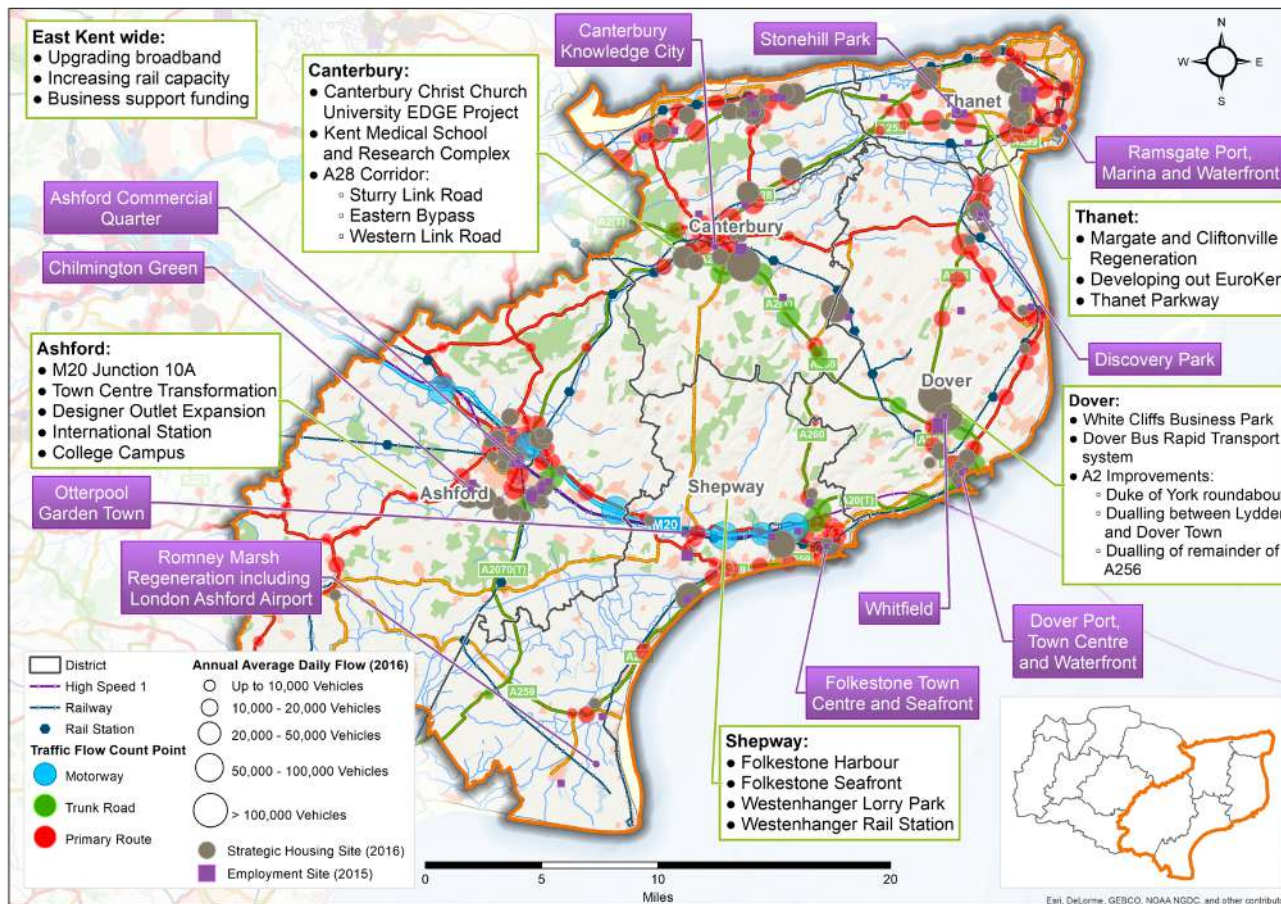


Figure 7.5: East Kent - example strategic projects for economic growth

Education

- Secondary school pressures in Ashford begin in Year 7 in 2018/19, with demand expected to exceed supply in 2019/20. This is to be managed in the short term through existing schools admitting additional pupils and a new school in the Chilmington Green development.
- Total primary school rolls will continue to rise until 2018/19 in Shepway. Subsequently, the pressure for Year 7 places means a new Secondary Free School will be needed in 2018/19.
- Reception year numbers are forecast to reduce from 1,678 in 2016/17 to 1,609 in 2020/21 in Thanet. However, continued inward migration and new housing may result in an increase over the forecast period. The impact of a decade of rising numbers in the primary phase will begin to impact on the secondary phase significantly from 2019/20 and provision will have to be put in place.

Health and Social Care

- Healthcare responding to growth in demand from residential development – e.g. primary healthcare required in the Westwood Cross area, Thanet, where major new development is planned.
- The need for four community service hubs has been identified in the South Kent Coast CCG area, in Deal, Dover, Folkestone and Romney Marsh. The CCG will look to utilise the existing estate where possible.
- The offer of a new hospital 'shell' in Canterbury from housing developers is being formally analysed and scrutinised to see if it is a viable option. The STP Programme Board acknowledged that if it is considered to be viable, this would have a considerable impact on the proposals for hospital services in East Kent. The work to develop proposals for East Kent continues, with a focus on finding potential long-term solutions to the current challenges as quickly as possible.

