Cabinet	**FP/869/06/12**
Date: 4th September 2012	

Essex Economic Growth Strategy

Report by Cabinet Member for Economic Growth, Waste and Recycling, Cllr Kevin Bentley
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Purpose of report

- To gain agreement of Cabinet to the document – A strategy for economic growth in Essex

Recommendations

- That Cabinet agrees the attached Strategy document.
- That Cabinet notes the intention to progress the priority actions through the budget setting process over the summer (2012) in preparation for financial year 2013/14.
- That Cabinet notes that the Implementation plan will be approved by the Cabinet when it has been developed

Background, context, and area of the County affected

The Essex Economic Growth Strategy (the EGS) (attached as an Appendix to this report together with the associated Evidence Base) sets out our economic vision for the County, and outlines how we will work with partners to plan for growth ***to unlock growth now, secure jobs and earnings tomorrow, and create the conditions for long term economic growth and strengthening communities.***

Our vision statement:

Essex is an economically vibrant and successful entrepreneurial county.

*Our **economic vision** is of a county where businesses and our residents can grow and fulfil their potential, making Essex the best place to live and work.*

Without economic growth we know that Essex will fall behind our competitors, both in the UK and overseas. Without economic growth we know that the public sector will be under even greater financial strain to meet demands on its services.

We know that a more prosperous economy in Essex, with greater opportunities for businesses to expand and prosper and for individuals to grow, will have positive impacts on a range of issues. These include improved physical and mental health for individuals through better job

opportunities, better quality of life for our residents, through to increased revenue paid to the Treasury from more profitable businesses.

The delivery of the Strategy will be supported by a supplementary *Implementation Plan (to be prepared)* which will inform the County Council's work programme, and start to exemplify tangible benefits related to our proposed actions.

The section on *Our Vision and Growth Ambition [Section 2]* explains what success looks like, our objectives and the guiding principles for how we plan to deliver the Strategy.

By economic growth we mean increasing **productivity, innovation and jobs** - an increase in the output of Essex firms and workers; an increase in new ideas that are successfully exploited to create economic, social and environmental value; an increase in the number of jobs in Essex; and an increase in the average earnings of our residents.

All of the proposals in the EGS are designed to achieve five objectives:

- to enable Essex businesses to be more **productive, innovate and grow**, creating jobs for the Essex economy
- to enable Essex businesses to compete and **trade internationally**
- to help individuals to **prepare for and access** better paid jobs through an education and skills offer that meets the needs of businesses;
- the **life chances** of people in our most deprived areas are improved be ensuring that residents are able to access jobs and public services; and
- securing the highways, infrastructure and environment to enable businesses to grow.

We will be guided by the principles of **aiming high**; promoting an economy driven by **knowledge, skills and innovation**; thinking **globally and acting locally**; promoting **environmentally sound growth**; and improving **infrastructure;** and **being a voice for Essex**, by making the case to government and other public agencies for the freedoms, powers and the investment and / or financial tools that we need to realise our economic potential.

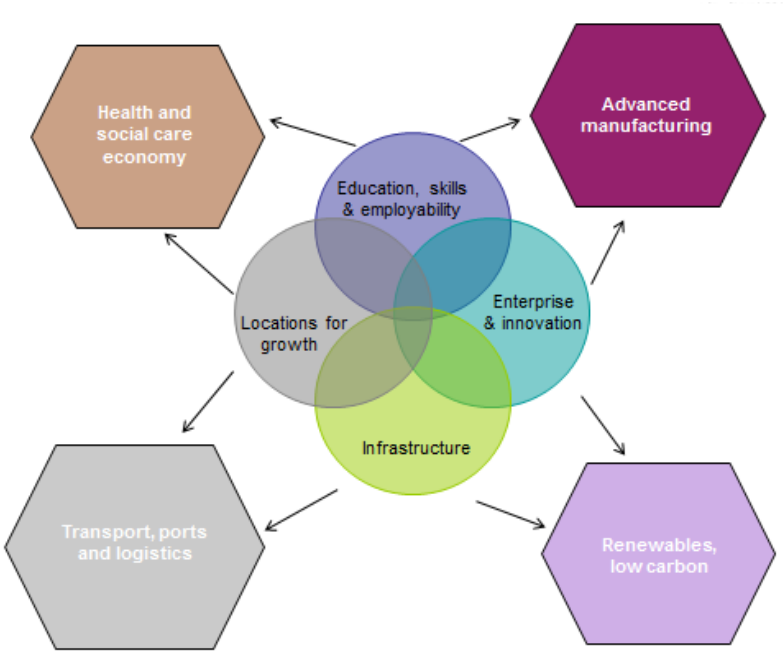
The Economic Growth Strategy builds from an understanding of *Essex in the Global Economy [Section 3]*.

- **drivers of change** in the global economy – such as the expansion of manufacturing in the BRIC nations (Brazil, Russia, India and China), increasing demand for investment in western economies and a new global consumer class, growing demand for high skilled workers, digital technologies, aging populations and lower government spending
- the **Essex economy** today – jobs and employment profile in Essex, relatively low productivity
- the **main barriers** to economic growth in Essex – from what businesses tell us, skills gaps, strategic rail and road networks close to capacity, changing demographics, bank lending practices
- the potential economic **growth sectors** – the sectors we consider to have the greatest potential for growth in Essex are:

    - **Advanced Manufacturing and Technology**
    - **Transport, Ports and Logistics**
    - **Renewable Energy/Low Carbon Technologies and**
    - **Health and Care Economy**

Our *Approach to Economic Growth [Section 4]* is based on **joining up** what we already do better across the Council and with partners, and **sharpening our focus** in pursuit of our vision

for economic growth; and exploring how best to **maximise private investment** and other public expenditure in Essex to achieve growth and **improve delivery**.



The Strategy goes on to explain specifically how we have aligned a wide range of different County Council activities into four main workstreams: ***Enterprise and Innovation***; ***Education, Skills and Employability***; ***Locations for Growth*** and ***Infrastructure***, with a summary of our immediate priorities for action at the end of each section.

Enterprise and Innovation *[Section 5]* outlines our efforts to attract new investment into Essex; support existing businesses to grow, through helping them innovate and trade globally, and the support we offer for new businesses.

Our *priorities for action* include:

- Re-launch our successful programme of world class *innovation support*, especially for the strategic development of businesses in our target growth sectors
- Develop effective routes to *sources of finance*, including venture capital and grants for technology investment
- Support Small and Medium Enterprises with the capacity to expand into *new markets*
- Ensure that every potential entrepreneur, including young entrepreneurs, are offered access to *advisory support* to prepare their first business plan and overcome barriers to starting up

Education, Skills and Employability *[Section 6]* summarises our work with employers to understand and respond to the skills gap in Essex, now and in the future; our efforts with schools and further education providers to improve attainments and ensure that education and training on offer meets the needs of both employers and learners; and creating training and sustainable employment opportunities, including incentivised apprenticeship schemes.

Our *priorities for action* include:

- Develop a *skills system for Essex* through the Whole Essex Community Budget pilot

- Increase the numbers starting *apprenticeships*, leading to an additional 3,000 people starting new jobs and acquiring new skills over the next two years
- Roll out an industry backed programme for *level 3 and 4 skills* in the existing workforce in the key industry sectors
- Divert skills funding into training the *unemployed* in technical skills required by the growth industries

Locations for Growth *[Section 7]* where our development of the *Integrated County Strategy* (*ICS*) with our partners in the districts and unitary authorities sets the framework and priorities for the places we wish to invest in to maximise growth.

Our *priorities for action* include:

- Look for opportunities to *align capital plans* identified in the ICS, with related funding and capacity building
- Develop *Local Enterprise Area Packages* to support business growth and investment with a focus on the key sectors, seeking reversal of town centre decline and considering related housing opportunities
- Build on high growth in the renewable energy and offshore wind generation sector by providing *a skills and training centre* at Harwich

Infrastructure *[Section 8]* covers our efforts to enable the efficient transport of people and goods across Essex through the development and maintenance of the road network; enabling access to public transport particularly for those living in rural areas; ensuring that high speed broadband services, water and energy supplies are available throughout the County and promoting the development of renewable energy sources.

Our *priorities for action* include:

- Improve the *integrated transport* network in key locations and *journey reliability* on strategic routes in the County
- Secure a private partner to deliver a *superfast broadband* upgrade programme
- Assessments of whether *water* shortages will limit growth and how best to address, and whether the County should invest in the development of *renewable energy* sources

Section 9 sets out how the County Council will lead efforts to promote economic growth in the County, and deliver the Economic Growth Strategy.

Area of County Affected

The EGS is relevant to the administrative area of Essex County Council. However economic growth is not limited by boundaries and informal discussions have taken place with Southend and Thurrock Unitary Authorities

Relevance to ECC's corporate plan and other Strategic Plans

The EssexWorks Commitment places sustainable economic growth and prosperity at the heart of ECC's vision for Essex.

> *"A buoyant local economy: where prosperity is secured by improving life-long education and skills, enhancing the transport network, attracting investment and stimulating growth*

both in vibrant town centres and key business sectors such as renewable energy, advanced manufacturing and logistics."

"we will provide the infrastructure and environment to enable businesses to grow" (Corporate Plan and Vision 2012 - 17)

Internal and External Consultation

- In developing the strategy a core cross-organisation officer team has worked closely with the lead Cabinet members and the work has been informed by extensive internal and discussions with members and officers:
- A cross-party Member Reference Group (MRG) was established in March 2012 to act as a sounding board to review the research and evidence base collated by officers and to comment on and shape the development of the Economic Growth Strategy. The MRG will continue to meet while the Implementation Plan is developed. The Cabinet Member would like to thank all members of the MRG for their inputs.
- Informal engagement has taken place with officers in all councils in greater Essex as well as with key local businesses and local higher education institutions

Legal Implications (Monitoring Officer)

- The Strategy as a whole does not present any legal implications, however in the future individual delivery priorities may require monitoring officer involvement.

Finance and Resources Implications
(Section 151 Officer)

- There are no direct financial implications arising as a result of the approval of the Economic Growth Strategy as this report does not seek cabinet commitment to invest in the strategy at this stage. Implementation of the EGS, however, could potentially have financial impacts associated with it. These will be managed through the 2013/14 and onward, budget setting process. The budget process will be informed by detailed implementation plans and accompanied by a comprehensive evidence base and a case for investing in activities that support economic growth.

- In order to deliver the expected outcomes that have been identified in the EGS current indications are that the additional revenue investment could be up to £4.2million revenue funding (£2million income sources to offset this being explored, in particularly external funding to support Employability & Skills). However this depends on the extent of the EGS propositions that are delivered and the identification of funds that can be aligned to the delivery of EGS outcomes from current portfolios.

- It is also possible that an additional £20million of capital investment is required (in addition to that already included in the capital programme). Any further requirement will be considered within the normal budget and resource allocation process. The criteria to be applied for access to this funding would be:
    - That a robust business case with an agreed schedule for repayment of the capital funding is submitted and approved.
    - That all business cases submitted identify the associated economic growth outcomes that they will deliver.
    - That all approved projects will meet the existing criteria for ICS rolling fund capital investment.

- An additional £2.8 million annual capital budget could facilitate the development of further infrastructure capital projects which will enable long term economic growth over a period of approximately 10 years. This will be considered against other capital projects as part of the budget setting process.

Human Resources Implications

- Any human resource implications will be considered when implementation plans are developed and prior to delivery of these plans.

Equality Impact Assessment

- EIAs will be developed when implementation plans are developed and prior to delivery of these plans.

Background papers

- Local Economic Assessment – (2010)*
- Data from Essex Insight
- Joint Strategic Needs Assessment (2010)*
- Integrated County Strategy (2011)*

* All documents available on the ECC website

Essex Economic

Growth Strategy

September 2012

Essex County Council

Foreword

I am delighted to present Essex County Council's Economic Growth Strategy which outlines our robust approach to ensuring the economy of the county grows in future years.

This is a well evidenced approach and tackles both the short, medium and long term goals to achieve financial growth and stability for Essex.

The County Council cannot create jobs and wealth but it can and will create the environment for businesses to grow and flourish from start-ups to SME's as well as our larger firms. All are important drivers in our economic success.

Essex is renowned as a go-getting, entrepreneurial county and this spirit is captured within the Economic Growth Strategy. We are looking to invest in the infrastructure and environment that allow businesses to grow; international trade to help and assist Essex firms to develop business links with overseas organisations especially in China where we have a long standing relationship with the province of Jiangsu and Inward Investment where we are looking to encourage more companies to set up in Essex.

Skills is a high priority for ECC and building on the outstanding success of our Apprenticeship Scheme we are working further with employers and colleges to ensure we deliver the right qualifications for young people to increase their employment chances.

I believe this is one of the most forward thinking documents that any local authority has produced to encourage economic growth and I am proud of the work that has been undertaken so far and will be achieved as a result.

Cllr. Kevin Bentley

Cabinet Member for Economic Development, Regeneration, Waste and Recycling

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1. PURPOSE AND SCOPE

1.1. Our *Essex Economic Growth Strategy* (the *EGS*) sets out our economic vision for the County and how can take this forward. Building upon the ambition in *Essex Works,* the County Council's Corporate Plan, the *EGS* is a step change in our approach to growth. It shows what *we propose to do*, working with our partners*:* ***to unlock growth now, secure jobs and earnings tomorrow, and create the conditions for long term economic growth and strengthening communities*** Our *EGS* sets out how the County Council will lead efforts to promote economic growth, building on our proximity to London and our excellent international transport links.

1.2. A preliminary analysis of the expected outcomes to be delivered by the projects in the EGS has been undertaken and a high level summary is as follows:

ENTERPRISE AND INNOVATION	5125 jobs £15.6m p.a. realising a total notional economic value of £133,500,000 (based on model of £23,000 average salary of a job)
EDUCATION, EMPLOYMENT AND SKILLS	25% increase in Apprenticeship starts (16-18) from 2010/11 to 2013/14 33% increase in Apprenticeship starts (19-24) from 2010/11 to 2013/14 50% increase in Advanced level Apprenticeships & 100% increase at Higher level from 2010/11 to 2013/14 Paid work experience placements 200 - with 80% to progress to permanent jobs/Apprenticeships for next 5 years Min 400 Apprenticeships supported by Essex apprentice Programme in STEM related frameworks for next 5 years
LOCATIONS FOR GROWTH & INFRASTRUCTURE	Facilitating the earlier delivery of 42,000 jobs across the pipeline of projects identified to date Facilitating the earlier delivery of 13,000 additional homes across the pipeline of projects identified to date Addition to the rolling fund (ICS fund – over 5 years £20m) Direct transport benefits related to reduced journey times and increased journey reliability Wider transport benefits related to increased employment catchments, increased competition, and increased agglomeration

1.3. An implementation plan will be developed to detail how the strategy will be delivered.

1.4. To deliver growth means making the most of the entrepreneurial spirit, dynamism and diversity of all our people and enterprises. This will ensure that as the UK economy strengthens, Essex is

well placed to benefit. This means the public, private and voluntary sectors working together and it means building on our economic strengths and addressing our weaknesses.

1.5. The *EGS* sets out our ideas for discussion with Southend and Thurrock Councils, the District, Borough and City Council, the business community, higher and further education institutions and other key partners.

1.6. This is our first Growth Strategy and as such sets out the basic framework based on our best intelligence and knowledge. This is a living strategy and will continue to evolve following continued conversation with partners, businesses and residents.

1.7. Our *EGS* will be supported by a separate *EGS Implementation Plan* which will be developed to provide details of how key initiatives will be progressed, as well as an *EGS Performance Framework* setting out clear targets. These will both build on the County Council's experience in promoting economic development and demonstrate the step change in our efforts moving forward with partners across the county.

1.8. We have prepared the *EGS Evidence Base* which informed the economic development priorities within the S*trategy*. It will also inform the update of the Local Economic Assessment.

1.9. The EGS does not sit in isolation; it supports Essex County Councils' Corporate Vision 2012-17and its supporting Corporate Plan, draws from and informs (in particular) the emerging Health and Wellbeing Strategy and Lifelong Learning Strategy, and supports the Integrated County Strategy. The Whole Essex Community Budgets Pilot (2012) features economic opportunity.

2. OUR VISION AND GROWTH AMBITION

Essex is an economically vibrant and successful entrepreneurial county. Our economic vision is of a county where businesses and our residents can grow and fulfil their potential, making Essex the best place to live and work.

What Success Looks Like

2.1. Our ambition is to make Essex ***the*** location of choice for business, for those already based here and those who may choose Essex in the future, building on our proximity to London and our excellent international transport links; for Essex businesses to thrive and grow, creating sustainable job opportunities for our residents and growth opportunities for our businesses; and for our residents to have the skills that they need - and businesses need – for them to succeed in the future.

2.2. By economic growth we mean **increasing productivity, innovation and jobs.** We will track measures of the health of the Essex economy:

- ***Productivity***: an increase in the output of Essex firms and workers;
- ***Innovation***: an increase in new ideas that are successfully exploited to create economic, social and environmental value;
- ***Employment***: an increase in the number of jobs in Essex; and
- ***Prosperity***: an increase in the average earnings of our residents.

2.3. Of course, the health of the Essex economy will mainly be determined by a range of global and national drivers, but where we can make a difference we will do so.

2.4. This is a long-term commitment to Essex residents, communities and businesses.

Five Outcomes

2.5. Our *EGS* is unashamedly pro-growth and pro-business. Without economic growth we know that the public sector will be under even greater financial strain to meet demands on its services. Without economic growth we know that Essex will fall behind our competitors, both in the UK and overseas. It is also an important contributor to quality of life in Essex.