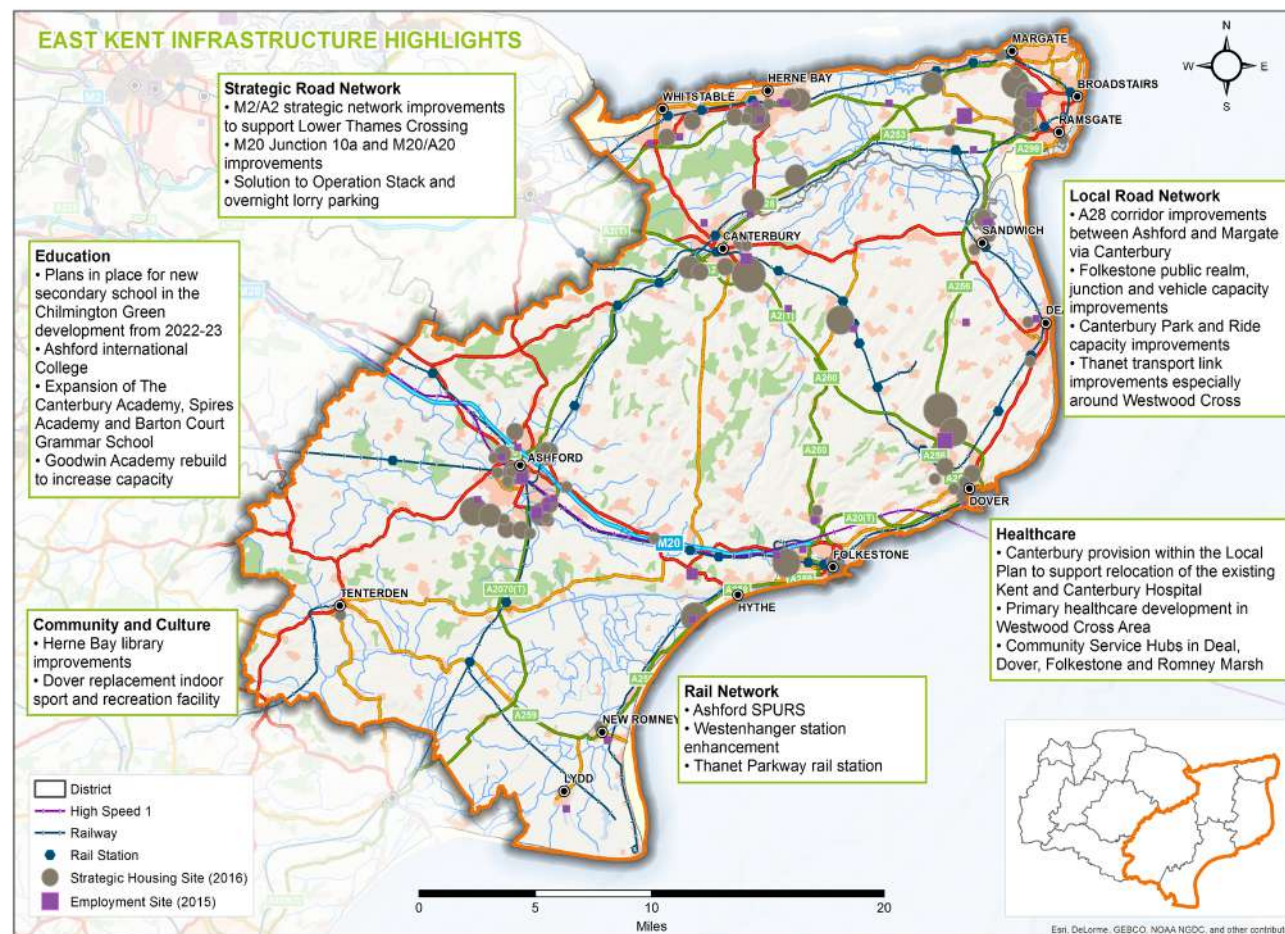


Figure 7.6: East Kent – key projects for each infrastructure sector

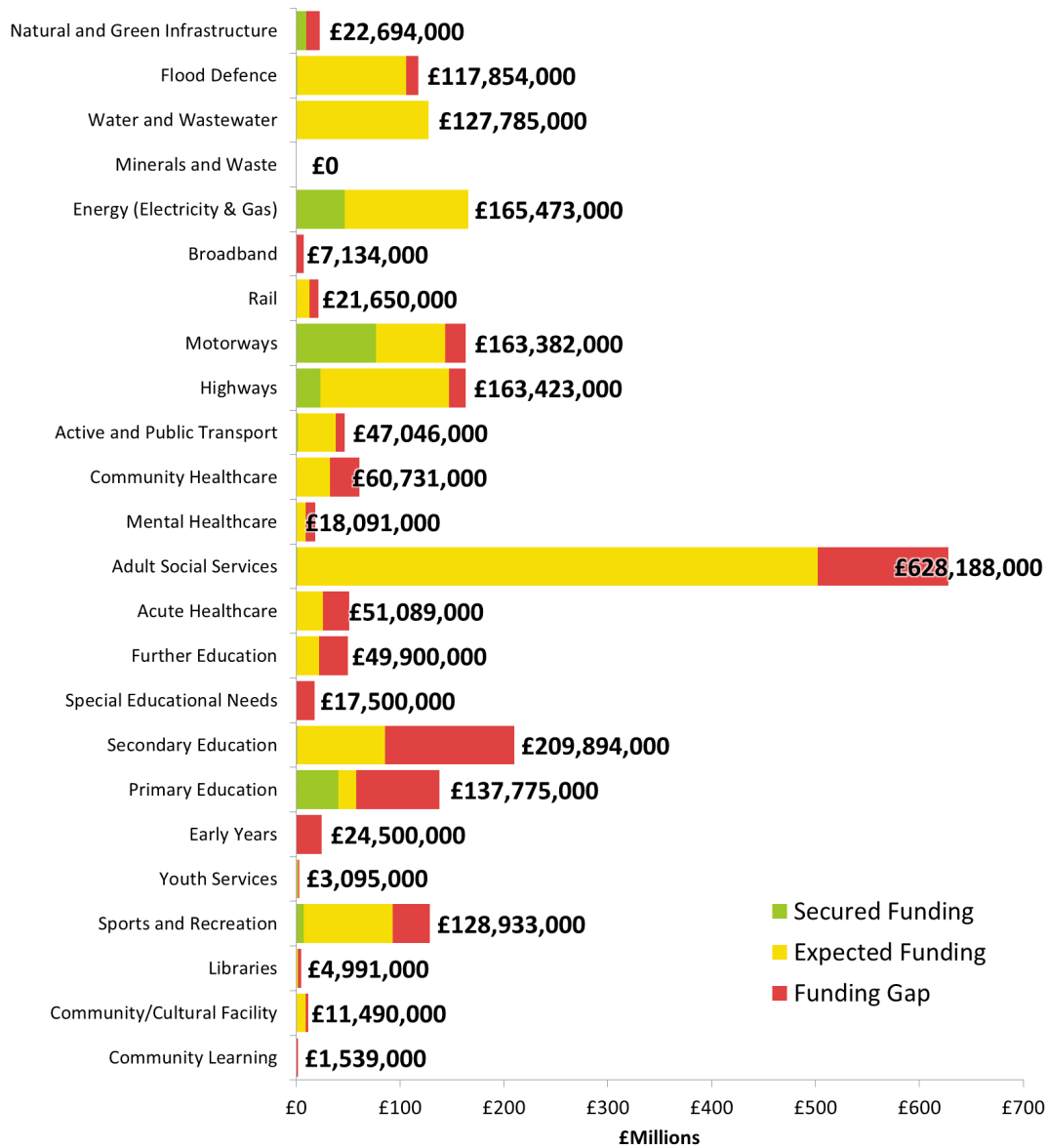


Figure 7.7: East Kent Infrastructure Funding Requirements

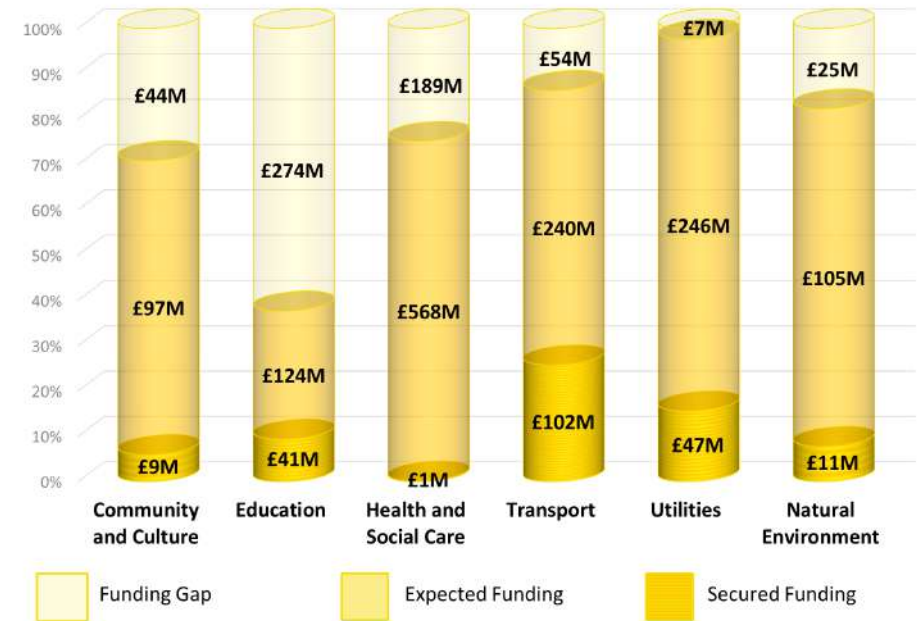


Figure 7.8: East Kent Service Sector Breakdown (Funding vs Gap)

WEST KENT

The West Kent sub-county area includes Sevenoaks, Tonbridge and Malling and Tunbridge Wells and is bordered by East Sussex, Surrey and the London Boroughs of Bromley and Bexley.

The economy of West Kent plays a vital role in promoting and sustaining the Kent economy as a whole. It has historically enjoyed strong job growth and is forecast to continue to do so, with good prospects for securing economic growth over the next 20 years. West Kent has the highest proportion of business start-ups in Kent, a stronger representation of higher-value, knowledge-based industries than anywhere else in Kent and boasts the strongest business survival rates. The area provides significant employment to those living elsewhere in Kent, including high-skilled, well-paid jobs.

The West Kent Partnership is an economic and strategic partnership that operates across the area, to promote West Kent, champion key economic issues and engage with industry and business to support the local economy. Its vision for West Kent is:

“To sustain a dynamic and well-connected local economy, to ensure that West Kent remains a key location for business success and growth, and that our local population has access to quality jobs and skills development.”

WEST KENT - DISTRICTS AND BOROUGHES

Sevenoaks District has one of the highest proportions of Metropolitan Green Belt in the country (93%) and contains parts of two Areas of Outstanding Natural Beauty; the High Weald and the Kent Downs, both of which cover a total of 60% of the District.

Sevenoaks District Council (SDC) is at the beginning of produc-



**HOUSING GROWTH
(2011-2031):**
31,400



**POPULATION GROWTH
(2011-2031):**
62,800



TOTAL INFRASTRUCTURE REQUIREMENT
£785,697,000



TOTAL FUNDING IDENTIFIED:
£603,713,000



INFRASTRUCTURE FUNDING GAP:
£181,985,000

ing a new Local Plan to cover the period 2015 to 2035. Headline figures include a housing need of 12,400 units, a need to identify up to 11.6 ha of employment land and up to 32,100 m² of retail floorspace. SDC completed its Local Plan Issues and Options in autumn 2017 and will be producing its draft Local Plan in spring 2018.

Due to its Green Belt constraints, the Local Plan will look to focus development within its existing town and village centres. This will

be achieved by increasing densities, prior to looking for brownfield development opportunities in the Green Belt and only then the release of other Green Belt in 'exceptional circumstances'. Schemes that enable regeneration benefits or provide key infrastructure to support the needs of communities will also be considered.

Tonbridge and Malling is mainly rural in character, with villages and small towns of varying size and character, many of which are of architectural or historic interest. The largest rural settlements are

AUTHORITY	DOCUMENT	STAGE	EXPECTED ADOPTION (AS OF NOV 2017)
SEVENOAKS DC	CORE STRATEGY (2015-2035)	ADOPTED 2011	
	LOCAL PLAN 2015-2035	ISSUES AND OPTIONS CONSULTATION - SUMMER 2017	SUMMER 2019
TONBRIDGE AND MALLING BC	CIL	ADOPTED 2014	
	CORE STRATEGY (2021)	ADOPTED 2007	
	LOCAL PLAN (2031)	REG 19 CONSULTATION - EARLY 2018	SPRING 2019
TUNBRIDGE WELLS BC	CORE STRATEGY (2026)	ADOPTED 2010	
	NEW LOCAL PLAN (2033)	ISSUES AND OPTIONS (REGULATION 18 - JUNE 2017)	SPRING/SUMMER 2019

West Malling, Borough Green, Hadlow, Hildenborough and East Peckham. An extensive area of the Borough lies on the floodplain of the River Medway, although the potential negative impact of this in Tonbridge is reduced to some extent by the Leigh Barrier to the west of the town.

Tonbridge and Malling Borough Council is looking to adopt a new local plan mid-2019, after public examination at the end of 2018. The Borough has an excellent strategic communications network, especially with London, and a high percentage of the workforce with NVQ4+. There is strong evidence of speculative commercial development being delivered and coming forward, such as Nepicar Park, Crickets Farm and London Road, showing confidence in the market.

Leybourne Grange, Holborough Quarry and Nepicar Park are all near completion or complete as substantial areas of growth in the district. Planning permissions have been approved and are being delivered for Kings Hill (Phase 3) and Peter's Village, with redevelopment of the Aylesford Newsprint site due in the near future.

Tunbridge Wells lies in the south-west of Kent bordering East Sussex. Royal Tunbridge Wells forms the majority of the main urban area and provides a large proportion of the social, cultural and economic opportunities available in the Borough. The quality of the built and natural environment is very high, with 70% of the Borough designated as part of the High Weald AONB and 22% of the Borough is also designated as Metropolitan Green Belt.

Tunbridge Wells has a strong residential market and the Borough is considered to be an attractive location for business investment given the close proximity to London and the access to a highly skilled workforce. However, limited land and premises are currently available. The Borough's Economic Needs Study identifies the

need for 11-15 hectares of employment land equating to approximately 10,000 new jobs over the Plan period and to increase the Borough's economic attractiveness to potential investors. In addition, investment in the next 5 years in Royal Tunbridge Wells town centre, will build on its role as a cultural centre for West Kent and Sussex.

Tunbridge Wells Borough Council's Development Plan consists of the Adopted Local Plan 2006, the Core Strategy 2010 and the Site Allocations Local Plan 2016. The Council is currently preparing a new Local Plan to cover the period to 2033, which

will replace the previous Plans for the Borough and will set out the scale of development required during this period and the key locations to meet this need.

The Borough faces significant challenges over the Plan period, in order to meet the development needs whilst maintaining the exceptional quality of the built, natural and historic environment and promote economic growth. The Council has recently undertaken an Issues and Options consultation for its new Local Plan and as part of this consultation five strategic options were set out to meet the required growth.