2.6. All of the proposals in the *EGS* are designed to achieve five objectives:

- Essex businesses are enabled and supported to be more **productive, innovate and grow,** creating jobs for the local economy;
- Essex businesses are enabled to compete and **trade internationally**;
- individuals are **equipped and able to access** better paid jobs through an education and skills offer that meets the needs of businesses;
- the **life chances** of people in our most deprived areas are improved be ensuring that residents are able to access jobs and public services; and

- securing the highways, infrastructure and environment to enable businesses to grow

Guiding Principles

2.7. Our efforts to achieve these objectives will be guided by the following principles:

- **Aim high:** We will set high ambitions for all our work with businesses, colleges, and our residents.
- **Promote an economy driven by knowledge, skills and innovation:** Our economic success will depend on businesses that harness knowledge and expertise to transform brilliant ideas into commercial opportunities.
- **Think global, act local:** International markets are our greatest opportunity as well as our greatest threat. Our businesses need to be at the cutting edge of technological change with world class skills to compete in the world economy
- **Promote environmentally sound growth:** Environmentally sound economic growth is creating new opportunities for Essex businesses. New markets include the development of renewable energy sources and energy conservation, and enabling more energy efficient car and public transport.
- **Improve infrastructure:** We will continue to promote transport, communications and utility infrastructure improvements that are essential to Essex businesses.
- **Be a voice for Essex:** make the case to government and other public agencies for the freedoms, powers and the investment and / or financial tools that we need to realise our economic potential. We will also celebrate Essex as a place to live, work and visit.

2.8. In implementing the *EGS* we will provide **statutory services** in ways which support economic growth. We will target our **discretionary services** to do the same. We will operate as a **business** as a purchaser in ways which stimulate the growth of the Essex economy. We will engage with key institutions across the County and promote the **thought leadership** that is crucial to the future economic prosperity of the County. These are significant changes in the way the County Council will operate in future.

3. ESSEX IN THE GLOBAL ECONOMY

3.1. Our *Economic Growth Strategy* builds from an understanding of:

- drivers of change in the global economy;
- the Essex economy today;
- the main barriers to economic growth in Essex; and
- the potential economic growth sectors.

The *EGS Evidence Base*, available separately, provides further data.

Drivers of Change in the Global Economy

3.2. Following the recession in most advanced economies in 2008 and 2009, the path of recovery remains uncertain. Current projections suggest that 2012 will be a period of slow economic growth for the global and UK economies. There also remains the possibility that the on-going and unresolved Eurozone crisis could deteriorate dramatically, which would undoubtedly have profoundly negative consequences for the global economy. Nevertheless, despite the uncertainty around the future prospects for growth, it is essential to understand some of the key drivers of global economic change. These include the following.

3.3. **Manufacturing in the BRIC nations** (Brazil, Russia, India and China) is expanding very rapidly. These nations are also exporting "knowledge based services" at a faster rate. For example, in China, this growth is being led by the government, which has announced plans to pursue growth in seven strategic sectors: alternative fuel cars, biotechnology, environmental and energy-saving technologies, alternative energy, advanced materials, new-generation information technology and high-end equipment manufacturing. These are the leading growth markets for many UK companies.

3.4. However, it is important to recognise that as wealth increases these emerging economies, there will be **increasing demand for investment opportunities in western economies**. The building of the £1.5bn London Gateway by DP World is an obvious example of such investment. The chairman of China's $450bn sovereign wealth fund has also signalled his intention to concentrate investment on western infrastructure as a means of securing long term returns[1].

3.5. At the same time, growth in wealth and real wages in these countries is creating a **new global consumer class** with increasing purchasing power. This is creating new markets for western goods and services. By 2030 it is estimated that total spending by the middle classes outside North America and Europe will be five times what it is today[2]. Between 1998 and 2008, UK

[1] Financial Times: *China can help west build economic growth*, 27th November 2011

[2] OECD Development Centre (2010) Working Paper No. 285 – The Emerging Middle Class in Developing Countries

exports to the BRIC countries (Brazil, Russia, India and China) increased by an average of 11.8% annually[3].

3.6. One trend which is difficult to forecast but is likely to play an important role in western economies is that of **'on-shoring'**, the return of certain industries to the advanced economies. The main driver of this is likely to be the aforementioned rise in wages in emerging economies which, when combined with the transport costs to move goods to their destination markets and the productivity advantages in the advanced economies, is shifting the balance of competitiveness back towards the advanced economies. Boston Consulting Group (BCG) have argued that US manufacturing is reaching a 'tipping point' and that from around 2015, manufacturing will begin to shift back towards the US, creating up to three million new jobs.[4]

3.7. An overarching trend connected to the above observations will be the continued and **growing demand for high skilled workers**, due to the proliferation of increasingly sophisticated production techniques and the increasing importance of 'knowledge-based' services. A related trend is the continued **'hollowing out' of the labour market**, with more higher skilled and some lower skilled jobs being created, whilst the number of medium skilled jobs declines[5].

3.8. **Digital technologies are driving change**, at an accelerating pace, in every sector of the global economy. Most obviously this is creating a new internet based economy which in the G20 countries alone was worth $2.3trn in 2010 and is expected to be worth $4.3trn by 2016[6]. High speed broadband service is now an essential utility for a growing economy, with East Asian countries such as South Korea, Japan and Taiwan leading the pack in terms of average speeds. Moreover, the internet itself is changing, best illustrated by the exponential growth in phone and tablet 'app' sales over the last few years and the increasing use of smartphones to access internet services.

3.9. Another key area of change is in the field of **low carbon technologies**. BIS estimates that the global market for low carbon and environmental goods and services was £3.2trn in 2009 / 2010, £116bn of which was in the UK alone[7]. Investment in green energy generation is such that it is now highly likely that some renewable energy sources will achieve cost parity with traditional non-renewable energy sources over the next decade. Decentralised energy sources coupled with smart grid technology could help to reduce energy dependency on carbon sources. Battery technology improvements could generate the momentum to make electric cars viable. All of these trends look set to generate new jobs and business opportunities globally.

3.10. Another key structural change is the **ageing population** in many countries. This will be most pronounced in advanced economies such as Japan and parts of Europe, though it will also be felt in other parts of the world as well, most notably China. Where populations age less rapidly this will be primarily through welcoming outside immigration, particularly in the USA and UK, which will have attendant social and political consequences. Ageing populations will create demand for new medical and care technologies.

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[3] Ernst & Young (2011) The Outlook for UK Exports – February 2011

[4] BCG (2012) US Manufacturing Nears the Tipping Point: Which Industries, Why and How Much?

[5] University Alliance (2012) The Way We'll Work: Labour market trends and preparing for the hourglass

[6] BCG (2012) The Connected World: The $4.2 trillion opportunity – the internet economy in the G20

[7] BIS (2011) Low Carbon and Environmental Goods and Services (LCEGS) – report for 2009 / 2010

3.11. It is likely that - even when the immediate pressure caused by the current period of low economic growth has eased – that **government spending will remain lower** than the historical trend. This will happen because many governments will need to pay down public debt incurred over the past decade or so. It will also happen because the ageing population that many countries face will place a greater strain on government finances through reducing the tax base and increasing pension liabilities[8].

The Essex Economy Today

3.12. At the end of 2011, there were some 673,600 people in **jobs** in Essex[9]. This has steadily increased from a low point of 659,500 in 2008-2009[10]. It is likely that the number of jobs will not reach the pre-2009 peak employment of 678,000 until at least 2013-2014 and probably later. The economic activity rates for the county at 78.3% are slightly lower than the region (78.8%) but above the national average (76.1%).

3.13. In Greater Essex the future pattern of strategic growth up to 2031, in the form of new housing, jobs growth, and increased economic activity will be mostly focused on the main urban centres, namely Basildon, Southend and Thurrock (Thames Gateway South Essex), Chelmsford, Colchester and Harlow. These are recognised in the Integrated County Strategy as key centres for growth.

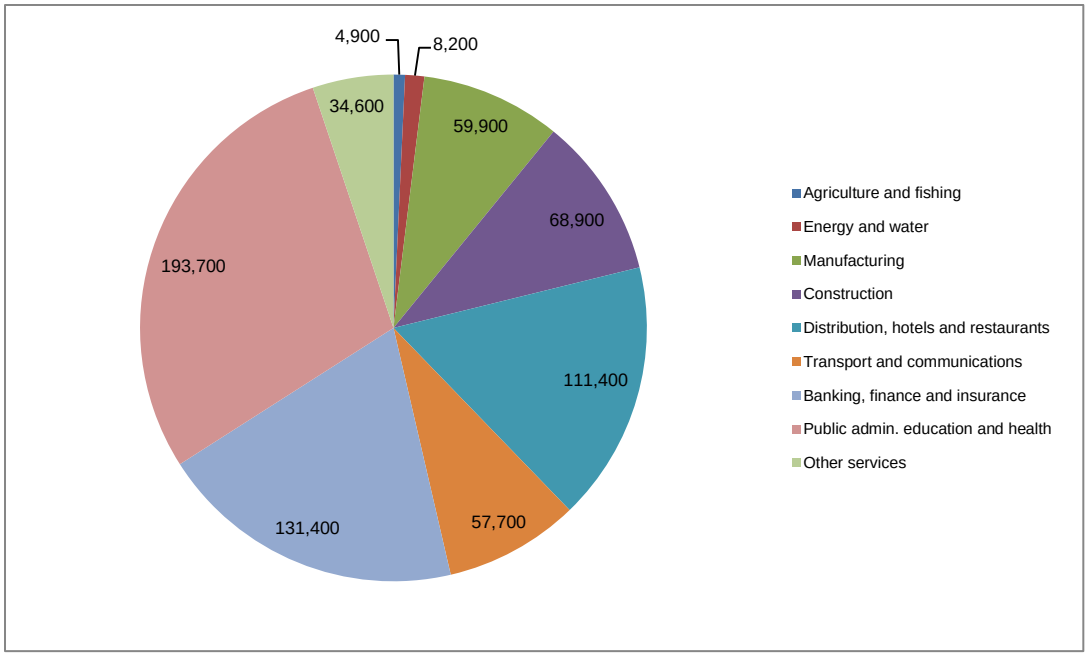
3.14. Looking at the mix of jobs in Essex, 28.8% are in public administration, education and health; this is just below the national average. Almost 20% are in banking, finance and insurance; this is well above the regional (references to 'region' refer to the East of England as the latest information source) and national averages. Around 8.9% are in manufacturing; 1% below the regional and national averages. The overall profile is illustrated below.

Numbers of those in employment in Essex by Sector 2011

[8] In the UK, the Office for Budgetary Responsibility (OBR) has stated that: 'the public finances are likely to come under pressure over the longer term, primarily as a result of an ageing population.' *OBR (2011) Fiscal Sustainability Report – July 2011*

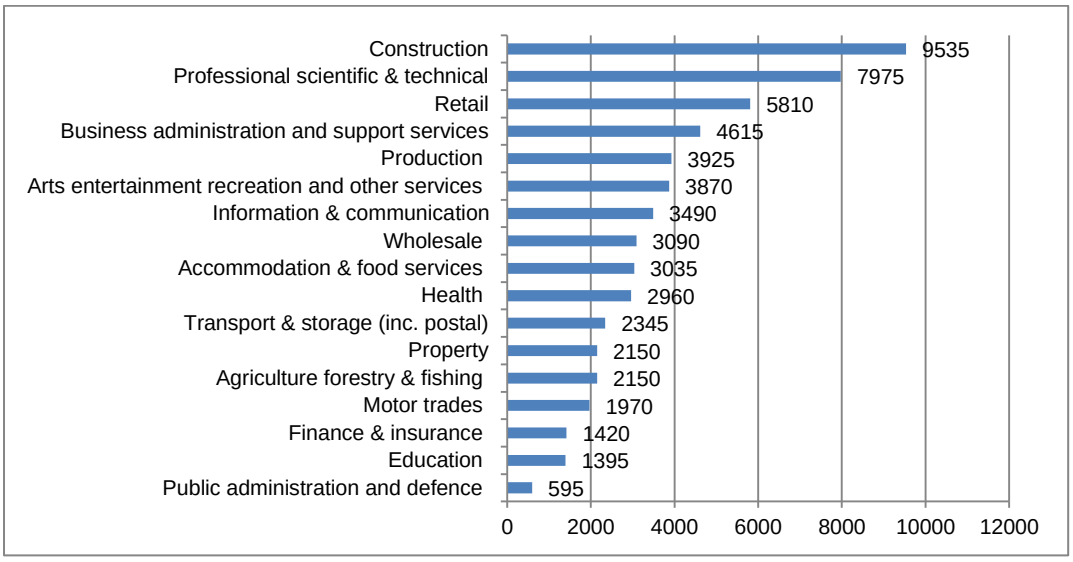
[9] Nomis ONS Oct 10-Sep 11, all people economically active in employment in Essex

[10] Nomis ONS Oct 08 –Sep 09



3.15. The **profile of business units by sector** in Essex in 2011 was construction (16%); professional, scientific and technical (13%); retail (10%); business administration (8%); production (6%), information and communication (6%); arts, entertainment and other services (6%) and health (5%). This is illustrated below. It is broadly in line with the England average.[11]

Business Units by Industry 2011



Source: Data from Essex Insight: UK Business: Activity, size and location (ONS), Number of local units in VAT and/or PAYE based enterprises, total units 60,330

[11] Essex Economic Assessment (2012 draft)

3.16. Of the 70,000 or so **businesses** in Essex, around 71% have no more than four employees (compared with the England proportion of 68%) and only 1-2% employ 100 or more. Around 5% employ 90% of the workforce. The numbers of businesses fell by 3.2% from 2008-2001, compared with 3.7% nationally, but over the period 2010-2011 the reduction was greater than the national position (1.7% in Essex compared with 1% in England). Most of this decrease is accounted for by those with up to four employees.[12]

3.17. It has become harder to start up a **new enterprise** in recent years. The numbers of business start-ups have reduced, from almost 7,000 in 2007 to under 6,000 in 2010. Failures have increased too, from almost 6,000 in 2008 to just over 7,000 in 2009 and 2010.

3.18. **Productivity** in Essex as measured by GVA[13] is low at £16.4k per head, compared with £18.5k in the Eastern Region and £20.5k in England (2009); this is a 3.8% reduction from 2008 (nationally the reduction is -2.2%). The relatively low performance can partly be explained by the value added to London and other neighbouring economies by Essex residents. (They commute to work there but bring increased spending power back to Essex.) Indeed average resident earnings in Essex (£24k) are higher than working population earnings (£21k).

3.19. Some 11.6% residents are claiming out of work benefits. Unemployment hotspots in parts of the county (Basildon, Tendring and Harlow) are also worst affected by youth unemployment. Nearly 8,000 16-24 year olds in Essex are claiming Job Seekers Allowance as of May 2012 - an increase of 12% since the same time last year. A further 6,720 are claiming other out of work benefits.[14]

3.20. Despite the wider economic situation the proportion of young people in Essex who are not in employment, education or training (NEET) has reduced from 5.8% at the end of July 2011 to 4.9% at the end of July 2012. With changes introduced by Government over the last year meaning that we now also need to "track" and report on a proportion of 19 year olds, it is worth noting that this reduction has come when we are working with and reporting on a larger number of young people (16-19 yrs not 16-18 yrs as previously). Efforts continue in order to make the wide range of publically funded initiatives aimed at reducing NEET numbers work more cohesively.

The percentage of this cohort who remain "unknown" to us in terms of whether they are in employment, education, training or indeed NEET stands at 10.4%. This percentage has come down significantly over the year as a result of a large concentration of efforts on these numbers, and this has been acknowledged by the DfE. By comparison, the end of July 2011 figure was 11.9% which only measured 16-18 year olds. When comparing this age group only our end July 2012 figure is 7.1%.

[12] Essex Economic Assessment (2012 draft)
[13] Gross Value Added (GVA) measures the value of goods and services produced by business within an area (estimated to be in excess of £28bn in Essex): this is expressed for comparative purposes per head of resident population, so areas with high levels of out-commuting and retirement populations will show a lower value.
[14] Source: ONS Claimant Count

Main Barriers to Economic Growth in Essex

3.21. The *2010 Essex Business Survey* provides an insight into the issues that are most important to Essex businesses. Businesses stated that their main concerns were: the high cost of **energy** (49%), increasing **competition** (44%), **business rates** (40%), **low profitability** in their sector (39%) and local traffic **congestion** (35%).

3.22. In terms of **skills gaps**, there was a notable demand for school leavers or graduates with the appropriate attitudes to work, with 19% of businesses highlighting this as a gap in the current workforce. 13% of those surveyed identified some form of skills shortage, including high level technical skills, advanced IT or software skills, language skills and numeracy and literacy skills. (Around half stated that they did not face any skills gaps.)

3.23. To support employability in the county we need to ensure that our **education system** equips our people with the appropriate skills they need to prosper and take advantage of job opportunities. As well as working in partnership with schools, being both a critical friend and advocate for improving standards. We want a renewed focus on using educational provisions to meet community and business needs. We need to continue our focus on improving **educational attainment** levels at various key stages (GCSEs, early years, adult skills at levels 2, 3 and 4) as well as equipping the **adult workforce** with the skills they need to succeed. .

3.24. The **strategic road network** that provides essential access to our ports and airports and enables Essex businesses to trade with the rest of the UK and beyond is at or close to capacity. Around 6% of traffic on Essex's roads is made up of HGVs, rising to nearly a fifth on the Essex section of the M25, 16% on the M11 and around 14% on sections of the A12 and A120. Around 50 freight trains pass through Essex each day and this is set to double as our ports expand.

3.25. The **strategic rail network** is at or close to capacity. There has been a 34% growth in passengers on the Great Eastern mainline and 40% on the West Anglia mainline between 1995 and 2007, and a 26% growth between 2005 and 2011 on Essex Thameside services. Passenger numbers are close to all time record levels.

3.26. On current population trends, **demand for travel** will increase by 1.9 billion miles per year by 2025, including 1.4 billion additional miles travelled by car.

3.27. **Changing demographics** have implications for economic growth in Essex. The pattern of age distribution in Essex is slightly different from the national and regional picture, with proportionately *more* people in the 45-64 and 65+ age ranges (26.6% and 18.1% respectively in Essex, compared with 25.3% and 16.5% in England), balanced by *less* in the 15-34 age range (23.7% in Essex; 26.4% in England).

3.28. The balance of people of working age to older people is predicted to become more pronounced across Essex over the next 20 years or so. For every person over 65 there will only be 2.4 of working age by 2033, compared with 3.7 now, although more people are likely to be working beyond 65 because they cannot afford to retire. For Tendring, Castle Point and Maldon the

position is forecast to be far worse with less than two people of working age for every one over 65.[15]

3.29. In common with the rest of the UK, significant barriers are hindering efforts to proceed with new commercial, industrial and residential markets. In particular, changes in **bank lending practices** (arising from the global financial crisis) mean that developers find it extremely difficult to raise development finance for their projects. Lenders are extremely risk averse and likely to remain so. In addition, households seeking residential mortgages must raise larger deposits and face lower income multipliers as lenders determine the size of loan offered.

Potential Growth Sectors

3.30. Business growth in Essex over the decade up to 2008 was predominantly in financial services, construction and the public sector, with a marked increase in the financial services sector relative to others. Over the same period, Essex continued to lose manufacturing jobs.

3.31. Looking forward, the weakening UK financial services sector as a whole means that there will not be a significant increase in employment in this sector. There will be further reductions in public sector employment over the next several years.

3.32. Yet, we do see opportunities for economic growth. **Construction** employment may increase when the UK economy starts to expand again. With our excellent air, sea, road and rail transport links, and proximity to London, the Greater South East and Europe, Essex is well placed to share in the overall growth of Europe's economy. We have identified those sectors with higher than average growth potential and/or build from our extant industrial strengths. The sectors that we consider offer the **greatest potential for growth in Essex** are:

- Advanced Manufacturing and Technology;
- Transport, Ports and Logistics;
- Renewable Energy/Low Carbon Technologies; and
- Health and Care Economy.

3.33. Our views on each are as follows and we plan to **sharpen our focus** on how we attract investment from companies in these sectors – both those already in Essex and those new to Essex.

3.34. ***Advanced Manufacturing and Technology (AMT)***[16] – knowledge intensive engineering, engineering, automotive, aerospace, electronics, defence and ICT, which tend to result in high value products which contribute to growth and increased competitiveness. This also includes medical technologies.

3.35. The AMT sector has an estimated 710 companies across Essex, with a combined annual turnover of £13.575bn, and employs 24,000 people (4% of the jobs in Essex, which is a higher proportion than the national average). Two thirds of existing firms in the sector have been

[15] Essex JSNA Geography and Demographics Chapter, Essex Insight (September 2010)
[16] Government has made AMT and Life Sciences key priority areas in the 2011 'Plan for Growth'

located in Essex for over 10 years, and have no plans to leave. Particular strengths are machinery, ICT and motor vehicles, with these sectors accounting for over 60% of the advanced manufacturing firms in Essex. There are established clusters of advanced manufacturing businesses in Basildon, Harlow and Brentwood, with leading names such as Ford and Raytheon Ltd. Harlow's Enterprise Zone will support the growth of high-tech and medical technology companies[17].

3.36. There are just under 300 firms in Life Sciences (pharmaceutical, medical biotech and medical technology companies) in Essex employing just under 5,000 people with an annual turnover of almost £1.9bn. Strengths are in scientific research and development, manufacture of medical and dental equipment, pharmaceutical and optical products. There are clusters of Life Science companies in Harlow (the Med Tech Campus), Southend, Uttlesford (the proximity to Cambridge) and Brentwood[18].

3.37. ***Transport, Ports and Logistics***[19] – building on Essex's seaport and airport strengths, access to South East markets and Europe, this sector includes cargo handling, sea, road and rail freight and warehousing and storage. Ports and logistics include currently just over 1,000 firms, employing around 14,500 people with an annual turnover of around £2.8bn. Businesses in the sector were more likely than other sectors to have plans to enter new product/service areas/markets and to expand, and more likely to have made capital investment in their Essex sites over the past 12 months.[20]

3.38. Essex is the site of the largest combined deep sea container port and logistics park project in Europe (DP World/London Gateway) and the UK's second largest airport for freight and third largest for passenger travel (Stansted). Key locations are Thurrock, Southend, Stansted and Harwich. Ports and logistics account for more than 1 in 10 jobs in Thurrock and Uttlesford.

3.39. Our ports and airports are significant employers making a direct contribution to the Essex economy; for example, Stansted Airport currently employs 10,900 workers with 59% of the airport's employees living in Essex. As our ports and airports grow, the opportunity to promote related employment will also grow. The London Gateway development in Thurrock includes the creation of Europe's largest logistics park, predicted to create 12,000 new jobs. Planning approval has been given to enable Stansted Airport to handle up to 35 million passengers per year using the single existing runway.

3.40. ***Renewable energy/low carbon***[21] – includes technologies and services that control and prevent environmental damage, including reducing carbon emissions, renewable energy and materials collection and treatment. There is demand for low carbon and environmental goods and services to meet the UK's carbon reduction target of 80% by 2050. The environmental technologies sector includes some 650 firms, employing about 8,500 people and an annual turnover of £494.m. [22] Key locations are the whole of the East of England Energy Coast (comprising Essex, Suffolk and Norfolk), with particular centres of excellence at Ford

[17] Essex Sector Propositions: Advanced Manufacturing, M.E.L Research (*date*)
[18] Essex Sector Propositions: Life Sciences, M.E.L Research (*date*)
[19] UKTI describe the sector as 'a thriving and highly competitive industry which is developing world class facilities using leading edge technology'.
[20] Essex Sector Propositions: Ports and Logistics, M.E.L Research (*date*)
[21] Environmental Technologies is one of Government's key priority areas in the 2011 'Plan for Growth'
[22] Essex Sector Propositions: Environmental Technologies, M.E.L Research (*date*)

Dunton (green automotive technologies), Writtle College (land based sciences). Other activities and expertise are in Chelmsford, Colchester and Basildon. Indeed, when Essex, Suffolk and Norfolk are looked at together, the renewable energy sector is genuinely distinctive and competitive, offering potential investors a large supply chain of energy sector businesses, many with very advanced engineering skills and many decades of experience serving the oil, gas and nuclear industries, and looking to adapt their products and services to meet the needs of the renewable energy sector. The synergies between the three counties are particularly strong in the offshore wind sector with collaborative work including a joint skills initiative to deliver the workforce that this fast-growing sector requires, and an inward investment programme to promote opportunities in the East of England to offshore wind companies in China using ECC's strong links in Jiangsu Province.

3.41. ***Health and care economy*** – We see significant opportunities in this sector; we intend to formulate a new development programme taking account of the NHS innovation agenda, the increasing role of private providers, and the growing use of technology in assisted living. There is no doubt that the social care and health economy will grow, driven by the increase in the proportion of older people in the population. There are clearly synergies with the Advanced Manufacturing and Technology sector, for example developing mutual benefit from partnering with medical technologies and ICT industries.

4. OUR APPROACH TO ECONOMIC GROWTH

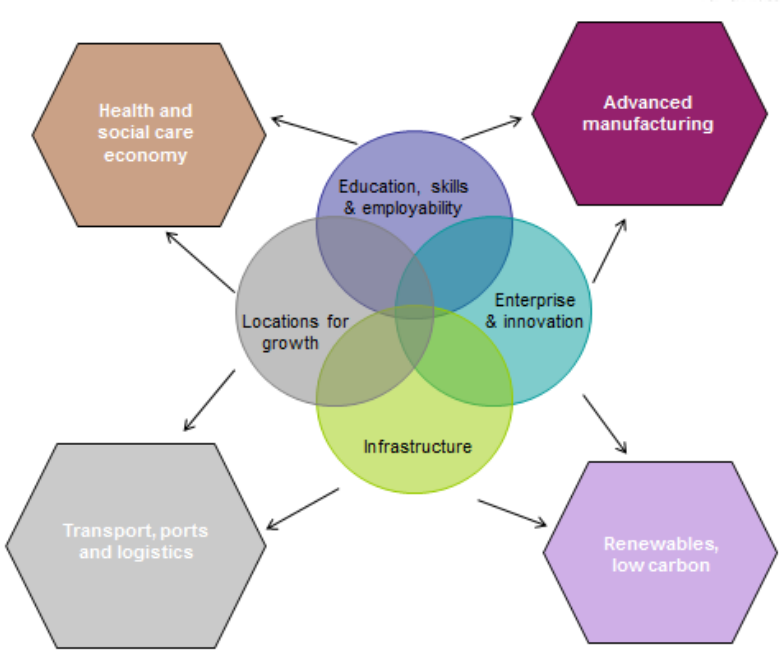
4.1. Our approach to promoting economic growth in Essex features two principles:

- to **join up** what we already do better across the Council and with partners, and to **sharpen our focus** in pursuit of our vision for economic growth; and
- to explore how best to **maximise private investment** and other public expenditure in Essex to achieve growth and to **improve delivery**

4.2. In implementing these principles, we will lead efforts across Essex to promote growth; and we will act as partners, sponsors and customers.

Joining Up and Sharpening Our Focus

4.3. We see a strong need for the County Council – and key public sector partners - to join up currently disparate activities and focus these on promoting economic growth:



4.4. The four building blocks of our *EGS* complement each other to promote growth across Essex:

- **Enterprise and Innovation**: our efforts to attract new investment into Essex; support existing businesses to grow, through helping them innovate and trade globally, and the support that we offer for new businesses.
- **Education, Skills and Employability:** our work with employers to understand and respond to the skills gap in Essex, now and in the future; our efforts with schools and further education providers to improve attainments and ensure that education and training on offer

meets the needs of both employers and learners; and creating training and sustainable employment opportunities, including incentivised Apprenticeship schemes.

- **Locations for Growth**: our development of the *Integrated County Strategy* (*ICS*) with our partners in the districts, borough, city and unitary authorities sets the framework and priorities for the places in which we wish to invest[23] to maximise growth.

- **Infrastructure:** our efforts to enable the efficient transport of people and goods across Essex through the development and maintenance of the road network; enabling access to public transport particularly for those living in rural areas; ensuring that high speed broadband services, water and energy supplies are available throughout the County and promoting the development of renewable energy sources.

4.5. We set out our proposals for each of these blocks in the next four sections below.

Maximising Private Investment and Other Public Expenditure

4.6. In delivering this *Economic Growth Strategy* we will:

- maximise private investment and other public sector funding to support delivery including, for example, the Growing Places Fund, European Structural Funds, initiatives being promoted by the Technology Strategy Board, and new financial instruments such as the Green Investment Bank; and

- Ensure that current programmes of work and associated funding, for example the Council's capital programme activity, are re-prioritised against the potential of schemes to support delivery of this *Strategy* (including realignment of the *Integrated County Strategy*)

4.7. Through the on-going development of the *Integrated County Strategy* (see Section 7: Locations for Growth below) we will align County Council investment priorities with those of other bodies including district, borough and city councils, the unitary authorities, statutory undertakers, and colleges and universities.

[23] The focus of the *Integrated County Strategy* is Thames Gateway South Essex, key towns (Southend, Thurrock, Basildon, Harlow, Chelmsford and Colchester) and the low carbon/renewables sector. An ICS Investment Plan identifies 51 projects considered vital to unlock the transformation of the Essex economy.

5. ENTERPRISE AND INNOVATION

5.1. The growth of the Essex economy requires: more companies investing in Essex; established Essex businesses becoming more competitive and expanding their markets beyond our borders; and on creating new companies which have high growth potential. To enable this growth, we will focus on activities that will create new sustainable jobs as well as the retention of existing jobs.

5.2. We see opportunities to enable this growth in every sector of the Essex economy. As set out in Section 4, we see particular opportunities in four priority growth sectors:

- **advanced manufacturing and technology** including information and communications technology, automotive, defence, and health technologies;
- **transport, ports and logistics** and companies that benefit from ready access to international airports and seaports.
- **renewable energy/low carbon**, and
- **health and care.**

5.3. Our *Strategy* will result in:

- further **investment** by companies already in Essex and attracting more companies to invest in Essex;
- Essex companies improving their **productivity** through **innovation** ;
- Essex companies **increasing their exports** to the rest of Europe, and the rest of the world; and
- accelerating new business **start-ups** and ensuring their survival.

We will achieve this as follows:

Invest in Essex: Open for Business

5.4. Essex already offers considerable competitive advantages to companies seeking to expand. Our key assets include international transport gateways, our workforce, our proximity to London, our quality of life, and our strengths in our priority growth sectors. We know that to capture inward investment, we need to continue to research and target lead generation to companies in sectors and international markets where we offer genuine competitive advantage.

5.5. We will **promote** Essex as an outstanding business destination and help existing and potential investors make the most of our strategic location, thriving business environment, and quality of life. We will provide assurance that Essex is 'open for business' with a co-ordinated offer in terms of location, skilled workforce, supply chains and knowledge base.

5.6. We will provide excellent support at all points of the 'customer journey' – including a '**whatever it takes'** approach to influencing key decision-makers with compelling information and practical support. To do this, we must be prepared to travel particularly to visit head offices of key target

companies in selected international markets. In addition to our own efforts we will use appropriate political and business leaders as influencers and ambassadors.

5.7. A significant proportion of our activities will focus on attracting further **investment in businesses already in Essex** (both UK and internationally owned), particularly in sectors where Essex has, or has the potential to achieve, global competitiveness. We will ensure that the full powers of central and local government are harnessed to overcome any barriers to investment.

5.8. To do this, we will establish a comprehensive **Key Account Management** programme with our 'Top 100' companies establishing close relationships with senior executives so that we can anticipate challenges affecting businesses' competitiveness and plans for growth, and develop and deliver specific and generic solutions. (This will cover around 30% of the private sector employment excluding retail.) Part of this will be to work with these companies to strengthen their **supply chains** by attracting companies from elsewhere to Essex.

Competitive Essex: Improving Productivity through Innovation:

5.9. Essex will prosper if small and medium sized enterprises (SMEs) across Essex become more productive. However, over the past decade or so, most government programmes have not effectively targeted and then supported those companies with high growth potential.

5.10. We will make the **Essex Growth Offer** to up to 500 SMEs with considerable expansion potential, targeting companies in our four priority growth sectors along with selected others. This Growth Offer will comprise:

- world class **innovation support** building on our successful Essex Innovation programme, and the Essex Manufacturing Innovation & Growth (EMIG) programme. This will focus first on the strategic development of businesses in our target sectors.

- key **sector network support,** as these are proven vehicles for sharing best practice and promoting commercially valuable collaboration. We will focus on development of key and emerging higher value industry sectors, such as automotive, aerospace, advanced manufacturing, and offshore wind energy.

- **routes to sources of finance** to enable business growth, including venture capital, cash flow funding, loan guarantee schemes and grants for technology investment. This will include ensuring companies gain access to all central government funded support schemes such as those from the Technology Strategy Board and how best to ensure that the growth of Essex companies is not hampered by more risk averse clearing bank lending practices. We will assess the feasibility of an "Essex Venture Fund" modelled on successful schemes elsewhere in the UK.

- more and better **business/higher education collaboration**. This will include facilitating many more Knowledge Transfer Partnerships between Essex companies and universities. This will also focus on exploring **commercialisation** opportunities arising from the major research and innovation projects in universities in Essex and nearby.

- support for the **tourism and leisure** sector, which contributes more than £2.5bn to the Essex economy and employs about 7% of the workforce by "promoting Essex as a place to visit, live and do business." This is achieved via Visit Essex, our business-led public-private partnership for which ECC is a major sponsor and host of the delivery team.

- a ready supply of suitable **premises for expansion**. This is set out in Locations for Growth, Section 7 below.

- new "**Essex Enterprise Areas":** Developing local enterprise packages to support business growth, including help to reverse the decline of town centres.

- modified Essex County Council and other public sector **procurement policies** to ensure that the economic benefits that arise when Essex companies win supply contracts are fully taken into consideration (alongside compliance with relevant UK and EU statutory requirements, of course) and to encourage local businesses to develop innovative solutions to public sector service challenges and achieving low carbon outcomes.

Essex International: Increasing Exports

5.11. Essex is already home to many companies exporting to global markets. Two international airports, seaports which accommodate a significant proportion of the UK's sea freight traffic, and excellent motorway and rail links provide Essex companies with substantial competitive advantage. However the actual number of businesses exporting is relatively small. We will:

- assist Essex companies and major institutions to **enter and expand in international** markets, via specialist support and business development programmes;

- build from our experience in creating valuable commercial relationships with **China**, by exploring how best to build similar capacity with other **emerging markets, especially India,** and working with partners to promote and enable export opportunities to established economies such as **EU** and the **US**.

Enterprising Essex: Accelerating Start-ups

5.12. There is a strong entrepreneurial spirit in Essex. Start-ups are a major factor in achieving the growth, so we will do all we can to support them.

5.13. Businesses are more likely to survive after three years if they have access to good business advice. We also know that young businesses are still finding it difficult to access proper finance. As well as provision of advice and support, there is a high demand and shortage of supply of good quality flexible-access premises for early-stage and growing businesses.

5.14. In response, we are making a new offer to potential Essex entrepreneurs. Our **Start-up in Essex** programme comprises:

- establishing a network of up to ten **Enterprise Hubs** building from the three successful schemes in Clacton, Basildon and Ongar and providing a full incubator service; we envisage that many of the new Hubs will use surplus Essex County Council premises;

- ensuring that every potential entrepreneur is offered access to **advisory support to** prepare their first business plan, gain access to finance, and to overcome other barriers to starting up, and helping entrepreneurs navigate through the critical initial stages of commercialisation of new ideas;

- providing routes to sources of **finance** that are essential to enable business growth, including, venture investment, cash-flow facilities, investment and R&D grants; and

- working with private developers to ensure that there is readily available supply of **"grow on"** accommodation.