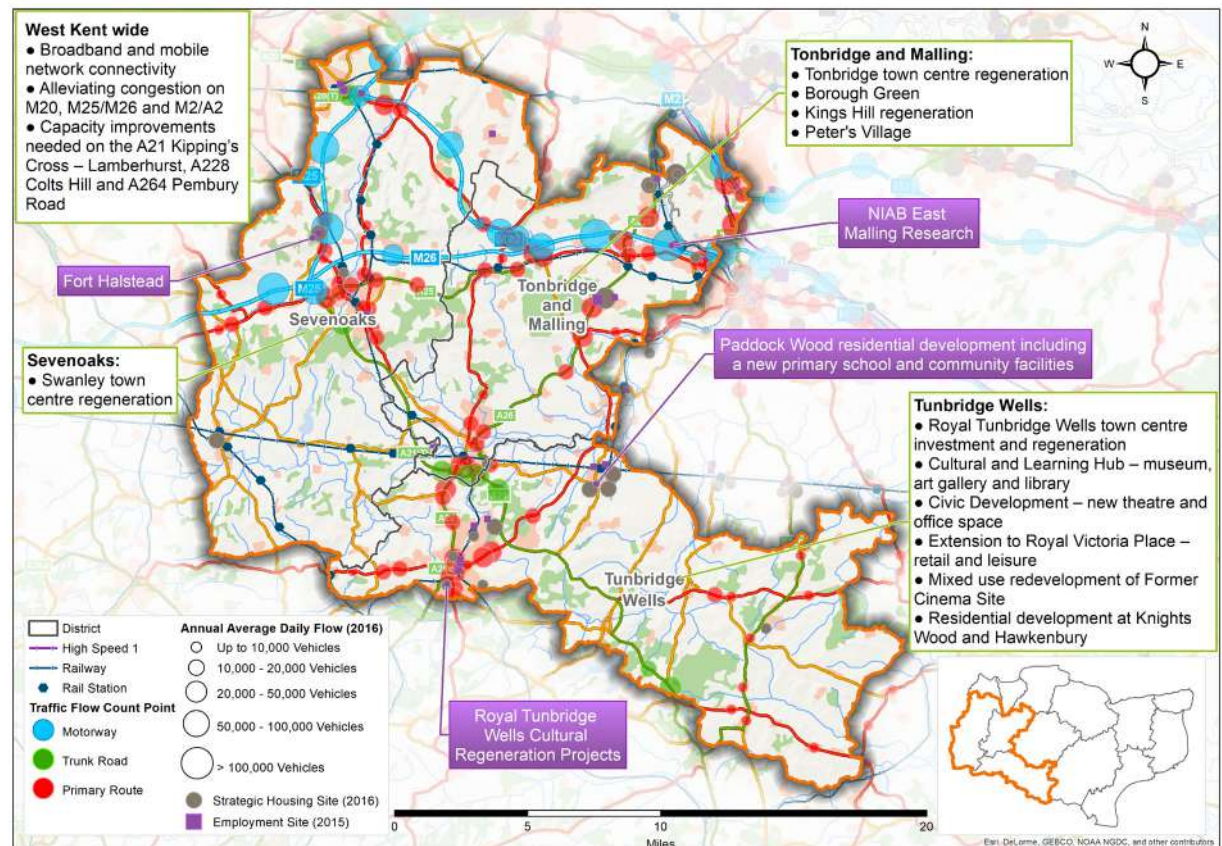


Figure 7.9: West Kent - example strategic projects for economic growth

WEST KENT OVERVIEW – GROWTH CHALLENGES AND OPPORTUNITIES

West Kent is highly constrained by environmental and planning issues including Green Belt, Areas of Outstanding Natural Beauty and flooding. Despite the constraints, West Kent has a number of thriving towns and regeneration sites which are providing new homes and employment opportunities for the area.

CHALLENGES	OPPORTUNITIES
Highly constrained districts, Green Belt, AONBs and flood zones result in a limited supply of sustainable land options	An attractive location for business investment due to close proximity to London and access to a highly skilled workforce
There are pockets of significant deprivation amongst relatively affluent areas, contributing to a wide variation between wards	Some strong evidence of speculative commercial development being delivered and coming forward in some locations (such as Nepicar Park and Cricketts Farm)
House prices affecting affordability in the sub-county area, as well as affecting recruitment	Broadband and mobile connectivity infrastructure improving
Pressure on commercial space, with permitted development rights exacerbating the loss of town centre office stock	High residential land values result in a strong residential market
Relative lack of choice of good-quality sites and premises for modern business operations	Continued regeneration/investment of sites such as Swanley Vision, Kings Hill, Peter's Village and Royal Tunbridge Wells town centre
Above-average business property and labour costs	Successfully delivering major highways schemes in the area will assist in unlocking development, reducing congestion and encourage economic growth
No major higher education institution	Investment in Royal Tunbridge Wells will build on its role as a cultural centre for West Kent and Sussex, and grow the visitor economy
Broadband speeds in some rural locations cause problems for businesses/home-working	Entrepreneurial population and SMEs with growth potential across a range of sectors
The proportion of the local population in the 65+ age group is higher than the national average and is expected to grow.	High proportion of businesses in the Knowledge Economy
New transport infrastructure is required in order to unlock further opportunities for growth (housing and economic)	

WEST KENT - INFRASTRUCTURE PICTURE

Key common strategic issues across West Kent are focused on roads, schools, health and regeneration.

Transport

- There is a need to improve the strategic/major road network including the M20, A21, A228 and also access to the M25/M26 which could increasingly impact on both West Kent and the coastal area to the south. Following completion of the dualling between Tonbridge and Pembury, the A21 now experiences significant congestion further south at Kipping's Cross.
- Congestion on radial routes into Royal Tunbridge Wells remains a significant issue at peak times. Options to increase vehicular capacity on the A264 Pembury Road and to increase opportunities for sustainable travel on the A26 are being explored.
- Sevenoaks, Tonbridge and Tunbridge Wells are all heavily dependent on rail for commuting into London and there is a need to maintain and enhance services to satisfy growing demand.
- Enhancements to the public realm in Tonbridge and Royal Tunbridge Wells town centres are aimed at enhancing the environment (including addressing air quality) for pedestrians and cyclists, and improving access to bus and rail services.
- New infrastructure is needed to encourage walking and cycling for shorter journeys between residential areas and local facilities.

Education

- Currently, specialist secondary provision for pupils with Autistic Spectrum Disorder (ASD) in Kent is at opposite ends of the County. This leads to pupils having to travel long distances to the nearest suitable provision.

The scale of forecast demand for high-functioning secondary-aged ASD pupils would be better accommodated through the establishment of a new school.

- A new primary Free School, Bishop Chavassee, is anticipated to meet the demand for places in central Tonbridge when it opens in September 2017.
- There are two allocations for new primary schools in Tunbridge Wells Borough, a new primary Free School at Paddock Wood and in Royal Tunbridge Wells, a new school at Hawkenbury forming part of the expansion of St Peter's Primary School. These schools will seek to mitigate pressures from new housing developments within these areas.
- There is also an existing demand for a new secondary school in Royal Tunbridge Wells to increase the capacity in the area as well as new provision likely as part of the new Local Plan.

Health and Social Care

- The CCG's Local Care Plan (July 2017) sets out the framework for delivering out-of-hospital care at four different levels – general practice, clusters, local care hubs and West Kent-wide services. As part of the Local Care Plan, estate is recognised as a key enabler for the delivery of out-of-hospital care.
- Additional GP capacity will be required in key areas to ensure adequate provision for new residents. The CCG will work with GPs to develop sustainable premises solutions for the longer term; this will include identifying shared opportunities for co-locating with other services (health and non-health).

Flood Defences

- Leigh Flood Storage Area had LGF3 funding announced in January 2017, with a view to submitting in Autumn/ Winter 2017.

- Focus on immediate collaborative actions and long-term strategies to reduce the risk of flooding from non-tidal rivers and surface water in the Medway catchment through the Medway Flood Partnership.