Enterprise and Innovation: Next Steps

Our Implementation Plan (available separately) sets out our overall approach to delivering the Essex *EGS*. Our immediate **priorities for action** are:

INVEST IN ESSEX

- sharpen our approach to targeting **inward investment** opportunities to companies where we can offer genuine competitive advantage, influencing key decision-makers with compelling information and practical support;

- establish a comprehensive **Key Account Management** programme with our top 100 companies, maximising **retention and growth** of our existing businesses;

COMPETITIVE ESSEX

- to work with HEI partners to enable **business, higher education and local authority collaboration** in support of target sectors including support for **knowledge exchange, the commercialisation of research** and innovation within supply chains,

- relaunch our successful programme of world class **innovation support** especially to support strategic development of businesses in our target sectors;

- develop effective routes to **sources of finance** to enable business growth, including venture capital, cash flow funding, grants for technology investment;

ESSEX INTERNATIONAL

- support SMEs with the capacity to expand into **new markets**, and provide specialist support and business development programmes to ensure they fulfil their potential domestically and internationally;

ENTERPRISING ESSEX

- ensure that every potential entrepreneur is offered access to **advisory support** to prepare their first business plan, gain access to finance, and to overcome other barriers to starting up;

- modifying ECC and other public sector **procurement policies** to ensure that the economic benefits that arise when Essex companies win supply contracts are fully taken into consideration and to encourage local businesses to develop innovative solutions to public sector service challenges and to achieve low carbon outcomes.

6. EDUCATION, SKILLS AND EMPLOYABILTY

6.1. Our workforce – those already in jobs and those seeking to enter the labour market – is our most important economic asset. A well-educated and skilled workforce is the key to improving the productivity of existing Essex companies and attracting new companies.

6.2. While we have seen significant improvements in educational achievement we do believe that much more needs to be done to bring Essex results in line with our young peoples' potential.

6.3. We know there is a need for more science, technology, engineering and mathematics (STEM) provision -- both academic and vocationally based. Companies in energy, ports, manufacturing, aerospace, aviation, construction and defence sectors all see this need. (For example, across the East of England as a whole, there is a need for 13,500 new recruits in the engineering sector, just to replace those retiring.)

6.4. Essex has had a vision of an education system which encourages inter-generational and lifelong learning, bringing businesses, education providers and local leaders together to jointly take responsibility for providing a skilled and flexible workforce tailored to the county's economic needs. While we currently have all of the required elements of education provision, ranging from early years through to adult community learning, this provision is not joined up and does not holistically tackle the needs of the community.

6.5. Our efforts will meet the needs of four main groups:

- young people at school or full time in colleges;
- young people leaving full time education;
- the employed workforce;
- adults seeking to enter the workforce.

Our approach to each of these groups is set out below.

Employer Led: Whole Essex Community Budget Pilot

6.6. As part of the Whole Essex Community Budget Pilot, we are preparing plans for the reform of skills provision in Essex. These changes are designed to enable local young people to secure high value jobs in sectors that drive economic growth rather than necessitate employers recruiting skilled staff from outside the local area. These sectors include, but are not restricted to the *EGS* growth sectors, and the needs of companies in these sectors will change over time.

6.7. Targeted employment support, helping people through a clear pathway, will be provided for those not ready or able to take up opportunities. It will be planned and delivered as part of the single commissioning model, to bring individuals to the point of entering employment and/or training.

6.8. The objective is to ensure that the skills and employment system is responsive to the needs of employers, coherent, based on economic intelligence, and develops skills needed for our higher value and growth sectors. These changes will increase **employer participation in training**, particularly SMEs and specifically through Apprenticeships. Employers will direct employment and skills provision through an Employment and Skills Board. These changes will directly lead to an increased number and proportion of resident **young people in high growth jobs**. This

will be a strategic framework and single budget for employment and skills. Our overall Community Budget Pilot proposals will be submitted to Government in October 2012.

6.9. Our current efforts to deliver some of these changes are set out in the text box below. These feature plans to **significantly expand Apprenticeship numbers** in the county, building upon the successful Essex Apprenticeship Programme. This is focusing on growth sectors, but also more generally working with employers to stimulate additional numbers.

Up-skilling the Employed Workforce

6.10. Most of those who will be in the Essex workforce over the next three decades are already in the workforce. We see massive opportunities to work with Essex employers to encourage them to invest more in up-skilling their existing employees. In part the changes in training provision arising from the Whole Community Budget Pilot will improve the quality of training available locally. We intend to roll out an industry backed programme to support the acquisition of much needed Level 3 and Level 4 skills in the existing workforce in key industry sectors.

Technical Skills Training for the Unemployed

6.11. Finally, we see the need to divert a proportion of skills funding into providing unemployed adults in parts of the County with technical training opportunities in skills required by industry. These proposals will be developed in partnership with JobCentre plus and key companies. This will be supported by a review of how our Adult Learning budget can be used on a more significant scale, in order to support larger numbers of people currently out of work to gain employment and to up-skill more of those currently in work in order to improve their career prospects.

Education, Skills and Employability: Next Steps

Our Implementation Plan (available separately) sets out our overall approach to delivering the Essex *EGS*. Our immediate **priorities for action** are:

- Develop a **skills system for Essex** which allows genuine employer led provision, matching skills provision to the local economy and achieving a single local commissioning system, through the Whole Essex Community Budget pilot (2012)
- Increase the numbers starting **Apprenticeships** by 25% for 16-18 year olds and 33% for 19-24 year olds within two years, leading to an additional 3,096 people starting new jobs and/or acquiring new skills over that period - a higher proportion than usual will be within more technically related disciplines.
- Extend the pilot Essex **paid work experience** programme for 16-17 year olds who are not ready for an Apprenticeship.
- Create **employer led initiatives** such as those delivered through group Training Associations which enable employers to commission the delivery of skills provision
- Continue the **focussed Essex Apprentice Programme for STEM related industries**, supporting engineering and manufacturing, energy and ports/logistics
- Create an **exciting image** of these industries to entice young people through better informed advice and guidance, media work, business mentoring and industry visits.
- Develop a schools programme to **promote STEM subjects in clusters of schools** adjacent to key sector locations.
- Establish stronger links with **higher education institutions** in Essex to develop higher level jobs.
- Roll out an industry backed programme to support the acquisition of much needed **level 3 and 4 skills in the existing workforce** in the key industry sectors.
- Create **employer led** initiatives such as those delivered by Group Training Associations which enable employers to commission skills provision.
- Create new or expanded **vocational training facilities** in Essex that service the needs of our key industry sectors, e.g., University Technical College for medical technologies in Harlow.
- Divert skills funding into **training the unemployed** in the technical skills required by the growth industries, e.g., renewables

7. LOCATIONS FOR GROWTH

7.1. Essex offers a diverse, strong mix of vibrant towns and cities and is well served by two international airports, the UK's most important seaport, and the national motorway, trunk road and rail network. It also benefits from its close proximity to London. Investing in the best locations for growth to build on these strengths is key to ensuring that Essex best performs in the intense global competition for investment.

Integrated County Strategy and Investment Fund

7.2. In recent years, Essex Council has been working closely with the district, borough, city and unitary councils to agree on where growth should take place in future. The results of this cooperation are summarised in the Integrated County Strategy (ICS) for Greater Essex first published in December 2010. The ICS strategic focus is*;*

- **Thames Gateway South Essex (TGSE):** Achieve transformational development and change throughout TGSE to significantly improve the local economy, quality of life of residents, and natural and built environment,

- **Key Towns:** Promote opportunities for economic growth, redevelopment, and regeneration in the key urban centres of Southend, Thurrock, Basildon, Harlow, Chelmsford, and Colchester, and

- **Low Carbon Energy Support:** the growth of renewable and low carbon energy as a key sector and promote the growth and location of associated industries in Greater Essex. Since then, we have continued to work with the district, borough, city and unitary councils to further develop the Strategy into an investment plan.

7.3. The *ICS* shows how we can use our prime assets to make Greater Essex an even more attractive location for businesses; it builds on strengths to realise potential. The *ICS* identifies the key strategic projects that will underpin the future prosperity of Greater Essex. It identifies the public expenditure needed to attract private investment accelerate economic growth.

7.4. To this end, Essex County Council has established an **ICS Investment Fund** to facilitate the early delivery of some of these schemes in partnership with district councils and the private sector.

7.5. The priority locations for growth are identified in the map below and the text box at the end of this section. This strategic rolling fund will form a foundation for our efforts to promote these locations for growth but most projects will be funded from other sources. The County is now working with partners to identify where to best use the ICS Investment Fund.

Map showing the ICS investment projects

Enterprise Areas

1. Enterprise West Essex at Harlow: Partnering with Anglia Ruskin University to take forward proposals for a Med Tech campus.

2. Braintree developing enterprise units and business support: Extension of existing enterprise centre at Springwood Industrial Estate.

3. Colchester enabling job creation: Unlocking a number of employment sites in Borough's North Colchester and University Gateway growth areas.

4. Chelmsford Innovation Centre: Creation of a Centre of Excellence for low carbon in Chelmsford, meeting needs and delivering open innovation activities to promote the commercial exploitation of the region's strengths in the sector.

5. Nethermayne Gateway, Basildon: The future expansion of the hospital and re-use of the existing college site for a town centre campus.

6. Thurrock Learning Campus: The Thurrock Learning Campus is intended to be a further and higher education facility that is being developed in a partnership of South Essex College and Thurrock Council.

7. Chelmsford Rail Station and Days Yard: Provision of new access to the station to facilitate development of commercial and residential sites.

8. Northwick Road Enterprise Centre: Development and operation of a new centre.

9. Basildon Railway Station: Modernisation of the existing station and environs.

Key Essex Gateway Locations

10. Harwich Incubation, Skills and Training Centre: Build on the high-growth in the renewable energy sector/offshore wind generation sector centred in Harwich.

11. Pond Hall Farm: Securing vehicular access to the site via a purpose built junction onto the A120. This development is a key element in delivering the regionally important windport

12. London Gateway Port and Logistics Park: Development of the logistics park will provide opportunities for new and existing businesses in Thurrock and the wider region.

13. London Southend Airport and Environs Joint Area Action Plan and MedTec Campus: The plan integrates land use, transport, environment and regeneration proposals with clear mechanisms for delivery. **Essex Town Centres**

14. Colchester's 'Better Town Centre' programme: Nine workstreams focussed on improving the quality and performance of this key urban centre upon which the economy of Colchester and the surrounding area depends.

15. Chelmsford Town Centre Public Realm Improvements: A series of significant public realm improvements in Chelmsford linked to major redevelopment sites.

16. Chelmer Waterside Regeneration: Expansion of the town centre with complementary commercial and residential development.

17. Stone Cross redevelopment at Harlow Town Centre and remodelling of Harlow Central Library: Redevelopment of the northern part of the town centre to improve the retail offer.

18. Basildon Town Centre Package: The regeneration will focus on delivering a package of commercial, residential, education and infrastructure outputs.

19. Regeneration of Southend Town Centre: Priority projects for Southend town centre

20. Lakeside Redevelopment: The project involves creating a regional centre focused on the existing retail centre and adding homes and further employment

Working with Partners to Enable Growth

7.6. More generally, the proposals in the *ICS* and the ICS Investment Fund are completely aligned with priorities of the **South East Local Enterprise Partnership (SELEP)**. Through SELEP, we are working with our partners in Southend, Thurrock, Kent, Medway and East Sussex to demonstrate to Government how best to accelerate growth in our area.

7.7. Ensuring consistent and meaningful strategic alignment with SELEP is a vitally important facet of our work. As SELEP remains strategic, and only intervenes where it can add value to work being undertaken locally, it is, in its own words 'respecting the principle of subsidiarity'. In SELEP terms, everything in the Essex *EGS* bears relevance. Specifically, though, we have a role in developing Essex projects in receipt of SELEP channelled funding (such as Growing Places Fund); and in helping our Enterprise Zones flourish – in Harlow and potentially elsewhere.

7.8. In 'adding value' for us, SELEP has a clear role in trumpeting our cause to Government – in influencing ministers around removing the barriers to growth and in lobbying for investment in economically transformative infrastructure improvements. SELEP's overriding objective is one of encouraging growth and enterprise.

7.9. The district, borough and city councils and the two unitary authorities are, of course, the local planning authorities. Thus, alongside the key locations for growth, the County Council will continue to work with the districts and boroughs, the Environment Agency, the Highways Agency and other statutory bodies to **bring forward land suitable for employment growth**. These bodies share a duty to ensure that the right mix of employment land is available. Allocations need to respond to market demand and take advantage where possible of "unused" capacity on road and rail networks.

7.10. We shall be encouraging the local planning authorities to offer **flexibility in 'use class'** designation and to work with owners/developers to **market** these sites very actively. We will work with our partners to support efforts to link Section 106 and Community Infrastructure Levy financial contributions to actual "end user" site occupations to encourage **speculative** developments. We will link these efforts to a wider co-ordinated offer around the availability of skilled workers and proximity to supply chains.

7.11. As the County Council we continually review our **property asset management** strategy to identify how best to use our operational and our surplus properties to meet our corporate objectives, one of which is to promote economic development. We will encourage other public agencies to do the same. This will include the opportunity to develop shared services centres. We will explore whether there is potential to combine these with incubator units, and increase the supply of "easy in/out" accommodation and "grow-on" space.

7.12. More generally, we know that to be competitive, Greater Essex must offer a portfolio of **readily available** property for employment uses: incubator units, offices, industrial and warehouse units in all sizes. We must also offer have a portfolio of **'shovel-ready', designed and consented schemes** in key locations, so that they can be implemented 'on-demand'. (A 15-month build period would be a reasonable response to many large investor enquires.) We will be continuously monitoring the supply in each segment of the property market and highlighting shortfalls as they emerge.

7.13. The County Council will also consider whether we can allocate the funds to **co-invest with private developers** in speculative business premises of all sizes ourselves. At the least, we will

seek to share the risk with partners on the delivery of key development projects where they promote economic growth including additional specialist incubation facilities and grow-on space.

7.14. Generally, if the County Council invests in projects, they will be in priority locations. In particular, we will consider partnerships with district councils to enhance the vitality of our **town centres**. We know that as transport interchanges, our town centres are excellent locations for employment growth. As well as shopping locations, they are cultural and recreational centres and the focus of civic life. With many high street shops at risk, it is vital that we find a way of preserving vitality and use of these areas. The Portas report makes a number of recommendations regarding the future of our town centres; we will work with our district council partners to implement their plans.

Housing

7.15. Our future economic prosperity depends on ensuring that a ready supply of housing for sale and for rent, in all price ranges is available. Those who work in the County, as well as those who commute to work elsewhere, need this supply. Shortages of any type of housing – for senior executives, for families, for key workers, or for low and moderate income households – hamper economic growth. Moreover, as the majority of domestic spend takes place in the communities where people live, or nearby, a ready supply of good housing boosts local employment.

7.16. As local planning authorities, the district, borough, city and unitary councils recognise the importance of housing in economic growth. Moving forward, the County Council will seek to work with these partners to ensure that Local Development Frameworks provide a ready supply of sites for market and affordable housing to serve the demand arising from the locations for economic growth across Essex. Promoting higher quality housing is also key to the regeneration of deprived communities, particularly coastal communities.

7.17. More generally, the County will work with the local planning authorities and the Homes and Communities Agency to accelerate housing starts and completions across Greater Essex. This will provide an essential boost to the construction industry, traditionally one of the key economic sectors in Essex.

Locations for Growth: Next Steps

Overall, the County Council will continue to work with partners to deliver the *Integrated County Strategy*. This features establishing the ICS Investment Fund. Our Implementation Plan (available separately) sets out our overall approach to delivering the Essex *EGS*. Our immediate emphasis is on[24]:

ENTERPRISE AREAS

- **Enterprise West Essex at Harlow**: Partnering with Anglia Ruskin University to take forward proposals for a Med Tech campus, Harlow's Enterprise Zone will comprise two linked sites, both located on the eastern side of Harlow, namely Templefields North East (TNE) and London Road. Both sites are close to the A414 providing easy access to the M11 and M25 and Stansted Airport.

- **Braintree developing enterprise units and business support**: Extension of existing enterprise centre at Springwood Industrial Estate, Braintree together with the Development of new enterprise units on site in Maltings Lane, Witham, and flexible work space site in Sible Hedingham

- **Colchester enabling job creation:** Unlocking a number of employment sites in Borough's North Colchester and University Gateway growth areas.

- **Chelmsford Innovation Centre:** Creation of a Centre of Excellence for low carbon in Chelmsford, meeting needs and delivering open innovation activities to promote the commercial exploitation of the region's strengths in the sector.

- **Nethermayne Gateway, Basildon**: The future expansion of the hospital and re-use of the existing college site for a town centre campus.

- **Thurrock Learning Campus**: The Thurrock Learning Campus is intended to be a further and higher education facility that is being developed in a partnership of South Essex College and Thurrock Council.

- **Chelmsford Rail Station and Days Yard**: Provision of new access to the station to facilitate development of commercial and residential sites.

- **Northwick Road Enterprise Centre**: Development and operation of a new centre.

- **Basildon Railway Station**: Modernisation of the existing station and environs.

[24] List derived from the place based aspects of the ICS sub-regional investment pipeline Strategic Level Projects list and enterprise locations.

KEY ESSEX GATEWAY LOCATIONS:

- **Harwich Incubation, Skills and Training Centre**: Build on the high-growth in the renewable energy sector/offshore wind generation sector centred in Harwich, and increase the amount of local qualified workforce, by providing a skills and training centre.

- **Pond Hall Farm**: Securing vehicular access to the site via a purpose built junction onto the A120. This development is a key element in delivering the regionally important windport

- **London Gateway Port and Logistics Park**: In support of the Port development, a logistics academy together with the development of the logistics park will provide opportunities for new and existing businesses in Thurrock and the wider region.

- **London Southend Airport and Environs Joint Area Action Plan and MedTec Campus**: Final submission version of the JAAP is currently being prepared jointly by Southend BC and Rochford DC. It is a response to the challenges / opportunities offered by London Southend Airport & airport related employment cluster. The plan integrates land use, transport, environment and regeneration proposals with clear mechanisms for delivery.

ESSEX TOWN CENTRES:

- **Colchester's 'Better Town Centre' programme:** Nine workstreams focussed on improving the quality and performance of this key urban centre upon which the economy of Colchester and the surrounding area depends.

- **Chelmsford Town Centre Public Realm Improvements**: A series of significant public realm improvements in Chelmsford linked to major redevelopment sites.

- **Chelmer Waterside Regeneration**: Expansion of the town centre with complementary commercial and residential development.

- **Stone Cross redevelopment at Harlow Town Centre and remodelling of Harlow Central Library**: Redevelopment of the northern part of the town centre to improve the retail offer, address under performance, public realm, evening economy, and the market and to improve retail circuit by remodelling of the existing library.

- **Basildon Town Centre Package**: To address problems associated with Basildon's New Town Heritage, a comprehensive regeneration is now required to facilitate economic growth and investment. The regeneration will focus on delivering a package of commercial, residential, education and infrastructure outputs.

- **Regeneration of Southend Town Centre**: Priority projects for Southend town centre include; enabling strategic sites, provision of a 600 space public car park, and the release of land for development of Alexandra and Clarence; Warrior Square and Tylers Avenue, Elmer Square, cultural / creative space as part of the development of Elmer Square, City Beach Phase Two, continuation of phase 1 through to Esplanade House

- **Lakeside Redevelopment**: The project involves creating a regional centre focused on the existing retail centre and adding homes and further employment.

FURTHER PARTNERSHIP INITIATIVES

We will also work with the district council partners to:

- seek relief to the '**airport related businesses only'** rule at Stansted and surrounding area to promote wider economic development in the area;
- develop **Local Enterprise Areas** packages to support business growth, and investment with a focus on the priority sectors. We will also seek reverse the decline of town centres and consider related housing opportunities.
- seek to **fast-track planning applications** for employment land development, changes in use class that have economic benefit and premises expansion, together with revising our requirements for s106/CIL, phasing payments linked to site occupancy levels;
- promote suitable planning policies to stimulate the development of "**the Essex low carbon energy coast**" including support for key wind energy activity in Harwich related to job growth

8. INFRASTRUCTURE

8.1. To grow, the Essex economy depends on the:

- efficient movement of people, goods and information, via effective and reliable transport and communications networks at competitive prices, to provide access to markets and suppliers; and
- readily available water, electricity and gas supplies again at competitive prices.

8.2. The *Essex Business Survey* (2010) highlighted the need for infrastructure improvements. According to Essex businesses, the top three investment priorities were: information and communications technology particularly high spend broadband networks, more reliable and cheaper transport services; and the road/transport network. Over one third (35%) of businesses are concerned about local traffic congestion, especially large and medium companies.

Whole Essex Community Budgets

8.3. Whilst this strategy identifies the key infrastructure priorities to support economic growth, it is unlikely that public sector funds will be available to construct these projects. There is a need to attract significant private sector investment and Essex will need to do all it can to demonstrate that it is 'open for business'.

8.4. The whole Essex community budget pilot is therefore looking at how it can deliver the conditions that make it attractive for the private sector to invest in Essex. It is looking at how to provide opportunities that are unique to Essex through a strategic approach to Essex infrastructure, including transport, utilities, and broadband.

8.5. It is important that we make the most efficient delivery decisions and make the most of limited public sector capital funding to realise opportunities presented by the private sector. Essex County Council will work across the public and private sectors to jointly assess the need for infrastructure investment, develop effective solutions, identify funding opportunities and deliver new projects "

8.6. Our aim is to create an infrastructure gateway that will co-ordinate infrastructure planning and the delivery of new infrastructure across Essex.

Essex Superfast Broadband

8.7. The County Council intends to ensure that a superfast broadband service is available to at least 90% of all business premises, and a 2Mbps service to the remainder, by the end of 2015; and that all premises will have access to an 8Mbps service by 2020. To achieve this we have established the **Superfast Essex Broadband Board** to enter into a partnership with a lead international telecommunications company. Detailed plans are now being prepared.

8.8. The economic imperative for doing so is clear. In itself, this will make it easier for businesses to use the internet to develop, market and sell products – to domestic and global markets. This will

also facilitate productivity improvements across a wide range of sectors and enable further use of telecare and other public services.

An Integrated Transport Network for Essex

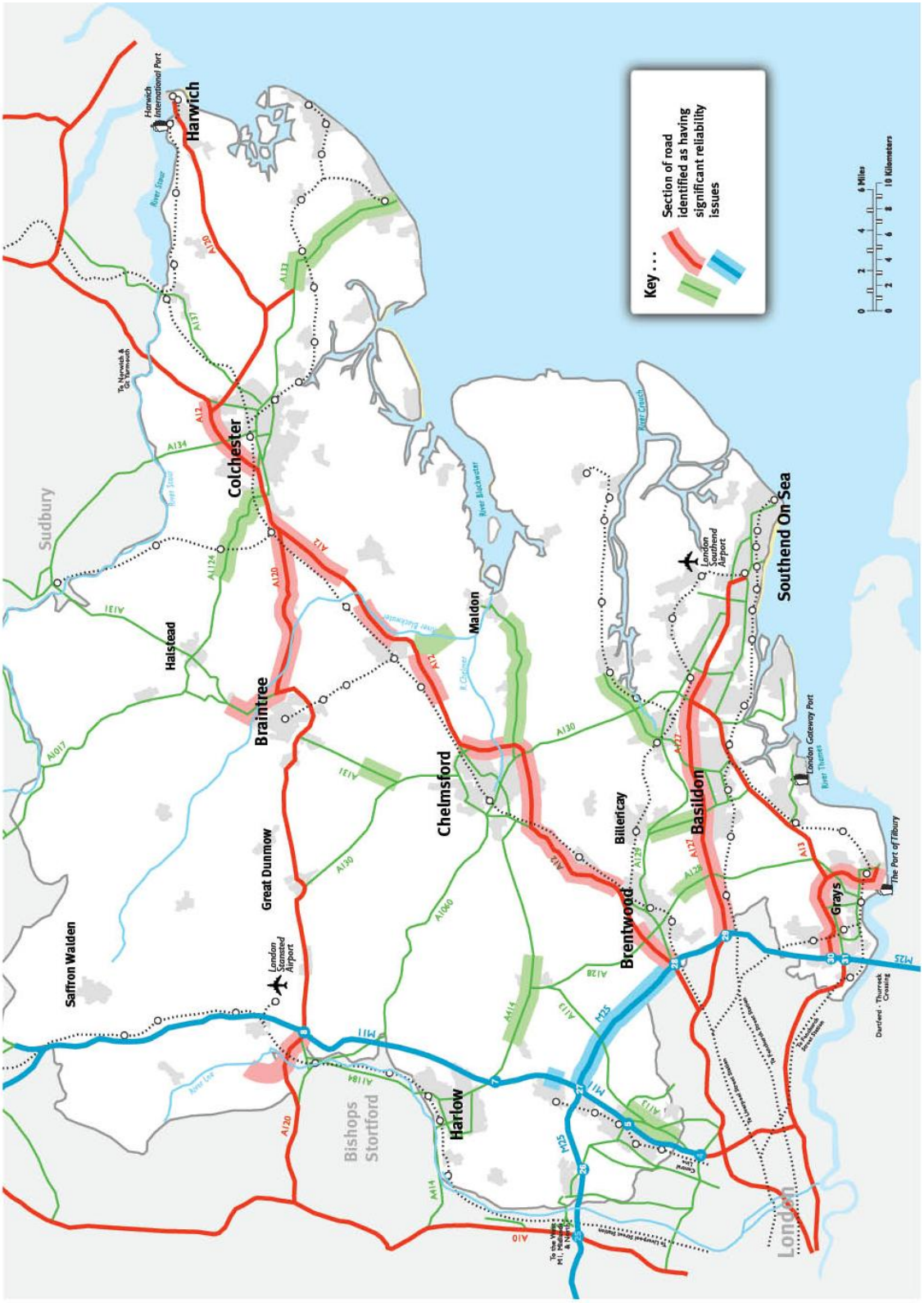
8.9. The County Council is responsible for managing and maintaining the transport network within its boundaries and for identifying essential improvements. How Essex County Council will do this is set out in detail in the Local Transport Plan (http://www.essexhighways.org/local-transport-plan-ltp.aspx). With funding now severely constrained, and likely to be so for several years, we are applying an incremental approach to ensuring that our transport network is fit for purpose and enables economic growth. This entails:

- prioritising the **maintenance and smarter use** of our existing transport network;
- making targeted investments to **address local network stress** points and local network development; and
- promoting **larger scale projects** where these are required to most effectively address the transport challenges facing Essex.

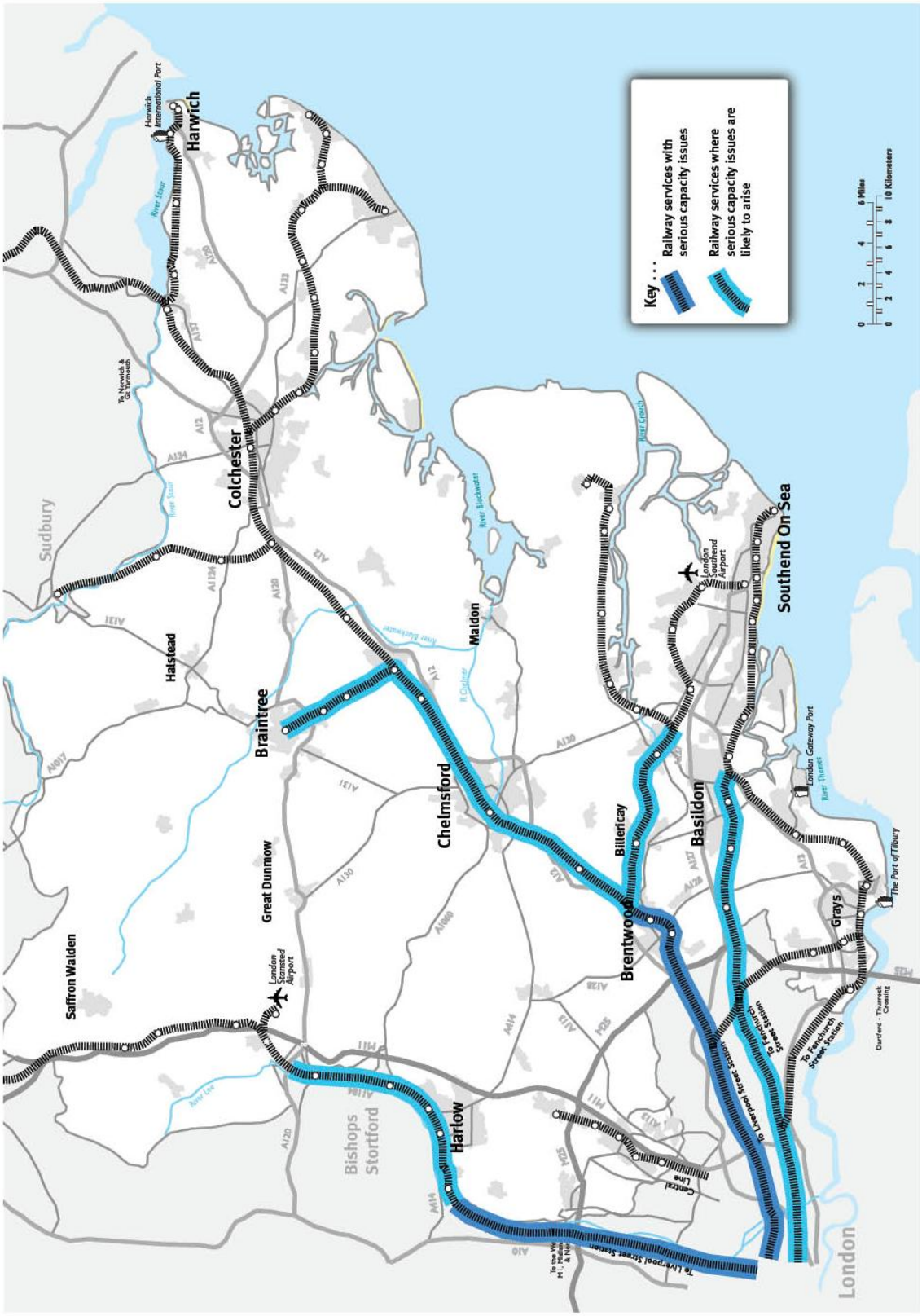
8.10. Our highway network is managed through a new long term partnership – Essex Highways – who are responsible for the maintenance of the network and ensuring that our roads function efficiently.

8.11. We also promote the smarter use of our transport networks. We seek to integrate different modes of travel to enable people and goods to use the most appropriate form of transport to reduce congestion and make the most effective use of the networks.

Map showing transport congestion 'pinch points' on major roads in Essex



Map showing rail infrastructure weaknesses



8.12. Future improvements in our transport network will be assessed to ensure that all schemes will represent good value for money based upon the whole life cost of the scheme. Investment will be focused on:

- principal **urban areas** – Basildon, Chelmsford, Colchester, Harlow, Southend and Thurrock – as these are the main locations for growth; and the
- key **interurban corridors** serving the principal towns, airports and seaports in Essex – the A12, the A120, the A127 / A13, our thre rail lines, and the M-11 in due course. Our approach to each of these is set out below:

An Integrated Transport Network for Essex

8.13. As highlighted in Section 6: Locations for Growth, our principal cities and towns are best placed to locate many new employment opportunities. They are the County's principal transport hubs providing interchange opportunities between different modes of travel and provide ready access to wide labour force catchments.

8.14. We will apply a **Transport Development Area** approach to the development of key sites and town centres based on community involvement in the close integration of land-use and transportation planning, urban design and operation of the transport network. This will concentrate development around existing and, where necessary, new transport nodes, providing sustainable transport choices to enable development to proceed in a way that benefits the local economy and places minimal additional demands upon our transport networks. A range of transport options will offer alternatives to car travel (e.g. walking, cycling, bus, rail etc) and alternative ways of working that are less dependent upon use of the transport network at peak times (e.g. flexible working hours, working from home).

8.15. Our urban centres all have good links to London and are ideal locations for businesses requiring a location close to London but wishing to benefit from lower operating costs and a more pleasant environment. We will promote our urban centres as a viable alternative to London by ensuring that the quality of our transport links to London is maintained and improved.

8.16. **Basildon** is the largest centre in the Thames Gateway and is home to the Basildon Enterprise Corridor, the largest concentration of employment in Essex. Basildon has been identified as a location for job and housing growth. Basildon also has ambitious plans to re-develop the town centre including the railway station. These developments will be of great benefit to the town, but also poses challenges for the transport network. Transport investment will be focussed on addressing these issues. Only a quarter of those who live within 3 miles (5km) of their workplace either walk or cycle to work which is below the national average, despite there being a good network of cycle ways in Basildon. A reliable bus network is also extremely important, with nearly a quarter of households without a car. The bus network is also an important way of providing access to education and training. Congestion is common on several key routes including, the A1235 and A132 around the Basildon Enterprise Corridor, the A176 between Five Bells and Basildon Hospital and the A132 / A13 junction in Pitsea.

8.17. **Chelmsford** is the focus for growth in the County with the planned construction of 16,000 new homes by 2025. Over the same period, growth initiatives and new business developments aim to achieve the creation of an estimated 20,000 new jobs. Many of these new homes and jobs will be located in the city centre and an urban extension to the north of Chelmsford. To support these developments and to ensure that Chelmsford remains an attractive location for its residents and businesses, innovative transport measures are required. Many of the key

corridors into Chelmsford city centre are congested, especially during the peak periods, with specific problems at junctions. Although the bus and cycling networks are extensive and serve the city well there are a number of key improvements required. The railway station is also at capacity at peak times and in need of environmental improvements.

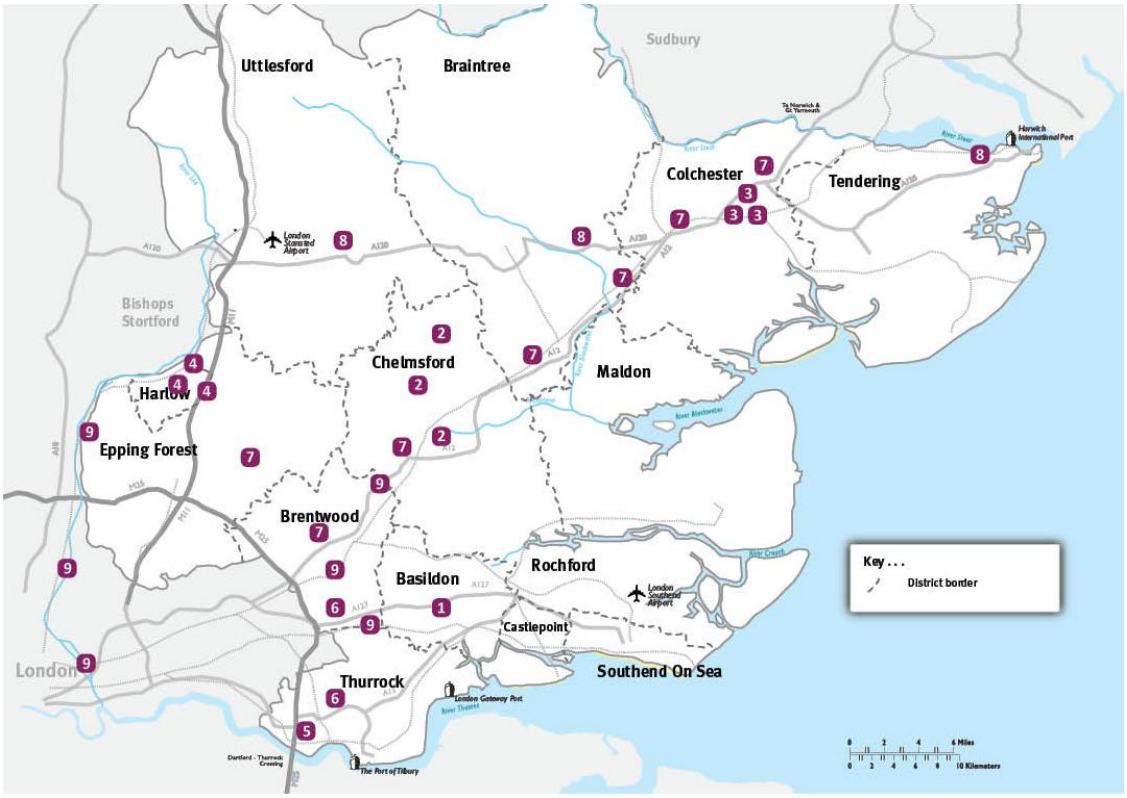
8.18. **Colchester** will accommodate the majority of the future growth in the Essex Haven Gateway with significant development in the town centre and to the north of Colchester. Key corridors into and around Colchester town centre suffer congestion, especially during the peak periods, with specific problems at some junctions along these routes. This can result in a reduction in air quality and poor public transport journey time reliability. Innovative transport measures will be required to support economic growth in Colchester.