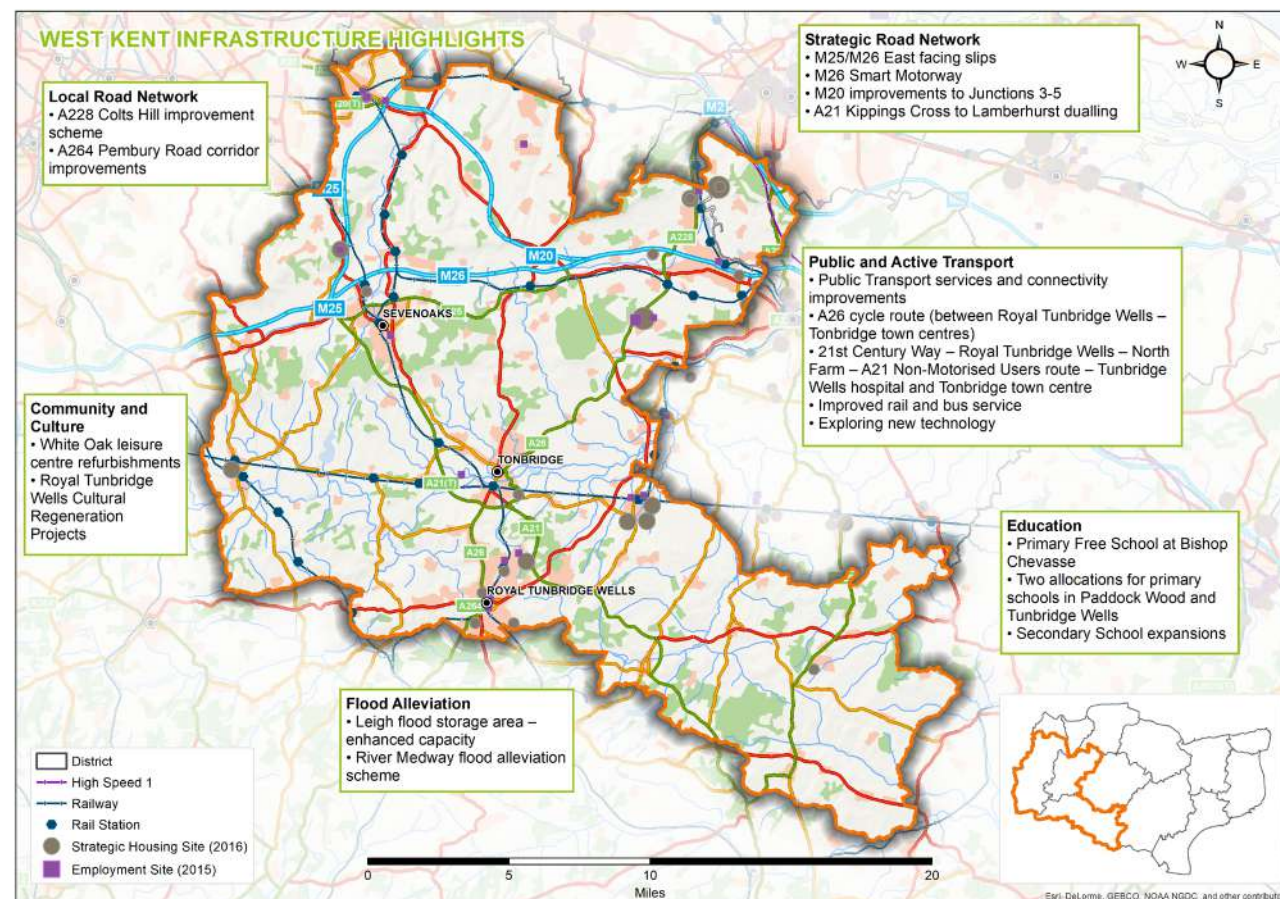


Figure 7.10: West Kent – key projects for each infrastructure sector

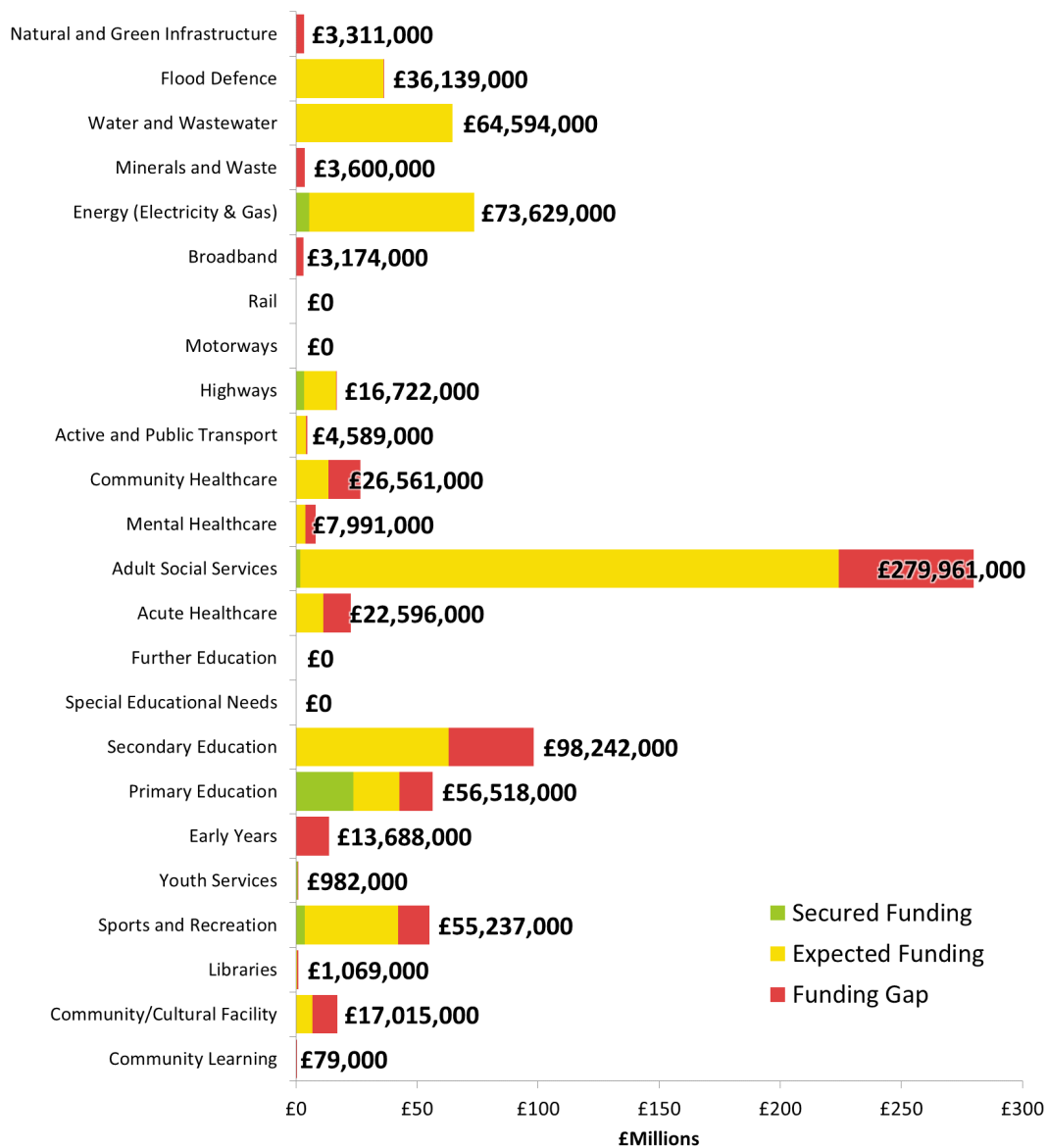


Figure 7.11: West Kent Infrastructure Funding Requirements

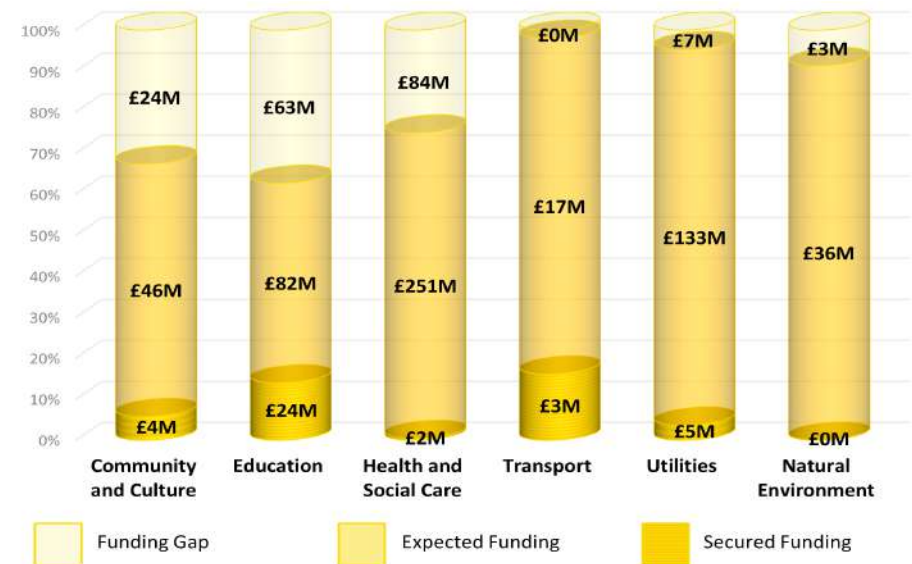


Figure 7.12: West Kent Service Sector Breakdown (Funding vs Gap)

8. EBBSFLEET GARDEN CITY - CASE STUDY

BUILDING A 21ST CENTURY GARDEN CITY AT EBBSFLEET

Sitting on the banks of the Thames, only 17 minutes from King's Cross/St Pancras, Ebbsfleet is being planned to grow out of the chalk quarries and industrial heritage of Northern Kent to become a Garden City for the 21st century. By 2035, a new settlement of up to 15,000 homes will have grown around Ebbsfleet, forming a centre of excellence for health, education and learning, and a major transport interchange for the South East.

Ebbsfleet Development Corporation was established to address delays in the building-out of significant existing planning permissions within Ebbsfleet, and in so doing to drive ambition and deliver development at quality and pace.

Aligning the Vision

The starting point of the programme was the co-development of an 'Implementation Framework' to align ambition between stakeholders, and assimilate the planning of city-wide infrastructure into a single plan. The framework and subsequent investment programmes are structured into 6 delivery themes, each addressing the challenges around a key infrastructural system.

Kick-starting infrastructural investment

Factors affecting delivery include: the omission of critical utilities; strategic infrastructure within the current Asset Management Plan (AMP) period; congestion on the A2 around Bluewater and its associated impacts on load road networks and public transport services; and the impact of the proposed International Theme Resort on Swanscombe Peninsula.

Building on the connections

The success of Ebbsfleet's transport strategy is dependent on the integration and development of its existing networks. The existing Fastrack bus service will be upgraded to a world-class rapid transport system, developing a comprehensive segregated network, integrated ticketing and enhanced fleets of electric vehicles to ensure a frequent and reliable service.

Recognising the value of 'the Garden'

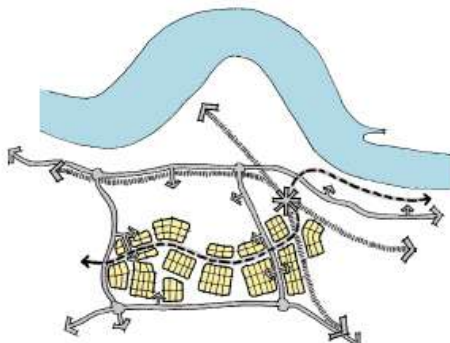
The 'Garden Grid' underpins the entire planning of Ebbsfleet. This network of parks and green corridors is the garden of the 'Garden City', recognising the value and operational efficiencies of green infrastructure to manage water, flood resilience, local climate and air quality, whilst supporting healthier lifestyles, growing food and reducing congestion for residents.

Delivery Theme #1

Homes and neighbourhoods // Healthy homes

Progress:

- 700 homes now constructed in Ebbsfleet.
- 7,274 homes granted full planning permission by September 2017.
- 10 new walkable neighbourhoods planned.
- 'Building for a Healthy Life' design tool being developed to benchmark quality of homes.

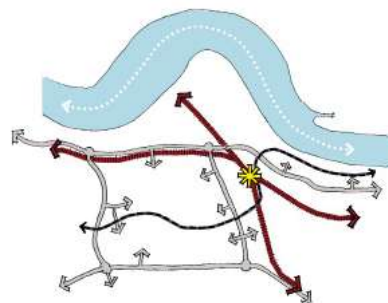


Delivery Theme #3

Connecting People + Places // Building on connections

Progress:

- £45mn EDC investment to bring forward Ebbsfleet and Bean A2 junction upgrades. Public consultation completed and scheme in development.
- Major package of upgrades for Fastrack system developed with stakeholders to ensure direct route to Bluewater delivered by 2021.



Civic Communities // Celebrate and reflect Ebbsfleet's landscape, people and cultural heritage

Healthy New Town Programme launched to develop new models of care, promote active lifestyles, and empower community engagement in health planning.

'Active Ebbsfleet' programme now has over 100 fitbit users sharing knowledge to create a healthy community, and providing data to inform investments in green infrastructure.

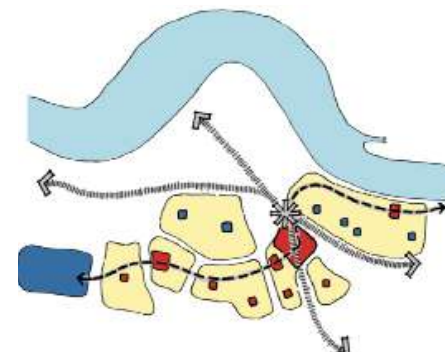


Delivery Theme #2

Enterprising Economy // Focus on Centres

Progress:

- New visitor information centre opened at Ebbsfleet International.
- Planning permission granted for first new local centre, at Castle Hill.
- Planning permission for new commercial space and business centre granted at Northfleet East.

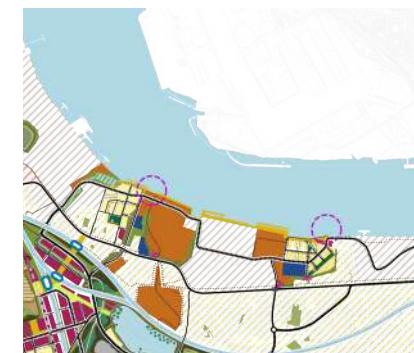


Delivery Theme #4

Healthy Environments // Bringing in the green and the blue

Progress:

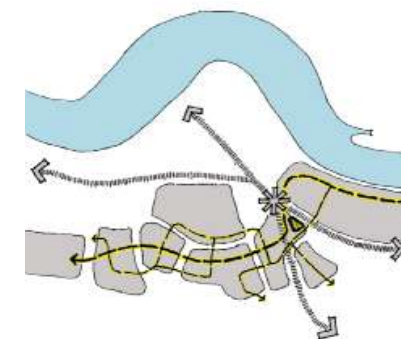
- 1.5 km new walking and cycling routes being constructed in 2017/2018.
- Stakeholder's Water Forum established to co-ordinate management of water.



Integrated utilities and services //

EDC investing £30mn in new electricity sub-stations to secure power for future development.

Working proactively with water companies to agree a water strategy, and investigate use of innovative new technologies.



9. ADDRESSING THE GAP

This framework identifies a number of challenges for delivering infrastructure to support growth:

- Cross-cutting challenges around the complexities and timeliness of delivery of infrastructure to enable sustainable growth in the County;
- Solutions are needed to address the viability gaps that are impeding timely and sustainable delivery;
- The cost of maintaining existing and new infrastructure. 2050 scenario testing emphasises the need to provide future-proofed and resilient infrastructure to avoid the need to reactively retrofit new technology at great expense.

Fundamental to overcoming the problem of delivering infrastructure is the need to correct what is ultimately a flawed system of infrastructure funding. The GIF analysis has shown a significant gap between the funding required and that secured from Central Government and other investment.

It also highlights the significant dependency of infrastructure on expected funding – a proportion of funding which is calculated based on past rates of attracting funding from developer contributions and other sources. In a challenging financial climate, there is increased risk that investment cannot continue to be secured at historic rates.

9.1 THE INFRASTRUCTURE GAP

Funding is the primary risk to delivering the infrastructure required to support growth across Kent and Medway, with a **total gap of £3.96bn**. There are significant gaps in funding across all types of infrastructure identified within the GIF; a situation that will not be improved with the shape and level of public sector funding proving very difficult to predict.

The funding situation outlined reflects current approaches to the delivery and funding of infrastructure. However, there is clearly uncertainty as, over the GIF time frame to 2031, there will be at least two general elections, making it difficult to anticipate Central Government policy with respect to various infrastructure types. Furthermore, estimated project requirements will be dependent on future housing growth being realised.

This framework takes a significant step in providing a picture of the infrastructure need across Kent and Medway, allowing partners to start looking to strengthen their approach to existing funding streams through making the most of existing mechanisms (such as Section 106 and CIL), whilst also looking to diversify.

Canterbury Cathedral

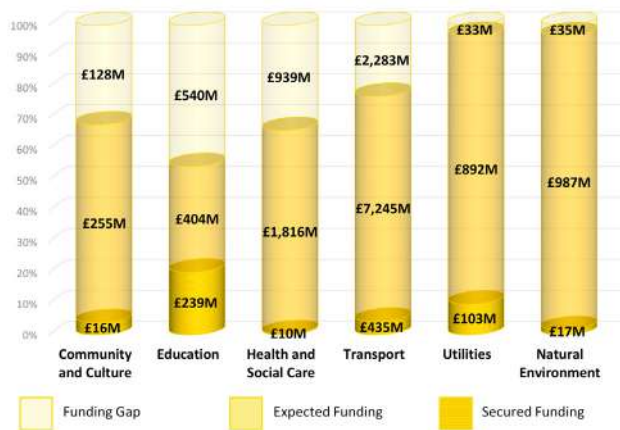


Figure 9.1: Infrastructure Sector summary of funding gaps vs identified funding

FILLING THE GAP

Whilst this framework identifies an overall funding gap of £3.96bn, there are a number of factors that could affect this gap as time progresses. The greatest risk amongst these is how much funding is “expected” as these anticipated amounts may not be received.

Over **90%** of the total funding to meet Kent and Medway’s infrastructure requirement is identified as expected. This is particularly true within the transport sector where the GiF assumes that funding will be found for critical national infrastructure, such as the Lower Thames Crossing, and county-wide priorities such as rail improvements.

Given current national trends in both demographic change and the financial challenges that local authorities are currently facing, this funding is at significant risk of not being available.

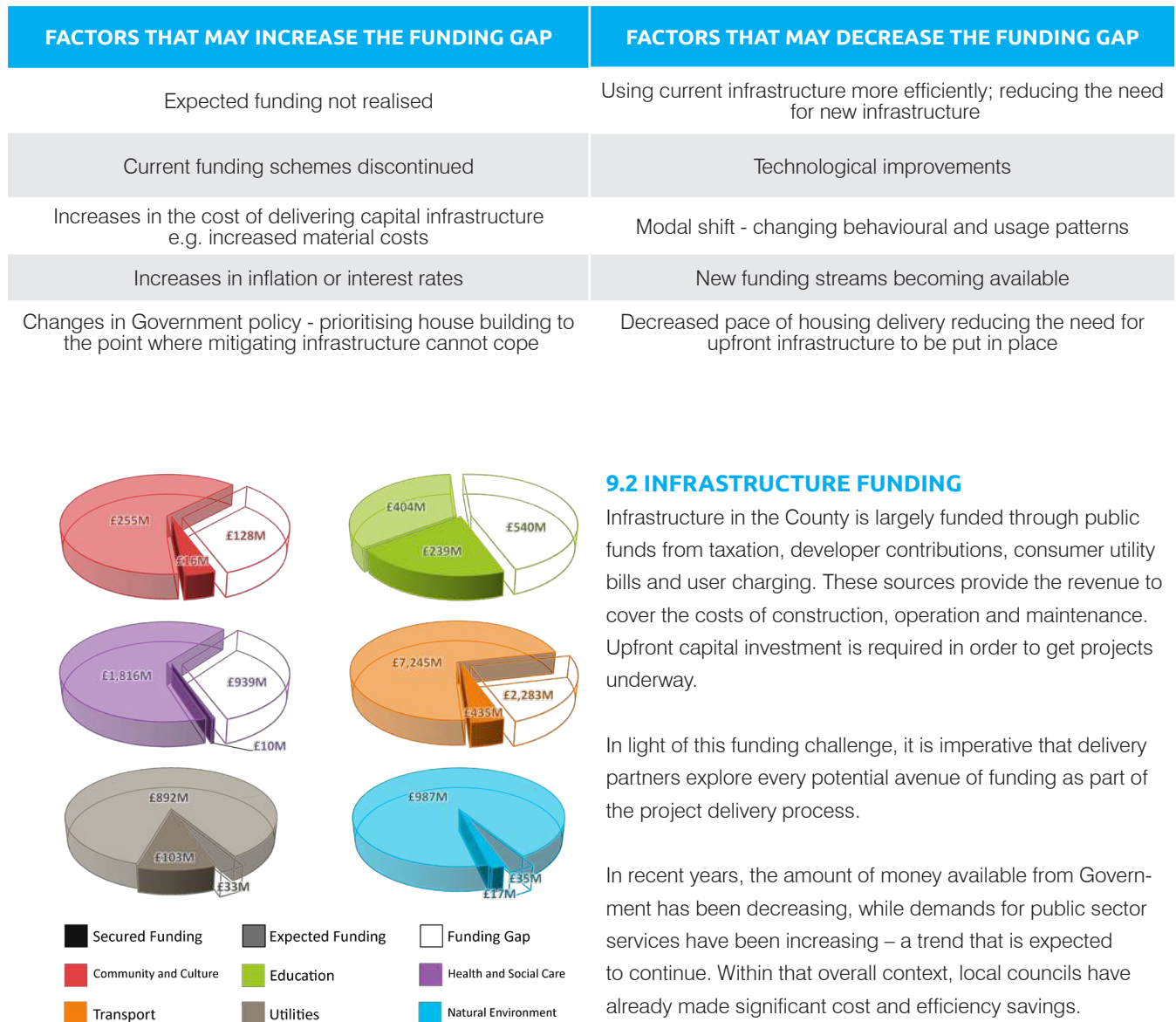


Figure 9.2: Breakdown of secured, expected and funding gaps by each infrastructure sector

9.2 INFRASTRUCTURE FUNDING

Infrastructure in the County is largely funded through public funds from taxation, developer contributions, consumer utility bills and user charging. These sources provide the revenue to cover the costs of construction, operation and maintenance. Upfront capital investment is required in order to get projects underway.

In light of this funding challenge, it is imperative that delivery partners explore every potential avenue of funding as part of the project delivery process.

In recent years, the amount of money available from Government has been decreasing, while demands for public sector services have been increasing – a trend that is expected to continue. Within that overall context, local councils have already made significant cost and efficiency savings.

FLAWS WITH CURRENT FUNDING MECHANISMS

Funding Policy - Increased limitations and complexities and lack of forward funding

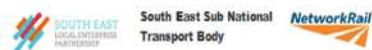
Funding Bids - Local planning authorities and developers spend disproportionate amounts of time navigating a complex, and at times contradictory, set of bids for funding

Disproportionate Risk - The risk of developing a business case for investing in major infrastructure is too heavily slanted towards local authorities and developers

Developer Contributions - Funding secured through developer contributions is proving insufficient in providing the comprehensive infrastructure that communities would and should expect from sustainable new developments



In addition to these Government Departments and non-ministerial bodies, the following organisations influence infrastructure funding decisions:



*These government departments co-ordinate the decision making on European Structural and Investment Funds (ESIF) from the EU.

Figure 9.3: Infrastructure funding bodies in the South East

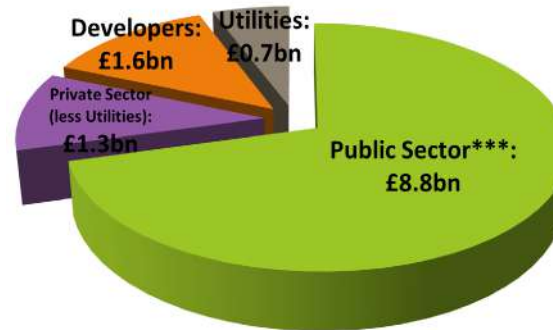


Figure 9.4: Estimated breakdown of secured and expected funding by source

FUNDING BODIES

There are a wide range of organisations responsible for the delivery and funding of infrastructure within Kent and Medway, as shown in Figure 9.3.

9.3 DEVELOPER CONTRIBUTIONS AND DEVELOPMENT VIABILITY

DEVELOPER CONTRIBUTIONS

Where proposed developments will directly create a pressure on infrastructure which cannot be accommodated, the planning system allows for obligations to be placed on the developer to either directly provide additional infrastructure or to contribute financially so that the public body responsible can. Historically, the majority of developer contributions have been secured through Section 106 agreements (s106); whilst highways improvements, which tend to be delivered directly by the developer, have been through s278 agreements.

S106

Section 106 monies are secured for a range of infrastructure. The County Council secures contributions towards primary and secondary education, highways and transportation, adult social care, libraries, adult education and youth and community facilities. The district councils secure contributions towards infrastructure such as; affordable housing, healthcare, local play areas and further education.

The legal tests used to consider a s106 agreement are set out in regulation 122 and 123 of the Community Infrastructure Levy Regulations 2010. The tests are that the contributions must be:

1. Necessary to make the development acceptable in planning terms;
2. Directly related to the development; and
3. Fairly and reasonably related in scale and kind to the development.

s106 agreements are secured on a site-by-site basis with payments typically being made in instalments as the development is built out. As an indicator, Figure 9.5 shows the s106 amounts that KCC has sought and secured for its services between 2014/15 and 2016/17.

However, limitations have been introduced on the use of s106 agreements; in particular, restrictions on how contributions can be pooled to deliver strategic infrastructure. This, combined with an increased use of CIL, will make it challenging to achieve the same levels of developer contributions in the future as have been secured in the past.

SERVICE	AVERAGE CONTRIBUTION SOUGHT (£ PER UNIT)	AVERAGE CONTRIBUTION SECURED (£ PER UNIT)	% SECURED FROM SOUGHT
Primary Education	£3,412	£3,261	96%
Secondary Education	£1,644	£1,617	98%
Adult Social Care	£54	£48	89%
Libraries	£116	£106	91%
Adult Education	£35	£29	85%
Youth & Community	£75	£56	74%
Total KCC Services (less transport)	£5,337	£5,119	96%

Figure 9.5: Average active s106 agreements made to Kent County Council 2014/15 to 2016/17. Agreements applied against 27,400 units.

CIL

The Community Infrastructure Levy came into force in April 2010, designed to largely replace the s106 regime, and allows local planning authorities to raise funds from developers through a tariff-style approach to help fund infrastructure. As at December 2017, only four authorities in Kent have an adopted CIL in place – Dartford, Maidstone, Sevenoaks and Shepway.