Harlow is a primary focus for growth, with 16,000 new homes and 12,000 new jobs planned over the next 15 years. Harlow is ideally placed, being close to the M11 and M25, on the West Anglia mainline and close to Stansted airport. Access to Harlow is, however, somewhat restricted with only one link to the strategic road network and two railway stations located on the edge of the town. The primary road access to the town, the A414, also serves as an important through route; congestion is common with its impacts often felt across the town's wider road network. Harlow is the location of Enterprise West Essex@Harlow, one of only two enterprise zones in the South East LEP area. This will accommodate up to 5,000 jobs, especially in the medical technology industries, advanced manufacturing and ICT sectors. There are also ambitious plans to redevelop Harlow town centre.

Southend is the largest urban area in Thames Gateway and the location of significant growth at London Southend Airport and Med Tech Campus. A Joint Area Action Plan is currently being prepared jointly by Southend Borough Council and Rochford District Council in response to the opportunities and challenges offered by London Southend Airport and the related employment cluster. The plan integrates land use, transport, environment and economic growth proposals with clear mechanisms for delivery.

Thurrock is the location of the largest new port development in the UK; **London Gateway Port** and the supporting logistics park. The new port together with the development of the logistics park will provide opportunities for new and existing businesses in Thurrock and the wider region. The **Lakeside Redevelopment** involves the creation of a regional centre focused on the existing retail centre and adding homes and further diversified employment. These development are both dependent upon improvements to the linked junctions 30 and 31 on the M25.

Map showing prioritised transport investment



Key

1. Basildon· Sustainable access to employment opportunities on the Basildon Enterprise Corridor to reduce congestion and provide access by bus. · Improvements to Nethermayne, Basildon, to provide more reliable access to support the future expansion of the hospital and re-use of the existing college site for a town centre campus· Transport improvements necessary for the delivery of the Basildon Town Centre Package to facilitate economic growth and investment. The regeneration will focus on delivering a package of commercial, residential, education and infrastructure outputs.

2. Chelmsford· Journey reliability impotents at the Army and Navy roundabout to address congestion at this key junction.· A north Chelmsford package to support major business park and housing development to the north of Chelmsford.· Chelmsford Town Centre Public Realm Improvements: A series of significant public realm improvements in Chelmsford linked to major redevelopment sites including improved access to the railway station.

3. Colchester· Northern Approaches Corridor, Colchester. A package of transport improvements including completion of the Northern Approaches Road, Bus priority measures and a new park and ride to support development in north Colchester.· Colchester's 'Better Town Centre' programme: Nine work streams focussed on improving the quality and performance of this key urban centre upon which the economy of Colchester and the surrounding area depends·

4. Harlow· The provision of access and more reliable transport links to Enterprise West Essex at Harlow.· Transport improvements necessary for the delivery of the redevelopment of the town centre.· Construction of a new M11 J7a giving direct access from the strategic road network to

development opportunities in north Harlow.

Inter Urban Corridors

5. Improvements to M25 J30/31 to provide reliable journey times to the Lakeside, London Gateway and associated business park developments.

6. Journey time reliability improvements along the A13 / A127 corridor to provide reliable access to the Lakeside, London Gateway and associated business park developments, the Basildon Enterprise Corridor, and Southend Airport and associated developments.

7. The introduction of technology to manage traffic flow and local improvements at pinch points along the A12.

8. Investment in the A120 to provide access to growth opportunities at Harwich Port and Stansted Airport.

9. Improvements' on our three rail lines to reduce overcrowding, improve journey times and reliability and attract both passengers and freight from road to rail including track capacity enhancements at Bow junction (Stratford), north of Chelmsford, at Tottenham Hale and along the Lea Valley.

Inter-urban Transport Corridors

8.19. The inter-urban transport corridors across Essex, both road and rail, have a key role to play supporting the success of our urban centres and essential routes to and from our **seaports** (The Haven Ports and London Gateway), **airports** (Stansted and London Southend Airport), and **London.** These four road corridors and our three rail lines are of significant economic value to the UK as a whole

- the A12;
- the A120;
- A127 / A13; and the
- the M11.

8.20. Connections between the main towns are good, and much of the local road network is operating within its capacity. However, some parts of the network experience significant congestion, including the A127 and A13 in south Essex, the A12, A120 and the A414 in central Essex, and connections from north and west Harlow to the M11,

8.21. Transport related priorities will be focused on routes where improvements will give the greatest benefit to the economy of Essex such as those that allow access to current and future major employment areas; give access to the main urban areas; provide access to the international ports and airports, and promote the transfer of freight from road to rail. In particular growth opportunities include:

- the substantial expansion of employment around the London Gateway container port development;
- the very considerable potential for employment growth along the M11 / West Anglia rail line for businesses requiring the international links offered by Stansted Airport;
- growth around Harwich arising both the construction of the Bathside Bay Container Terminal at Harwich, and the potential development of renewable energy industries; and
- growth generated by the expansion of scheduled services at Southend Airport.

8.22. The growth in travel demand created by port and airport development will have significant impact on the transport networks across Essex. This must be carefully managed to ensure that access to the airports and ports remains reliable with minimal impacts on the surrounding transport network.

8.23. We will manage the efficient movement of freight within the county by working with operators to ensure that heavy goods vehicles use identified routes and that other freight traffic uses the most appropriate routes. We will also work with local businesses to promote and support the sustainable distribution of goods within Essex. In addition, we will work in partnership with the Highways Agency and neighbouring authorities to provide live travel information to freight operators; and encouraging a shift of freight from road to rail.

8.24. In terms of the four principal road corridors, we will be prioritising investments initially in three:

- the A120 corridor to improve east-west connectivity and access to the port of Harwich access and Stansted Airport;
- the A12 corridor providing freight access to Haven Ports and journey reliability on this artery connecting key towns;
- the A127 / A13 corridor, key corridor connecting South Essex to London, access to London Gateway, access to Southend Airport and adjacent growth.

8.25. In addition to these road corridor improvements we will be continuing to press Government to upgrade **Junctions 30/31** on the M25. This will ensure that the full economic benefit of London Gateway is realised and enable the growth of Lakeside. We will also continue to press Government to enable free flow charging on the Dartford Crossing and to bring forward proposals for an additional Lower Thames crossing in due course.

8.26. In highlighting the need for these investments in the trunk road network serving Essex, we also see the importance of the **three rail lines** radiating from London through Essex. These are of considerable economic importance to Essex, as well as to London as a whole. At peak periods, congestion on these lines is severe as services approach London and must be addressed. Investment to provide additional capacity and line speed improvements on the services to our main towns and Stansted Airport is essential to support economic growth. Investment in rail freight is also required to maximise the economic benefits from the ports.

- Track capacity enhancements at Bow junction (Stratford)
- Track capacity enhancements north of Chelmsford
- Track capacity enhancements at Totenham Hale and along the Lea Valley

8.27. Transport and communications infrastructure provision is essential if the economy of our historic **rural towns and villages, extensive coastline and varied countryside** is to thrive. We will ensure that people in rural areas are able to access important services, such as has been enabled through our investment in broadband, without needing to travel long distances and minimise the impact transport has on the character of our rural areas.

Water and Energy Supplies

8.28. In the Essex Business Survey, almost half (49%) of businesses are concerned about **high energy costs**. Small businesses are particularly concerned. Essex is the driest county in the UK placing constraints on our **water supplies**. Essex and Suffolk Water is currently investing £150m to complete a scheme which will help to secure the water supply over the next 25 years, but parts of Essex affected by drought order pending completion.

8.29. Moving forward, we intend to undertake a full assessment of the extent to which County investments in the development of sources of **renewable energy,** and **energy conservation** would stimulate private investment and/or reduce energy costs for Essex companies. The County will also undertake a comprehensive assessment of whether **water shortages** will limit growth in Essex and how best to overcome potential shortages.

Infrastructure: Next Steps

Fundamental change is underway in relation to the identification of a pipeline of schemes and how we as an authority progress them. A much greater emphasis is required on reducing risk associated with the delivery of these schemes and the identification of barriers to delivery. This will see the redirection of resources from scheme delivery into planning infrastructure needs, managing relationships with partners, assessing feasibility, examining options and progressing designs through the planning system, to develop 'shovel ready' projects that can attract private sector investment. Infrastructure planning will be co-ordinated within multi-disciplinary teams to project manage priority projects and identify appropriate delivery mechanisms.

The following is an indicative list of transport projects that support the economic development identified in Section 6: Locations for Growth and that address wider transport needs across Essex. Detailed solutions will be subject to an assessment of economic impact, whole life costs and value for money. Scheme delivery is subject to the availability of funds and resources necessary to support scheme development and the identification of an appropriate funding route for implementation.

Our Implementation Plan (available separately) sets out our overall approach to delivering the Essex *EGS*. Our immediate **priorities for action** are:

SUPERFAST BROADBAND

- Secure a private partner to deliver the broadband upgrade programme under the auspices of the Essex Superfast Broadband Board.

INTEGRATED TRANSPORT NETWORK

Basildon

- Sustainable access to employment opportunities on the **Basildon Enterprise Corridor** to reduce congestion and provide access by bus.
- Improvements to **Nethermayne**, Basildon, to provide more reliable access to support the future expansion of the hospital and re-use of the existing college site for a town centre campus
- Transport improvements necessary for the delivery of the **Basildon Town Centre Package** including the redevelopment of the railway station to facilitate economic growth and investment. The regeneration will focus on delivering a package of commercial, residential, education and infrastructure outputs.

Chelmsford

- Journey reliability improvements at the **Army and Navy** roundabout to address congestion at this key junction. and to improve access to the city centre and Chelmer Waterside.
- A north Chelmsford package to support major business park and housing development to the north of Chelmsford.
- **Chelmsford Town Centre Public Realm Improvements**: A series of significant public realm improvements in Chelmsford linked to major redevelopment sites including improved access to the railway station.

Colchester

- **Northern Approaches Corridor, Colchester**. A package of transport improvements including completion of the Northern Approaches Road, Bus priority measures and a new park and ride to support development in north Colchester.
- **Colchester's 'Better Town Centre' programme:** Nine workstreams focussed on improving the quality and performance of this key urban centre upon which the economy of Colchester and the surrounding area depends.

Harlow

- The provision of access and more reliable transport links to **Enterprise West Essex at Harlow.**
- Transport improvements necessary for the delivery of the **redevelopment of the town centre**.
- Construction of a new **M11 J7a** giving direct access from the strategic road network to development opportunities in north Harlow.

INTER-URBAN CORRIDORS

- Improvements to **M25 J30/31** to provide reliable journey times to the Lakeside, London Gateway and associated business park developments.
- Journey time reliability improvements along the **A13 / A127 corridor** to provide reliable access to the Lakeside, London Gateway and associated business park developments, the Basildon Enterprise Corridor, and Southend Airport and associated developments.
- The introduction of technology to manage traffic flow and local improvements at pinch points along the **A12**.
- Investment in the **A120** to provide access to growth opportunities at Harwich Port and Stansted Airport.
- Improvements' on our three **rail lines** to reduce overcrowding, improve journey times and reliability and attract both passengers and freight from road to rail and the promotion of Essex as a location for business easily reachable form London.

  -Track capacity enhancements at Bow junction (Stratford)
  -Track capacity enhancements north of Chelmsford
  -Track capacity enhancements at Tottenham Hale and along the Lea Valley

WATER AND ENERGY

- Comprehensive assessment of whether **water shortages** will limit growth and how best to address any potential shortages.

- Assessment of whether the County should invest in the development of **renewable energy sources** and energy conservation to stimulate private investment and reduce energy costs.

9. DELIVERY

9.1. This *Essex Economic Growth Strategy* sets out our economic vision for Essex, our objectives, and four main sets of proposals to achieve these objectives. In Section 3 above, we identify the principles which will guide implementation. We also emphasize that we will provide statutory and discretionary services in ways which promote local economic growth, and we will operate as a business as a purchaser to provide benefits to the local economy. As a thought leader we will work with our partners to drive efforts to promote growth.

9.2. The *Essex EGS* will be supported by the:

- *EGS Implementation Plan; and the*
- *EGS Performance Framework.*

An EGS Evidence Base sits behind the strategy.

EGS Implementation Plan

9.3. For each of the proposed actions the *EGS Implementation Plan* will articulate:

- the rationale for the actions;
- measures of success and the period over which they will be realised;
- responsibility for delivery and key partners we will work with; and
- estimated investment needed (revenue, capital and external funding) and whether the actions are within current budgets.

9.4. This *Implementation Plan* will be reviewed every six months

EGS Performance Framework

9.5. The *EGS Performance Framework* will show how the elements of the *EGS* fit in terms of objectives, outcomes, activities and measures of success. It will set out measurable targets taking account of the time lags between an intervention leading to “action on the ground,” and economic impact.

9.6. Performance will be reviewed via regular discussions of progress, perhaps via peer reviews, in delivering the implementation plan, *supported* by data measuring progress towards agreed targets. Brief six monthly ‘tracking’ reports will be prepared, showing progress in delivery of the implementation plan, emerging risks and mitigation measures.

9.7. The Economic Growth Strategy is cognisant of areas that may have equality implications when it is implemented, including; possible tensions between access by people living in certain locations to economic growth potential and regeneration and a focus on economic growth; and education, employability and skills, where particular skills sets are focused on ensuring

equitable. In recognition of this the *EGS Implementation Plan* will undertake Equality Impact Assessments before it is put in practice.

9.8. A "light touch" Sustainability Impact Assessment may also be prepared.

EGS Evidence Base

9.9. The accompanying *EGS Evidence Base* summarises the key data which we have used to inform the *EGS.* We see a strong need to improve our intelligence about the strengths and challenges facing companies across Essex in order to inform further iterations of the *EGS* and the implementation proposals. For example, for our work on education, employability and skills we need to understand the sources of investment in the training provision that is commissioned, in the facilities and other mechanisms that are developed, and in the information, advice and guidance that is used to guide career choices. Our Key Account Management work with business is the key to developing this intelligence.

9.10. The Essex Local Economic Assessment will take on board the evidence gathered in the preparation of *EGS* to ensure it remains fit for purpose. The potential of EssexInsight to develop and maintain the evidence base will be reviewed.

9.11. Together these three documents will underpin the delivery of the *Essex Economic Growth Strategy.*

This information is issued by
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The information contained in this document can be translated, and/or made available in alternative formats, on request.

Published August 2012

ESSEX ECONOMIC GROWTH STRATEGY EVIDENCE BASE

Final Report

September 2012

Essex County Council

CONTENTS

1. INTRODUCTION

This document is a supporting document for the Essex Economic Growth Strategy (the EGS). The EGS sets out our economic vision for the County

1.1. The Essex EGS aims to make the most of the entrepreneurial spirit, dynamism and diversity of all our people and enterprises. This will ensure that as the UK economy strengthens, Essex is well placed to benefit.

Evidence Base Context

1.2. This evidence base provides the basis our economic development priorities. It will also inform the update of the Local Economic Assessment. The strategy's ambition is to make Essex the location of choice for business, locally and those who may choose Essex in the future, building on our proximity to London and our excellent international transport links; for Essex businesses to thrive and grow, creating sustainable job opportunities for our residents and growth opportunities for our businesses; and for our residents to have the skills that they need - and businesses need – for them to succeed in the future.

1.3. The health of the Essex economy will mainly be determined by a range of global and national drivers and these are summarised in the following chapter. In addition to the Global Economic Context (Chapter two) the strategy has four building blocks to promote growth across Essex. These form the structure of the evidence base and comprise:

- **Enterprise and Innovation:** including new investment; businesses growth through innovation and trade, and new businesses support. Chapter three looks at the current make up and performance of the local economy. It highlights growth sectors, enterprise dynamics and productivity.

- **Education, Skills and Employability:** including understanding and responding to skills; educational attainment and tailored education; and creating training and sustainable employment opportunities. Chapter four looks at changing demography and dynamics and well as educational attainment and employment and skills measures.

- **Locations for Growth:** building on the contents of the Integrated County Strategy (ICS) this building block sets the framework and priorities for the places in which we wish to invest to maximise growth. Chapter five highlights key housing and population statistics illustrating the anticipated pace of change that is envisaged.