Under CIL, each district is to create a charging schedule which is applied to the floor space of the development. The funding raised from CIL is collected by the districts, pooled into a ‘pot’ and can be spent on a wide range of infrastructure types. The infrastructure that receives CIL funding will be determined by the local Council.

As the allocation of CIL monies takes place independently of assessing the impact of the development proposal, in the majority of cases it won’t be until after the development has been built that it will be known which infrastructure service the district is to allocate money to. It may be that money won’t be allocated under CIL to some services which would have contributed via s106. This compares to s106 which sets out what infrastructure the development will fund from the moment it is granted planning permission.

The Government commissioned an independent review of CIL in November 2015 to assess the extent to which CIL does, or can, provide an effective mechanism for funding infrastructure, and to recommend changes that would improve its operation in support of the Government’s wider housing and growth objectives. The independent review group submitted their report to ministers in October 2016, the report was published in February 2017 and proposes significant changes to how CIL could operate in the future.

It is not known to what extent the Government will change the current CIL mechanism in response to the review; prior to the general election it had been announced that policy changes would be

implemented through the Budget in November 2017. These decisions could have wide-reaching impacts on infrastructure delivery across Kent and Medway.

DEVELOPMENT VIABILITY

A development’s ability to contribute to infrastructure is dependent upon the value that it will generate. 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.

As a result of the current financial climate the country faces, a number of major schemes have had to reconsider the amount of infrastructure and affordable housing being provided. As a result, LPAs across Kent and Medway have had to renegotiate s106 agreements due to viability issues, resulting in the loss of necessary infrastructure provision to mitigate the impact of development.

The Kent and Medway Economic Partnership (KMEP)

- Set up in 2013, KMEP is the economic partnership for Kent and Medway
- Aims to drive forward economic growth and prosperity throughout the region.
- One of the four federated partnerships that comprise SELEP
- Governed by a Board, whose membership is drawn from business, local government, further and higher education
- KMEP has been pivotal in unlocking transport, skills (FE colleges), capital and commercial growth.

AFFORDABLE HOUSING

Affordable housing is defined (by the NPPF) as social rented, affordable rented and intermediate housing, provided to eligible households whose needs are not met by the market.

Providing for the range of housing needs and securing homes that are affordable for all is vital in ensuring sustainable and balanced communities. This can be achieved through the delivery of a range of housing and tenure options that can support those on lower incomes as well as those who are able to purchase a home on the private market.

The graph below demonstrates the level of affordable housing delivered against the overall level of housing delivery across the County.

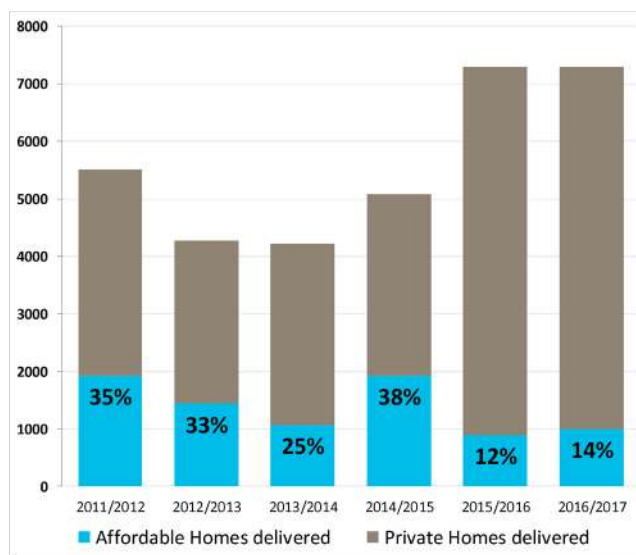


Figure 9.6: HCA Affordable housing 2016/17 and Kent and Medway Local Authorities (Business Intelligence Statistical Bulletin July 2017)

Figures from DCLG and the HIA for 2016/17 show that there were 1,500 affordable dwelling completions in Kent (KCC area). This represents about 21% of all dwelling completions. In addition, a total of 100 affordable units were completed in Medway, making a total of 1,600 affordable homes for the whole County.

At the local level in Kent (KCC area), Dartford provided the most affordable units (550 units completed), about 39% of the County total. Five Kent local authorities each completed 100 or more affordable units¹.

The Housing Strategy for Kent and Medway recognises there is a great diversity of housing across Kent and Medway. One of the ambitions is to provide choice and affordability in housing for the citizens of Kent and Medway, including rural communities².

The level of affordable housing required depends on each district's housing market needs and is set out in Local Plan policies. The actual level delivered is often determined on a scheme-by-scheme basis through a viability assessment process within individual planning applications and then secured through Section 106 agreements. The viability assessment process tests the level of affordable housing that can be delivered whilst still securing a viable scheme.

The viability assessment is normally carried out on behalf of the developer to calculate the level of affordable housing that can be delivered (alongside other policy requirements), whilst still retaining a viable scheme. The main factors that influence the level of affordable housing are:

- Land remediation costs;
- High infrastructure costs or delivery; and
- Other Section 106 obligations.

The determining authority will make a judgement as to where the financial or on-site provisions/ contributions should be focused –

whether for education provision, affordable housing, or a mix of other infrastructure contributions. The level of affordable housing provided within a scheme, and more widely across the County, is often reduced, or sometimes sacrificed completely, to enable a viable scheme to go ahead. Additionally, in some instances, the tenure has to be flexed in order to meet the viability issues – it could result in the delivery of more shared ownership than is set out in policy. This has an impact on reducing the amount of other affordable housing tenures (e.g. rented housing), which there might be a higher demand for. Since the introduction of affordable rent, there can be virtually no social rent delivered in some areas, which is very much needed.

This approach to housing delivery is a real challenge to ensuring that balanced communities, offering the right range of affordable housing for all residents' housing needs, are provided.

This is not a problem specific to Kent and Medway. The charity Shelter states that "while Section 106 continues to make an important contribution to affordable housing delivery, this system is not delivering the numbers of affordable homes that it should – and could"³.

EXTRA CARE HOUSING

Within Kent, there are currently 19 extra care schemes and since 2009, the majority of the completed units are affordable rented flats. The tables on the next page show the extra care schemes delivered and in development for Kent. The housing providers comprise of; Housing and Care 21, West Kent Housing Association, Orbit, Abbeyfield Kent Society, Sanctuary Housing and Optivo.

EXTRA CARE HOUSING (APR '09-DEC'17)			
AREA	TOTAL NUMBER OF AFFORDABLE UNITS	AFFORDABLE RENT UNITS	AFFORDABLE SHARED OWNERSHIP UNITS
KENT	895	811	97

EXTRA CARE HOUSING - IN DEVELOPMENT (FORECAST COMPLETION APR '18-DEC'19)			
AREA	TOTAL NUMBER OF AFFORDABLE UNITS	AFFORDABLE RENT UNITS	AFFORDABLE SHARED OWNERSHIP UNITS
KENT	279	239	40

RESIDENTIAL LAND VALUES (VOA)

A key component of viability is the value placed on the land which is to be developed. Land values are typically tied to factors such as land quality, access, existing and potential use and availability, as well as the socio-economic features of the area.

The latest available information from the Valuation Office Agency (VOA) for December 2015 provides an estimated average price per hectare of land with planning permission for residential uses.

It should be noted that the values illustrated are produced on a theoretical basis and provide a means to compare variations across Kent and Medway. They do not necessarily represent true land values, and are not able to demonstrate variations between sites or conurbations within each district or borough. LPAs have or are undertaking more detailed work on viability which includes additional detail on land values within districts.

The average land value for Kent and Medway is estimated at **£2,950,000** and ranges from £6,865,000 in Sevenoaks to £1,275,000 in Dover, at district level. This is above the England average land value of £2,100,000, but below the South East average of £3,600,000 (excluding London). London has an average land value of £29,000,000 per hectare.

AVERAGE HOUSE PRICES

Average house prices are directly related to residential land values and are driven by demand and supply. Areas with high house prices indicate a potentially higher rate of return for developers but come at the risk of low availability and high prices for acquiring the land. The opposite is true for areas with low house prices.

Since the height of the UK financial crisis in 2009, average house prices have risen by 41%, with the average house price in Kent and Medway being **£311,000 in 2016**. This is below the South East average of £353,000. Unsurprisingly, areas in close proximity to London or with fast links to the capital see higher average house prices, the greatest being Sevenoaks at £484,000.

Coastal regions such as Thanet, Dover and Shepway tend to see lower average house prices. However, similar to the rest of Kent and Medway, these areas have also seen significant average price increases since 2009, suggesting that the supply of desirable and affordable housing across Kent and Medway is constrained.

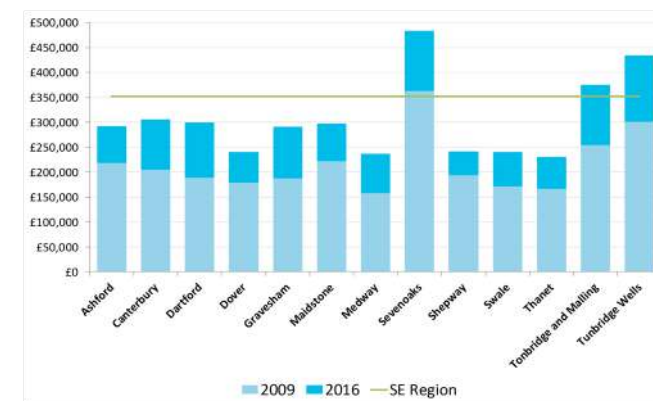


Figure 9.7: Average house prices across Kent and Medway 2016

HISTORIC COMPLETIONS			
AREA	5 YEAR AVERAGE COMPLETIONS TO 2016	GIF PLANNED TRAJECTORY (2011-2031)	PROPORTION OF GIF PLANNED TRAJECTORY (ANNUAL AVERAGE)
NORTH KENT	2,440	78,600	3.1%
EAST KENT	1,840	68,600	2.7%
WEST KENT	990	31,400	3.2%
KENT AND MEDWAY	5,280	178,600	3.0%

¹Affordable Housing 2016/17 Kent Local Authorities, Business Intelligence Statistical Bulletin (Jan 2018); ²Better Homes: localism, aspiration and choice (2011); ³https://england.shelter.org.uk/_data/assets/pdf_file/0010/1434439/2017.11.01_Slipping_through_the_loophole.pdf

HISTORIC COMPLETIONS

The table on page 89 shows average housing completions in the sub-county areas of Kent and Medway in the five years to 2016. This is compared to the total housing identified by the GIF from 2011 to 2031. As a rule of thumb, an annual delivery of 5% of the total requirement could be considered to be a target for sites to 2031. The table demonstrates relatively constrained growth across the County in comparison to the total GIF planned housing trajectory, reflecting in some cases depressed market conditions for the period and in other cases reasons such as long lead-in times or difficult site preparation.

KEY FINDINGS

- Limitations introduced on the use of s106 agreements will make it challenging to achieve the same levels of developer contributions in the future as have been secured in the past.
- As at December 2017, only four authorities in Kent have an adopted CIL in place – Dartford, Maidstone, Sevenoaks and Shepway.
- Development values vary widely across Kent and Medway in terms of residential land values and average house prices.
- Values and prices are higher in the west of the County, despite the majority of development capacity being to the north and east around existing towns, in particular Ashford, Dartford and Medway.
- High land values have implications on the ability of developers to make contributions to support development and infrastructure across the County, without negatively impacting upon scheme viability. Similarly, low land values can also cause lower sale values.
- The pace of housing delivery remains below an average requirement of 5% per year.

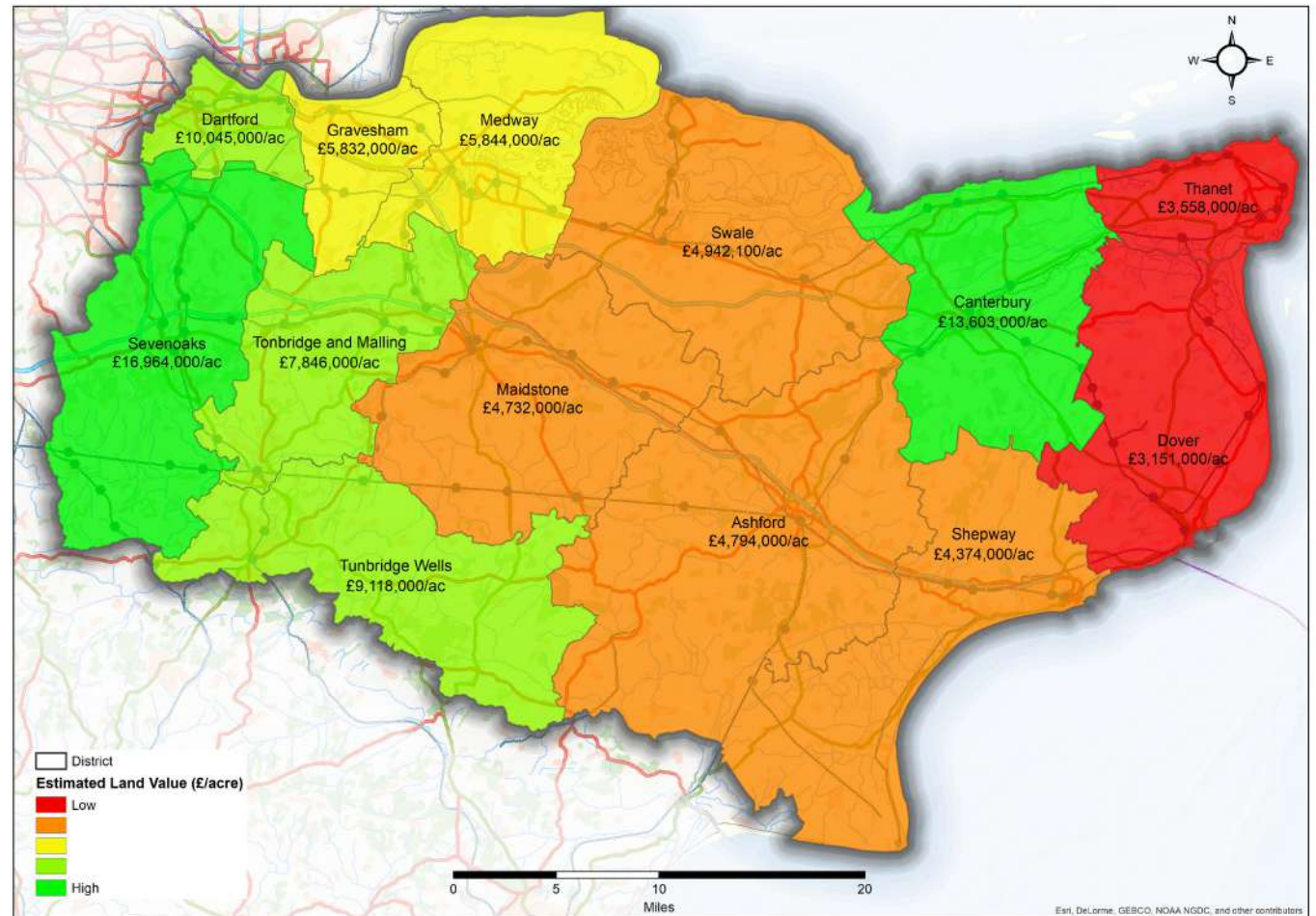


Figure 9.8: Residential Land Values across Local Authority area in Kent and Medway (VOA, December 2015 - latest figures available)

AN IMPERFECT SYSTEM

What is clear is that both s106 and CIL have limitations in leveraging sufficient developer contributions to fully mitigate the impact of planned growth and enable sustainable communities across Kent and Medway.

S106 agreements are generally not applied on smaller developments or permitted development, which are a significant part of Kent and Medway's planned residential housing growth. Recent pooling restrictions also make it difficult to use s106 to help deliver necessary strategic infrastructure. CIL is not widely adopted in Kent and Medway and it takes some time for sufficient funding to come in before a project can be delivered, and there is no certainty where CIL will be applied.

Both are adversely affected by development viability issues associated with land values and the pace of housing delivery, which affect a developer's upfront rate of return.

Taking this into account and acknowledging that developer contributions are just part of the funding puzzle, the GIF demonstrates that there is a case for a form of strategic infrastructure delivery framework, either at a County or National level, that can lever in contributions proportionate to the size of housing developments.

9.4 UNLOCKING BARRIERS TO DELIVERY

Unlocking the barriers to enable the timely delivery of housing growth is essential to ensure that Kent and Medway's critical role in the national economy can continue. These barriers will be overcome through either a more efficient approach to the way infrastructure is delivered, and/or improving the way that infrastructure is funded.

Below are several recommendations as to how the barriers to providing the infrastructure required to support growth as outlined in this framework can be overcome.

VALUE CAPTURE

- Opportunities to develop more effective land value capture, where land owners are able to sell land for development at a high price once planning permission is granted.
- Exploring ways of fairly and effectively claiming back value to support the provision of infrastructure for the development.
- Requirement for a more effective approach to developer contributions and effective application of user charges based on robust strategic spatial planning with a direct link to infrastructure funding.

MORE INTEGRATED SYSTEMS

- New ways of working across infrastructure providers are emerging, enabling a more holistic and ultimately more efficient approach to delivering infrastructure at a time when resources are stretched.
- Providing services through collaborative working and taking a multi-functional, integrated infrastructure approach will help reduce the amount of infrastructure required as well as its cost.

Kent and Medway examples of where service provision systems are being integrated include; the Health & Social Care Sustainability and Transformation Plan and the Medway Flood Partnership.

PRIVATE FINANCING

- Opportunities to explore the use of private sector financing to fund major infrastructure that is well constructed, well commissioned and fit for purpose.
- Needs to be targeted at infrastructure in cases where an appropriate return on investment can be found.
- Further work will be needed to provide a more robust understanding of where there is genuine potential for private finance in Kent and Medway.

For example, financing the Lower Thames Crossing could be met through private financing, if explored by Government. This could allow the scheme to be delivered more quickly. In a similar way to the M6 Toll road system, future crossing receipts could be used to pay back the initial investments put forward for the scheme and make it self-funding.

PETER'S VILLAGE

Peter's Village is a major development site in Tonbridge and Malling on the east bank of the River Medway. The plans included building a bridge across the river to provide better transport links for the new development. However, construction of the bridge had significant costs and came at the same time as the recession, putting the development on hold.

In 2014, the developers, Trenport, obtained a repayable loan from the Homes and Communities Agency (HCA) of £19.5m to kick-start the development of the bridge. In September 2016, the £15m bridge was opened, offering easy access to the river's west bank and on to London.

SPREADING THE RISK

- A more appropriate spread of risk between Central Government and local partners throughout the life cycle of developing a business case, through to delivery of projects on the ground.
- Long-term funding streams need to be guaranteed, with simplification of the pots available to bid for local authorities.
- Government to bear more risk of delivering key strategic infrastructure through the introduction of more forward funding for infrastructure and funds for a business case preliminary appraisal system.
- If provided through long-term, low-cost finance arrangements, forward funding would allow necessary infrastructure to be delivered and would be paid back over time from local tax receipts and business rates.

SWIFTER AND SIMPLER SYSTEMS

- Swifter Government evaluation of bids would help speed up delivery. As an example, from an LGF bid submission in July 2016, it took a further seven months (February 2017) for a Government announcement to be made.
- A more streamlined system is needed where the Government is funding and/or delivering infrastructure, to reduce the complexities and bureaucracy which make access to approvals and funding for major strategic development difficult to navigate.
- Faster lead-in times for the identification and funding of key infrastructure are required; otherwise, development may precede the necessary infrastructure required to support it.
- Better follow-through of policy into the policy drivers and more compatibility between the various funding drivers in different sectors.

FUTURE-PROOFING

- Ensuring that planned infrastructure is delivered in such a way that makes it resilient to future advances and avoids the need to reactively retrofit new technology at great expense.
- Maximise opportunities for sourcing funding towards asset maintenance.



10. NEXT STEPS



Archbishop's Palace, Maidstone

Kent and Medway is embracing growth. We recognise the benefits business and housing growth brings to the County in terms of new jobs, new facilities, and new communities.

However, the GIF makes it clear that the current mechanisms in place for the planning, funding and delivery of infrastructure are not sufficient for accommodating the level of growth planned for Kent and Medway. New approaches are required to secure the additional public and private investment needed. The next steps for the County in closing this investment gap are summarised below.

A) Defining the investment gap

The evidence provided through the GIF clearly demonstrates the need for new and additional sources of finance to enable the ambitious levels of growth planned for the County. If not addressed, the investment gap will impede this growth. It will also severely limit the ability to accommodate any further growth in the form of additional pressures coming from London or from new Government policy. This includes recent proposals to increase housing targets significantly through a new approach and methodology for calculating the Objectively Assessed Housing Need.

Action 1) We will work with Government and partners to ensure that there is clear recognition of the shortfall in capital investment identified for delivering planned, high-quality growth across Kent & Medway. The evidence base presented in the GIF will be used and the approach could be a potential model for supporting improved spatial planning and delivery. Recognition will be particularly important in the context of the Government agenda on housing and emerging plans around housing requirement and delivery tests. We will also use the GIF to help package investment opportunities.

B) Pioneering a “place-based” approach

In Kent and Medway, our joint working on housing, planning and growth is both proven and impressive, including; the previous Growth & Infrastructure Framework (2015); Kent & Medway Housing Strategy and Kent & Medway Growth Plan; and our local chapter of the South East LEP's Strategic Economic Plan. We will develop new ways of working with Government and its agencies, recognising the need for increased “place-based” activity with greater co-ordination of investment in homes, infrastructure and jobs to build quality communities. We will further achieve this through new joint initiatives including the GIF, refreshed Housing Strategy and our bids for Housing & Infrastructure Fund (HIF), and a successful bid for the 100% Business Rate Retention pilot.

Action 2) Building on our co-ordinated approach to housing and growth in Kent and Medway, we will establish new ways of working with the Department for Communities & Local Government and more widely across Government and its agencies.

This may include co-production and design, as in current HIF bids, greater recognition of DCLG as a “broker” within Government, increased engagement with local agencies or the development of new devolution initiatives to support growth needs.