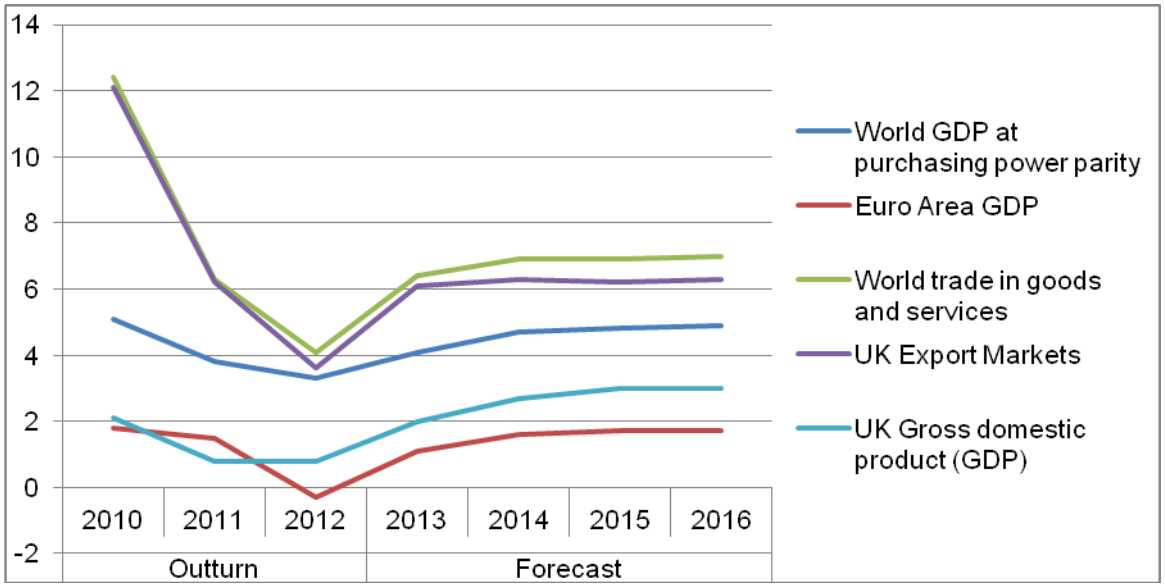
- **Infrastructure:** this building block includes the efficient movement of people and goods across Essex; access to public transport; high speed broadband services, water and energy supplies and the promotion and development of renewable energy sources. Chapter six reviews key transport and infrastructure data.

2. GLOBAL ECONOMY

Structural change within the global economy coupled with rapid technological advancements set the context for the economic growth strategy.

Drivers of Change in the Global Economy

Detailed Summary of Global Growth Forecasts



Source: OBR Economic and Fiscal Outlook, p80, Percentage change on a year earlier

2.4. Following the recession in many of the advanced economies in 2008 and 2009, the path of international and domestic economic recovery remains uncertain. Current projections suggest that 2012 will be a period of slow economic growth for the global and UK economies, but there also remains the possibility that the on-going and unresolved Eurozone crisis could deteriorate dramatically, which would undoubtedly have profoundly negative consequences for the global economy. The chart above from Office for Budget Responsibility shows the **flat Eurozone projections to 2016 with slight growth in world GDP and goods and services.**

2.5. Despite the high levels of uncertainty around the future prospects for economic growth, it is essential to understand some of the key drivers of global economic change. These drivers fall into one of two main categories:

- Structural changes in the global economy
- Technological changes driving economic and sectoral growth

Structural Changes in the Global Economy

2.6. The most obvious structural change being experienced by the global economy today is the **rapid growth of a number of emerging economies**, most notably China, India and Brazil. As well as lower value manufacturing and services these countries are now increasingly moving up the value chain into higher value manufacturing sectors. In China this growth is being led by the government, which has announced plans to pursue growth in seven strategic high technology sectors: alternative fuel cars, biotechnology, environmental and energy-saving technologies, alternative energy, advanced materials, new-generation information technology and high-end equipment manufacturing. The fact that this list corresponds so closely with similar priority lists

created by western governments illustrates that advanced economies will increasingly compete directly with emerging economies in these high value sectors.

2.7. However, it is important to recognise that as wealth grows in these emerging economies, there will be **increasing demand for investment opportunities in western economies**. The building of the £1.5bn London Gateway by DP World is an obvious example of such investment (See Chapter three). The chairman of China's $450bn sovereign wealth fund has also signalled his intention to concentrate investment on western infrastructure as a means of securing long term returns[1].

2.8. At the same time, growth in wealth and real wages in these countries is creating a **new global consumer class** with increasing purchasing power. This is creating new markets for western goods and services. By 2030 it is estimated that total spending by the middle classes outside North America and Europe will be five times what it is today[2]. Between 1998 and 2008, UK exports to the BRIC countries (Brazil, Russia, India and China) increased by an average of 11.8% annually compared to 3.1% average annual increase to EU countries[3]. Likewise, visitor spending in the UK by tourists from BRIC countries rose by nearly 160% between 2000 and 2011, whilst total visitor spending rose by only 40%[4].

2.9. One trend which is difficult to forecast but is likely to play an important role in western economies is that of **'on-shoring'**, the return of certain industries to the advanced economies. The main driver of this is likely to be the aforementioned rise in wages in emerging economies. This, when combined with the transport costs to move goods to their destination markets (typically in the advanced economies) and the productivity advantages in the advanced economies, is shifting the balance of competitiveness in some cases back towards the advanced economies. Boston Consulting Group (BCG) have argued that US manufacturing is reaching a 'tipping point' and that from around 2015, manufacturing will begin to shift back towards the US, creating two to three million new jobs and generating between $20bn - $55bn in additional output[5]. Given that the EU economy is larger than the US economy, we might expect similar or greater impacts in the EU. Of course, a counter-argument to this is that as consumer markets develop in emerging economies, there may be an increasing cost incentive to be close to these markets which would balance out the impact of rising costs. In practice, it is likely that on-shoring will be greatest where the benefits of being close to home markets are largest, and where productivity differences are most significant.

2.10. An overarching trend connected to the above observations will be the continued and **growing demand for high skilled workers**, due to the proliferation of increasingly sophisticated production techniques and the increasing importance of 'knowledge-based' services. A related trend is the continued **'hollowing out' of the labour market**, with more higher skilled and some lower skilled jobs being created, whilst the number of medium skilled jobs declines[6]. Internationally, many governments have responded to these trends by encouraging an increase in the proportion of young people achieving degree level skills or higher. For example, the number of UK students at domestic universities has increased by 17.8% over the last decade[7] and China alone produced 6.6 million graduates in 2011[8]. In the short term this may depress employment opportunities and wages for graduates, as has been seen in the UK where the proportion of recent graduates in lower skilled jobs rose from 26.7% in 2001 to 35.9% at the end of 2011[9]. However, in the longer term we can expect that demand for higher level skills will

[1] Financial Times: *China can help west build economic growth*, 27th November 2011
[2] OECD Development Centre (2010) Working Paper No. 285 – The Emerging Middle Class in Developing Countries
[3] Ernst & Young (2011) The Outlook for UK Exports – February 2011
[4] Visit Britain (2011) Latest Quarterly Data – 2000 to 2011 Q4P
[5] BCG (2012) US Manufacturing Nears the Tipping Point: Which Industries, Why and How Much?
[6] University Alliance (2012) The Way We'll Work: Labour market trends and preparing for the hourglass
[7] HSA (2011) All students by HE institution, level of study, mode of study and domicile 2010/11 and HSA (2001) All Students by Institution, Mode of Study, Level of Study, Gender and Domicile 2000/01
[8] Xinhua (2011) China faces challenge of employing millions of college graduates – 2nd June 2011
[9] ONS (2012) Graduates in the Labour Market - 2012

increase, to the extent that insufficient supply of higher skilled workers might create bottlenecks in some parts of the economy[10].

2.11. Another key structural change is the **ageing population** in many countries. This will be most pronounced in advanced economies such as Japan and parts of Europe, though it will also be felt in other parts of the world as well, most notably China. Where populations age less rapidly this will be primarily through welcoming outside immigration, particularly in the USA and UK, which will have attendant social and political consequences. Ageing populations will create new challenges for economies in terms of providing adequate care and in requiring individuals to work for longer, as has already been seen in the UK. At the same time, the ageing population will create demand for new medical and care technologies such as telemedicine.

2.12. The recession has created significant pressures on government budgets. However, it is likely that - even when the immediate pressure caused by the current period of low economic growth has eased – that **government spending will remain lower** than the historical trend. This will happen because many governments will need to reduce public debt incurred over the past decade or so. It will also happen because the ageing population that many countries face will place a greater strain on government finances through reducing the tax base and increasing pension liabilities[11]. Where governments look to reduce expenditure this is likely to shift the cost burden from governments to citizens or result in a decline in the quality of public services.

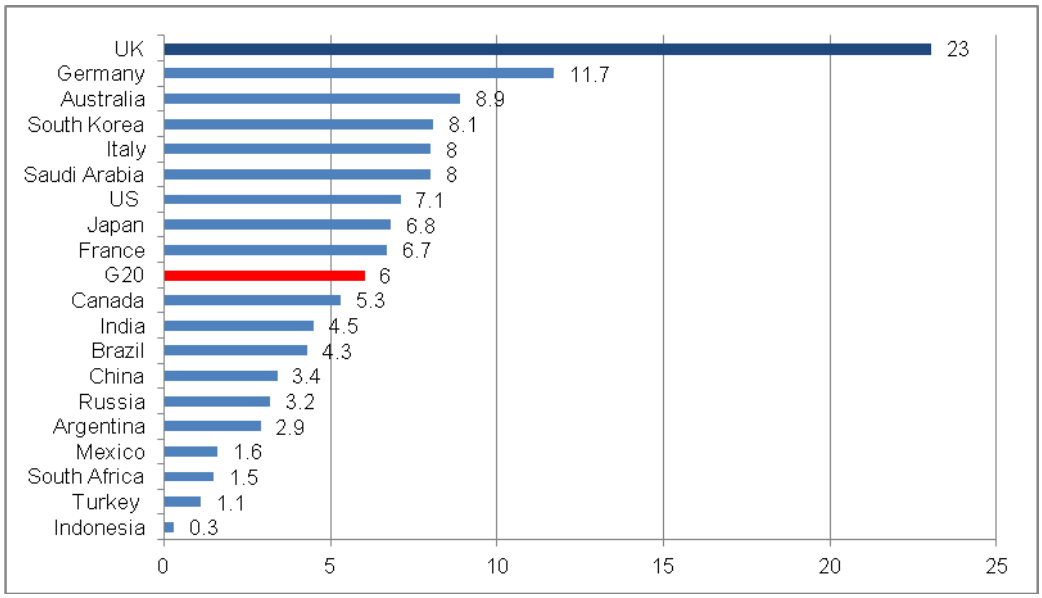
Technological Changes Driving Economic and Sectoral Growth

2.13. **Digital technologies are driving change**, at an accelerating pace, in every sector of the global economy. Most obviously this is creating a new internet based economy which in the G20 countries alone was worth $2.3trn in 2010 and is expected to be worth $4.3trn by 2016[12]. High speed broadband service is now an essential utility for a growing economy, with East Asian countries such as South Korea, Japan and Taiwan leading advanced economies in terms of average speeds. Moreover, the internet itself is changing, driven by the popularisation of smart phones. Dramatic examples of this can be seen in the exponential growth in phone and tablet 'app' sales over the last few years and the increasing use of smartphones to access internet services.

2.14. The impact of digital technologies is not just a technological phenomenon, but is impacting on businesses in the physical world. Some of the most important trends are in the **retail sector**. Online retail sales accounted for 13.5% of total sales in the UK in 2010[13]. When the proportion of sales researched online but purchased in physical stores is taken into account, the internet accounts for a quarter of total retail sales in one way or another[14] (see Chart). This is one way in which technological changes are driving real structural changes in the economy, as the growth in online retail is having significant implications for local retail centres and shifting the balance of employment demand from traditional retail occupations to transport and logistics occupations.

[10] See, for example, *Carnevale, A. & Rose, S. (2011) The Undereducated American*, which estimates that the USA needs a further 15 million graduates by 2025.
[11] In the UK, the Office for Budgetary Responsibility (OBR) has stated that: 'the public finances are likely to come under pressure over the longer term, primarily as a result of an ageing population.' *OBR (2011) Fiscal Sustainability Report – July 2011*
[12] BCG (2012) The Connected World: The $4.2 trillion opportunity – the internet economy in the G20
[13] Ibid
[14] Ibid

On-Line Retail as a Percentage of Total Retail (2016)



Source: BCG (2012) The Connected World: The $4.2 trillion opportunity – the internet economy in the G20

2.15. Another key area of change is in the field of **low carbon technologies**. BIS estimates that the global market for low carbon and environmental goods and services was £3.2trn in 2009 / 2010, £116bn of which was in the UK alone[15]. Investment in green energy generation is such that it is now highly likely that some renewable energy sources will achieve cost parity with traditional non-renewable energy sources over the next decade. Decentralised energy sources coupled with smart grid technology could help to reduce energy dependency and uncertainty for households and businesses. Investment in battery technology could help finally generate the momentum necessary to make electric cars viable. On a more prosaic level, replacing traditional lighting with LED lighting, and installing other energy efficiency measures in homes and businesses is beginning to create significant savings for governments, businesses and individuals. The effect of all of these trends will be to generate new employment and business opportunities globally.

2.16. Aside from the structural manufacturing trends discussed above, it is also likely that there will be technological trends underpinning the **changing nature of manufacturing**. New technologies such as 3D printing are rapidly decreasing in cost, and will open up opportunities for firms to produce in a more decentralised manner and to rapidly develop new products in response to demand.

2.17. The above trends are to a certain extent already underway, but it is also reasonable to assume that **wider technological progress** in the following fields could be similarly important in generating new economic and employment opportunities:

- Robotics
- Advanced materials / nanotechnology
- Biotechnology

[15] BIS (2011) Low Carbon and Environmental Goods and Services (LCEGS) – report for 2009 / 2010

Growth Sectors

2.1. The sectors that we consider offer the **greatest potential for growth in Essex** are:

- Advanced Manufacturing and Technology;
- Transport, Ports and Logistics;
- Renewable Energy/Low Carbon Technologies; and
- Health and Care Economy.

Advanced Manufacturing and Technology

2.2. Advanced Manufacturing forms a significant part of the Essex economy. The table shows that the sector in Essex is currently made up of an estimated 710 firms. It employs 24,000 people and has an annual turnover of approximately £13.5 billion. Geographically there are larger concentrations towards the south of the County with pockets in virtually all districts (including activity around Stansted). Advanced Manufacturing accounts for 4% of all jobs in Essex; a higher proportion than the national average.

Number of Essex Advanced Manufacturing firms 2011 and Employees (2010)

District	No. Firms	Employees	Turnover
Basildon	87	6,703	
Braintree	84	1,688	
Brentwood	36	1,488	
Castle Point	25	540	
Chelmsford	62	1,632	
Colchester	71	1,303	
Epping Forest	16	656	
Harlow	47	2,835	
Maldon	52	826	
Rochford	42	1,255	
Tendring	22	1,911	
Uttlesford	51	979	
Southend	95	1,136	
Thurrock	20	859	
Essex	710	23,811	£13.5bn

Source: Essex Sector Propositions: Advanced Manufacturing, 2012, MEL Research for INVEST Essex (Data sourced from Experian and NOMIS BRES)

2.3. There are 12 employers with over 500 employees identified on the Experian data base including globally recognised firms (See next Table). Ford, employing over 10,500 employees, have their headquarters in Brentwood and a major automotive research and development facility located in Dunton (Basildon). The research centre, which employs some 3000 engineers, is the main design team at Ford Europe and developing a new generation of environmentally friendly engines and vehicle technologies.

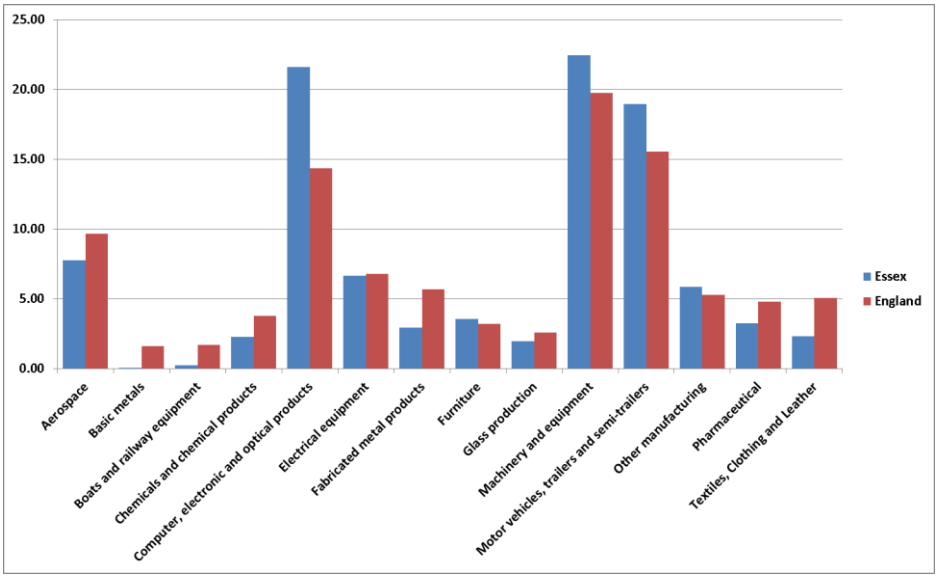
Key Essex Employers: Advanced Manufacturing Employees (550+) and Turnover

Company Name	District	Principal Activity Description	Number of Employees (includes derived)	Total Sales (includes derived) (£m)
FORD MOTOR COMPANY	Brentwood/Basildon	Manufacture and sale of motor vehicles and automotive components.	10567	8378
MERIAL LIMITED	Harlow	Development, production and sale of pharma & biological animal health products & related.	5235	1544
PITNEY BOWES LIMITED	Harlow	Manufacture, supply & servicing of mailing machines & office equipment & outsourced services.	2110	218
RAYTHEON SYSTEMS LIMITED	Harlow	Major suppliers of electronic systems, products, components & services to defence & commerc. mkts.	1487	268
OLYMPUS KEYMED (MED & IND EQUIP'T)	Southend	Manufacturer, service and distribution of specialist medical and industrial equipment.	1078	258
NEW HOLLAND TRACTOR LIMITED	Basildon	Manufacture and assembly of tractor components.	945	236
NEW HOLLAND AGRICULTURE LIMITED	Basildon	Manufacture and sale of tractors and the sale of agricultural & construction equipment & machinery.	890	1078
NOVAR ED&S LIMITED	Basildon	Leading manufacturer and supplier of electrical and electronic products.	844	137
ROCKWELL AUTOMATION LIMITED	Maldon	Design, manufacture and maintenance of high availability safety and control systems.	656	77
O-I MANUFACTURING UK LIMITED	Harlow	Manufacture of glass containers.	648	86
IPECO HOLDINGS LIMITED	Rochford	Design, development and manufacture of specialised equipment for the aerospace industry.	571	49

Source: Essex Sector Propositions: Advanced Manufacturing, 2012, MEL Research for INVEST Essex (Data sourced from Experian and NOMIS BRES)

2.4. Essex has sub-sectoral strengths in the manufacture of machinery and equipment, computer, electronic and optical products, and automotive and motor vehicles (See Graph).