C) Exploring innovation in financing the funding gap

Government funding alone will never support all our infrastructure requirements – we need innovation. However, the GIF has highlighted the limitations in the current system, which is fragmented and inefficient, with local authorities and developers carrying a majority of the risk in funding critical infrastructure. Limitations and complexities associated with funding streams provided by Government and its agencies, together with a lack of effective forward funding facilities, place an additional burden on those who deliver infrastructure. There is an urgent need for reform of the wider developer contributions system to ensure that new development pays fairly for the infrastructure it requires and new, creative thinking in how additional funding can be raised or sourced.

Action 3) As a matter of urgency, we will explore existing, new and different ways of closing the funding gap and ways of working with Government in addressing the shortfall in capital funding. We will explore the potential for other mechanisms that may help fund infrastructure. This may include use of existing legislation to support new forms of finance, such as land value capture.

In addition, we will interact with the private sector to consider private sector funding options, including the development, pension, insurance and investment sectors, to explore the feasibility of establishing an ‘institutional investment’ fund for infrastructure.

D) Commercial supply and demand

The GIF evidences the increasing demand for business premises and the current lack of suitable supply. Sustainable communities need to provide both homes and jobs and there is a risk if priorities focus on housing growth alone.

Action 4) We will work with local partners, including Kent Developer Group and Locate in Kent, to develop key actions to respond to the gaps identified between the supply and demand of commercial space.

This could be through encouraging speculative commercial development through funding incentives (where there is a funding gap rather than a viability gap) or securing local agreements with Government to give greater protection to existing commercial premises.

E) Future-proofing Kent and Medway’s infrastructure

Looking ahead to 2050, we recognise that there are significant opportunities and challenges environmentally, socially and economically that we will need to accommodate over time. As the rate of adoption of new technology increases, we need to become more able to adapt our infrastructure and our communities to accommodate these advances – whether that is the increased uptake of electric vehicles, the critical transformation of health and social care, or the introduction of increasingly multi-functional infrastructure.

With these pressures and opportunities, there are likely to be demands for new types of infrastructure, different forms of

governance and new funding and financing models. Whilst such changes cannot be predicted, we can consider how to deliver infrastructure in a way that is more flexible and adaptable now, in order to enable us to accommodate the ever changing demands on that infrastructure.

Action 5) Working alongside key infrastructure providers and public and private local partners, we will use the 2050 framework developed in this GIF to future-proof the infrastructure we deliver today to the greatest extent possible, building in resilience and flexibility where possible, and proactively horizon-scanning in order to enable us to utilise advances in technology where appropriate. This will include recognition of future energy and digital connectivity needs to support a growing population, and prioritisation of investment to enable us to be more future-proofed.

F) Creating well-designed communities

Place shaping needs to be at the heart of growth and fundamentally, we want to be building not just houses, but rich and sustainable communities that residents are proud to live in and which ensure good quality of life, access to jobs, services and places that people enjoy living in.

Looking forward, we will need to make some bold decisions in planning for growth, particularly around modal shifts in transport and the role and promotion of broadband in changing lifestyle, travel and employment choices, as well as in house-building innovations, using modern technologies and skills in construction and design (such as modular housing and life-time homes).

Action 6) We will use the GIF to understand at an infrastructure-specific level the opportunities and challenges in providing higher-quality communities - and work with

the industry to identify how to deliver that higher quality. We will work with local partners such as Design South East in ensuring high-quality, innovative and inclusive design. This could include looking to pool expertise and provide best practice across the County.

Action 7) We will seek to engage with SE authorities through new mechanisms like the Transport for the South East Subnational Transport Body, where we will use the GIF to help prioritise strategic infrastructure investment at a regional level.

G) Collaborating with infrastructure providers

The identified funding gap suggests the need to work with the private sector to modernise and deliver the required infrastructure and to work with and support the utilities companies to ensure that their medium-to long-term planning aligns with Kent and Medway's growth agenda. Through our work, including with the Housing & Finance Institute, we are already beginning to explore alignment with utility investment plans.

Action 8) We will seek to engage with the private sector and utilities companies, to ensure that there is alignment in planning for future growth. This will include exploring ways to ensure better access to and sharing of data and data management information.

We will collaborate with the utilities sector to seek improved medium- to long-term planning aligned to Kent and Medway's growth plans. A key role for the public sector will be to hold utilities companies to account to make the necessary capital investment. This can be achieved by continuing the recently established County Council Utilities Sub-Committee for utility provision and matching utility companies' capital investment plans to planned growth.

H) Creating an increasingly robust and real-time evidence base

The GIF provides a snapshot in time of planned growth and the required supporting infrastructure across Kent and Medway – and is underpinned with data that provides valuable evidence to help us focus on the scale of the challenge we have in delivering and funding this growth. From its original iteration in 2015 to this refreshed version, the GIF has evolved and improved – whether through the refinement of data sources and methodologies, or through our understanding of our infrastructure provider partners. For the GIF to continue to be a valuable tool in helping us understand the county-wide growth agenda and associated delivery challenges, we will continue to develop and evolve the Framework, working with partners.

Action 9) We will work with Medway Council and the Kent district and borough authorities to review and update the GIF data, to ensure that the evidence base is robust and aligns with district and borough councils' Local Plan evidence and Infrastructure Delivery Plans. This will reflect robust partnership working across the County, to ensure that we can resist inappropriate growth in Kent and Medway, where infrastructure funding has not been secured. The GIF will be regularly updated to reflect the ongoing development of Kent and Medway Local Plans and to enable refinement of evidence, including costs and future funding assumptions.

Action 10) Using the data that underpins the GIF, we will develop a dynamic online platform that will enable users to interact, manipulate and download relevant areas of interest.



Ashford International

11. APPENDICES

11.1 LOCAL GROWTH FUND (LGF) BIDS (Table) (as at December 2017)

Rochester Riverside, Medway

SCHEME NO.	LGF ROUND	PROJECT NAME	DELIVERY BODY	TOTAL COST (£m)	TOTAL LGF ALLOCATION (£m)
1	1	Innovation Investment Fund	KCC (Non Transport)	15	6
2	1	Tonbridge Town Centre Regeneration	KCC Transport	2.7	2.4
3	1	Sittingbourne Town Centre Regeneration	3rd Party (Spirit of Sittingbourne) Transport	4.7	2.5
4	1	M20 Junction 4 Eastern Overbridge	KCC Transport	5.69	2.2
5	1	Tunbridge Wells Jct Improvement Package	KCC Transport	1.96	1.8
6	1	Kent Thameside LSTF	KCC Transport	8.27	4.5
7	1	Maidstone Gyratory Bypass	KCC Transport	5.74	4.6
8	1	Kent Strategic Congestion Management programme	KCC Transport	4.8	4.8
9	1	Middle Deal transport improvements	3rd Party (Quinn Estates) Transport	1.55	0.8
10	1	Kent Rights of Way improvement plan	KCC Transport	1.3	1
11	1	Kent Sustainable Interventions programme	KCC Transport	2.9	2.7
12	1	West Kent LSTF	KCC Transport	9.06	4.9
13	1	Folkestone Seafront-on-site infrastructure and engineering works	KCC Transport	0.69	0.55
14	1	A28 Chart Road	KCC Transport	32.77	10.2
15	1	Maidstone Integrated Transport	KCC Transport	11.85	8.9
16	1	A28 Sturry Link Road	KCC Transport	29.6	5.9
17	1	Rathmore Road	KCC Transport	9.5	4.2
18	1	A28 Sturry Rd Integrated Transport Package	KCC Transport	0.7	0.3
19	1	Maidstone Sustainable Access to Employment	KCC Transport	2.6	2
20	1	A226 London Road/B255 St Clements Way	KCC Transport	6.9	4.2
21	1	Coastal Communities Group	3rd Party (Thanet DC) Non Transport	1.5	0.67
22	2	M20 Junction 10a	3rd Party (Highways England) Transport	104.4	19.7
23	2	Ashford Spurs*	3rd Party (Network Rail) Transport	10.5	9.8
24	2	Thanet Parkway	KCC Transport	21.48	10
25	2	Dover Western Dock Revival	3rd Party (Dover Harbour Board) Transport	15	5
26	2	Folkestone Seafront (non-transport)	3rd Party (Folkestone Harbour Board) Non Transport	22.11	5
27	3	Dartford Town Centre	3rd Party (Dartford BC)	12	4.3
28	3	Fort Halstead, Sevenoaks	3rd Party (Sevenoaks DC)	32.03	1.53
29	3	A2500 Lower Road improvement	KCC Transport	1.8	1.53
30	3	Kent and Medway Engineering, Design, Growth and Enterprise (EDGE) Hub	3rd Party (Canterbury CCU)	21	6.12
31	3	Leigh Flood Storage Area (LFSA) & East Peckham – Unlocking Growth	3rd Party (Environment Agency)	24.69	4.63
32	3	A2/A28 Coastbound off-slip, Wincheap	3rd Party (Pentland Homes)	10.06	4.4

*LGF funding is split at £5mn (LGF2) and £4.8mn (LGF3) for a total £9.8mn

11.2 RELEVANT INFRASTRUCTURE BODIES

Highways England (HE)

Highways England reports to the Department for Transport and has responsibility for managing the core road network of motorways and major A roads in England. Highways England's responsibilities most relevant to the GIF 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;
- Making sure traffic can flow easily on major roads and motorways.

Network Rail

Network Rail are responsible for the rail infrastructure across Kent. The South East network is the busiest and most congested in the country, connecting the capital and its southern and south-eastern suburbs with Kent, Surrey, Sussex and Europe.

Main railway lines:

- South Eastern Mainline from Charing Cross to Dover Priory via Tonbridge and Ashford
- Chatham Mainline from London Victoria to Dover Priory and Ramsgate via Chatham
- Hastings Mainline from London Charing Cross to Hastings via Tunbridge Wells
- Network Rail High Speed Ltd maintains and operates High Speed 1 from St Pancras International to Folkestone.

Environment Agency (EA)

The EA is sponsored by the Department for Environment, Food and Rural Affairs (DEFRA), with responsibilities relating to the protection and enhancement of the environment in England. As a risk management authority, local 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 habitats for wildlife.

Utility Companies (Electricity, Gas, Water, Broadband)

- Utilities infrastructure delivery and funding is largely the responsibility of the relevant utility companies, with connections to services also funded through site developers.
- 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.
- Of critical importance, and only possible through continual joined-up dialogue, is to ensure that the latest KCC housing and employment site trajectories, and specifically the key strategic sites, are acknowledged by these utility companies in their planning documents and therefore covered by their respective investment programmes. It is understood that the five-year AMPs are not open to be revised once published; whereas the energy company RIIO documents will be updated annually, which gives more room for accommodating new information.

National Health Service (NHS)

Due to the restructuring of the NHS there has been a significant change to the organisation, commissioning and governance of healthcare provision across the UK. Within Kent and Medway, eight new Clinical Commissioning Groups have been established.

Ebbfleet Development Corporation (EDC)

EDC was set up by Government to speed up delivery of up to 15,000 homes and create a 21st Century Garden City in north Kent. The corporation is working with local authorities, including KCC, and local communities to develop a shared vision for the area, providing high-quality, attractive and sustainably constructed housing as well as opportunities to create 30,000 jobs. The corporation is also the planning authority for Ebbfleet Garden City.



**To provide your views and for enquiries
please contact GIF@kent.gov.uk**

Photography credit: Alex Hare Photography, Kent