Advanced Manufacturing Sub Sectors 2010 (%)



Source: Essex Sector Propositions: Advanced Manufacturing, 2012, MEL Research for INVEST Essex (Data sourced from Experian and NOMIS BRES)

2.5. The sector demonstrated a degree of resilience during the recession and local Advanced Manufacturing businesses are more likely than their counterparts in other sectors to have plans to enter new product areas, expand into new markets and make capital investment at their sites[16].

[16] Essex Sector Propositions: Advanced Manufacturing, 2012, MEL Research for INVEST Essex

Over half of the businesses completing the MEL business survey had plans to expand their product offers and enter new markets. More than four out of ten businesses planned to expand within the next 12 months. That said "*while the business representatives interviewed had ambitious plans for growth, their expectations for the short-term were tempered by an appreciation that the future operating environment for manufacturing was unclear*"[17].

2.6. Results from the survey of Essex businesses (op. cit.) indicate that Advanced Manufacturing firms tend to have very positive views of being located in the area. Local transport infrastructure and access to national and international logistics were perceived as being particularly significant. More Advanced Manufacturing companies export than the wider business population and local access to international airports and seaports is regarded as being particularly advantageous. "*For the significant number of businesses that are export-focused (69%), the relative proximity of Essex to mainland Europe is also a major benefit*" (op. cit.).

2.7. It is not surprising the sector is prioritised locally given the presence of substantial large and mid-sized businesses, a strong skills base to draw on and the cautious growth prospects expressed by business. This is combined with the fact that Advanced Manufacturing is a national priority sector and locally is very well positioned to exploit globally recognised higher education institutions with expertise in engineering and technology and exceptional R&D capabilities.

Transport, Ports and Logistics

2.8. Ports and Logistics form an integral component of Essex's economy currently comprising over 1,000 firms. Together these firms employ over 14,000 people (See Table) and have a combined annual turnover of £2.8 billion. The sector is a thriving and highly competitive industry, developing world-class facilities using leading edge technology. It incorporates the following business activities: cargo handling; sea, road and rail freight; and warehousing and storage. Across the county the highest numbers of Ports and Logistics firms are located in Thurrock (associated with Stansted Airport), Basildon and Southend (See Table).

Number of Essex Ports and Logistics Firms 2011 and Employees (2010)

District	No. Firms	Employees	Turnover
Basildon	136	2,561	
Braintree	92	1,139	
Brentwood	47	515	
Castle Point	65	281	
Chelmsford	79	892	
Colchester	93	701	
Epping Forest	32	1,592	
Harlow	44	804	
Maldon	77	568	
Rochford	47	305	
Tendring	67	380	
Uttlesford	47	1,557	
Southend	108	6,432	
Thurrock	156	3,508	
Essex	1,072	14,417	£2.8bn

[17] Essex Sector Propositions: Advanced Manufacturing, 2012, MEL Research for INVEST Essex

Source: Essex Sector Propositions: Ports and Logistics, 2012 MEL Research for INVEST Essex (Data sourced from Experian and NOMIS BRES)

2.9. Transport, Ports and Logistics is a priority sector locally, it provides valued logistical support to Essex's other sectors, and is a key reason why businesses choose to locate in the area. MEL Research notes key concentrations of activity. "*Essex's Ports and Logistics clusters are formed around the four key 'pivot points' of London Stansted airport; the port of Tilbury; Harwich International Port; and, the M25 and M11 motorways. There are notable Ports and Logistics clusters in Uttlesford (around London Stansted airport), Thurrock and Basildon (around Tilbury), Epping Forest and Harlow (close to the M25 and M11), and Tendring (around* Harwich)"[18]. The top ten employers excluding Stansted (over 10,000 employees) are illustrated in the table – they are all located in Thurrock or Tendring.

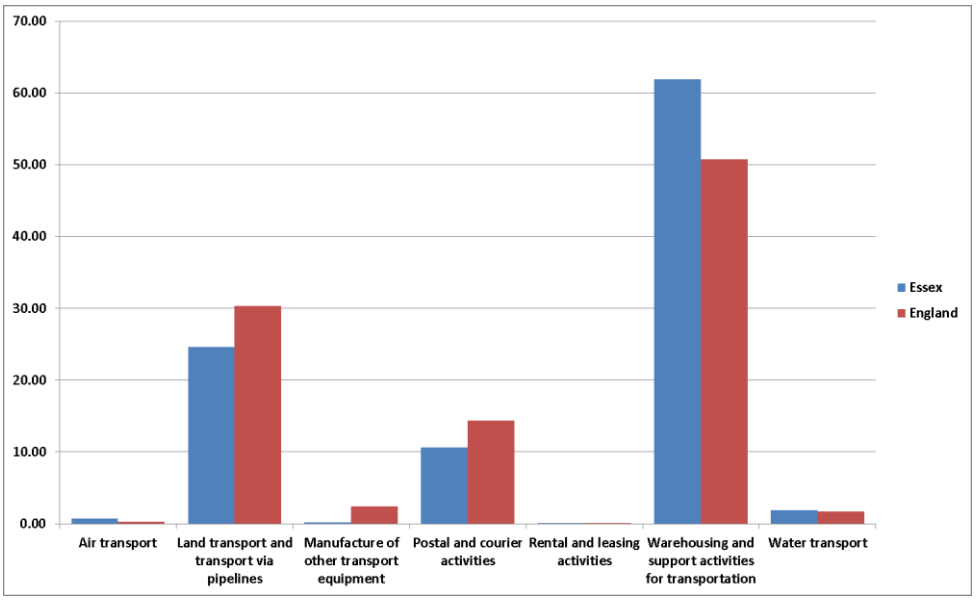
Top Ten Essex Ports and Logistics Companies

Company Name	District	Principal Activity Description	Number of Employees (includes derived)	Total Sales (includes derived) (£m)
INCHCAPE SHIPPING SERVICES HOLDINGS LTD	Thurrock	Sea and coastal water transport	3568	302
DSV ROAD LIMITED	Tendring	Freight transport by road	976	187
WALON LIMITED	Thurrock	Freight transport by road	921	102
PORT OF TILBURY LONDON LIMITED	Thurrock	Other supporting water transport	506	79
DSV SOLUTIONS LIMITED	Tendring	Freight transport by road	305	34
TILBURY CONTAINER SERVICES LIMITED	Thurrock	Cargo handling	203	33
THE BOOK SERVICE LIMITED	Tendring	Storage and warehousing	397	33
NUSTAR TERMINALS LIMITED	Thurrock	Storage and warehousing	204	31
LONDON CITY BOND LIMITED	Thurrock	Storage and warehousing	268	29
HARWICH INTERNATIONAL PORT LIMITED	Tendring	Sea and coastal water transport	247	19

Source: Essex Sector Propositions: Ports and Logistics, 2012 MEL Research for INVEST Essex (Data sourced from Experian and NOMIS BRES)

2.10. Two key sub-sectors account for over 85% of the overall sector in Essex (Mel, op. cit.): warehousing and support activities for transportation (including warehousing, storage and cargo handling for water, land and air transport) and land transport / transport via pipeline (See Graph).

Ports and Logistics Sub Sectors 2010 (%)



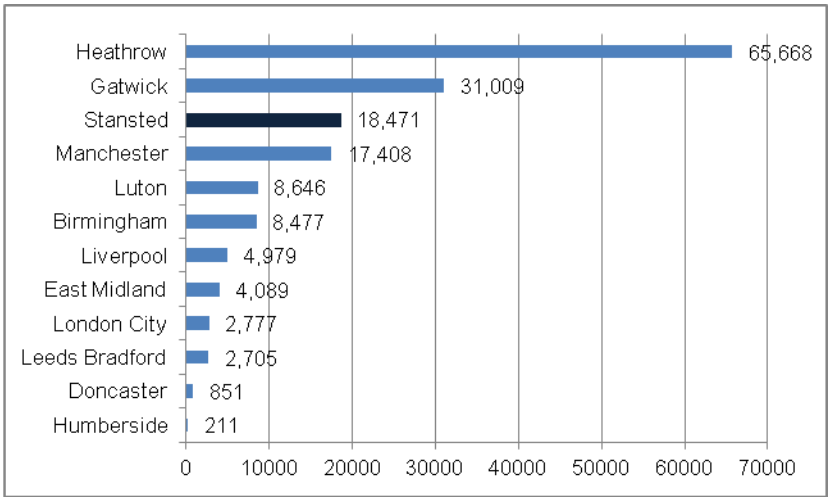
[18] Essex Sector Propositions: Ports and Logistics, 2012, MEL Research for INVEST Essex

Source: Essex Sector Propositions: Ports and Logistics, 2012 MEL Research for INVEST Essex (Data sourced from Experian and NOMIS BRES)

2.11. Work published in 2010[19] notes that Essex has more ports and logistic businesses than any other county in the East of England and any county bordering London. It highlights that clusters of companies are located in Thurrock, Stansted and Harwich and along the A120.

2.12. Airports are recognised[20] as having considerable social and economic impacts on their surrounding areas. Stansted provides the infrastructure to support growth as well as being an economic entity in its own right. It is the third busiest UK airport in terms of passengers (See chart and table) with 18.4m passengers (2010) handling 11.1% of the traffic at major airports.

Country of Residence and Journey Purpose of terminal passengers at the 2010 survey airports ('000s passengers)



Source: CAA Passenger Survey Report 2010

2.13. Stansted handles a high proportion of foreign leisure passengers.

Country of Residence and Journey Purpose of terminal passengers at the 2010 survey airports ('000s passengers)

	Business				Leisure					
	UK		Foreign		UK		Foreign		Total	
	000's	%	000's	%	000's	%	000's	%	000's	%
Total	**19,518**	**11.8**	**17,519**	**10.6**	**80,981**	**49**	**47,272**	**28.6**	**165,290**	**100**
Heathrow	8,441	12.9	11,357	17.3	18,969	28.9	26,901	41	65,668	100
Gatwick	2,918	9.4	1,591	5.1	20,287	65.4	6,213	20	31,009	100
Stansted	**1,721**	**9.3**	**1,320**	**7.1**	**8,906**	**48.2**	**6,523**	**35.3**	**18,471**	**100**
Manchester	2,140	12.3	974	5.6	12,128	69.7	2,166	12.4	17,408	100
Luton	1,194	13.8	444	5.1	4,893	56.6	2,114	24.4	8,646	100
Birmingham	1,202	14.2	575	6.8	5,626	66.4	1,074	12.7	8,477	100
Liverpool	350	7	165	3.3	3,595	72.2	870	17.5	4,979	100
East Midland	265	6.5	79	1.9	3,270	80	474	11.6	4,089	100
London City	865	31.2	887	31.9	504	18.1	521	18.8	2,777	100
Leeds Bradford	343	12.7	114	4.2	1,974	73	274	10.1	2,705	100
Doncaster	15	1.8	7	0.9	696	81.8	132	15.5	851	100
Humberside	64	30.3	4	1.8	134	63.2	10	4.6	211	100

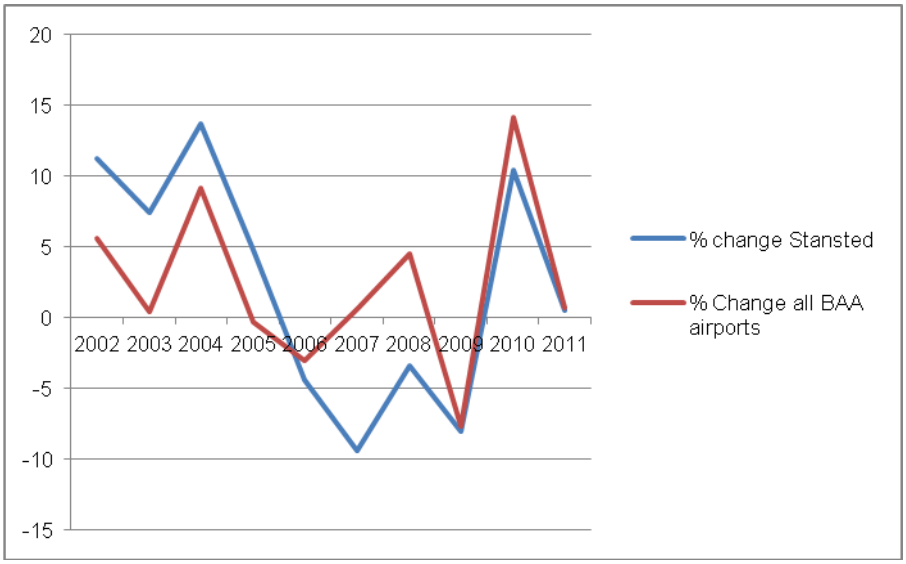
[19] Essex Ports and Logistics Sector, Essex County Council, Sector Summary 2010

[20] The Social and Economic Impact of Airports in Europe, York Aviation for ACI Europe 2004

Source: CAA Passenger Survey Report 2010

2.14. Stansted employs 10,200 staff (1,420 are BAA employees), makes an economic contribution of £400 million a year and handles over 204,000 tonnes of air cargo (12 months to March 2012)[21]. It has recovered from a decline in 2006 to 2008 which was more marked than the national picture (See Chart). Between 2002 and 2001 cargo increased from 186,000 tonnes to 204,000.

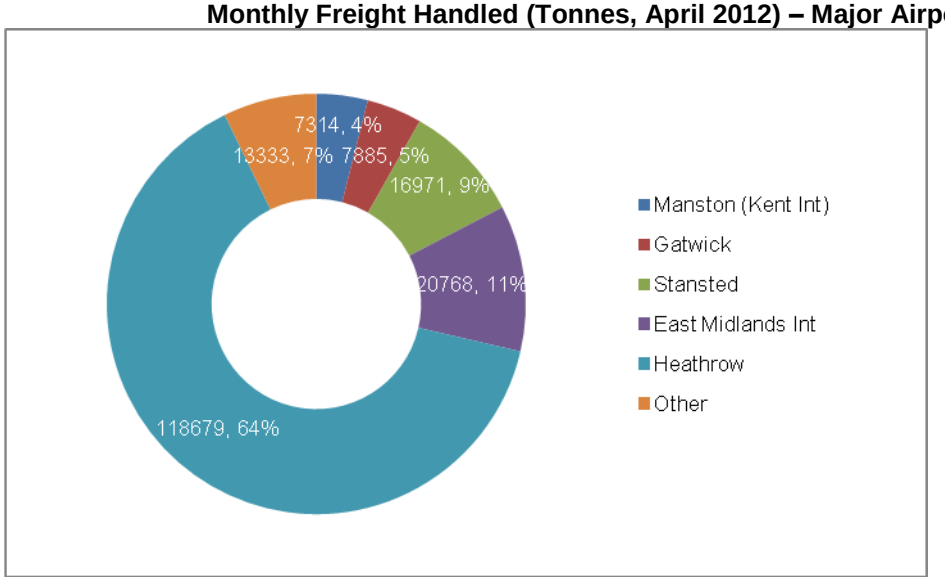
Percentage Change in Volumes of Freight (Tonnes) Handles 2002-2011



Source: CAA.

2.15. The following chart shows that in April 2012 Stansted handled the third most freight in the UK accounting for 9% of all traffic and some distance behind Heathrow.

Monthly Freight Handled (Tonnes, April 2012) – Major Airports



Source: CAA.

2.16. Of particular significance for this sector is the investment at London Gateway. This will be the UK's first 21st Century major deep-sea container port and Europe's largest logistics park. It will offer deep-sea shipping access allowing businesses to reach the largest consumer markets in the

[21] http://www.stanstedairport.com/about-us/stansted-facts-and-figures

UK. The port will be the most efficient in the country, adding an additional 3.5million TEU (standard twenty foot equivalent cargo units (containers) to the nation's port capacity).

2.17. In addition to a major deep sea port, London Gateway will integrate with Europe's largest logistics park offering individual units up to, and in excess of, one million square feet. Offering so called PortCentric logistics the location of the port will ensure trade does not have to travel far, reducing the associated road miles, costs and vehicle emissions.

2.18. The Mel sector study (op. cit.) notes that Essex is an ideal place to locate a Ports and Logistics business. It points to strong government and local partner support for the sector combined with access to a large pool of skilled labour and cutting edge research and development including Essex's National Skills Academy for Logistics. The study stresses the "*superb transport infrastructure formed around the four key 'pivot points' of London Stansted airport; the port of Tilbury; Harwich International Port; and the M25 and M11 motorways*". It claims the sector offers a strong strategic location from which to access European markets and an ideal location for international businesses looking for a headquarters from which to manage UK or European operations.

Renewable Energy/Low Carbon Technologies

Low Carbon Environmental Goods and Services (2010/11): East and UK

		LCEGS Regional Sales 2010/ 11			Employment 2010/ 11		
		East (£m)	UK (£m)	% UK Sales	East	UK	% UK Empt.
Environmental	Air Pollution	116	1,018	11	1,004	9,466	11
	Contaminated Land	123	990	12	963	8,504	11
	Environmental Consultancy	56	821	7	513	7,313	7
	Environmental Monitoring	20	166	12	148	1,491	10
	Marine Pollution Control	9	133	7	79	1,055	7
	Noise and Vibrator Control	23	229	10	184	1,994	9
	Recovery and Recycling	1,101	7,174	15	8,537	56,309	15
	Waste Management	466	5,210	9	4,102	44,827	9
	Water Supply / Waste Water Treatment	595	8,373	7	5,106	72,932	7
Low Carbon	Addition Energy Sources	152	1,347	11	1,185	11,320	10
	Alternative Fuel Vehicle	1,799	13,430	13	13,293	104,453	13
	Alternative Fuels	2,174	18,107	12	15,107	143,422	11
	Nuclear Power	420	3,873	11	3,782	35,910	11
	Building Technologies	1,217	14,794	8	9,173	112,634	8
	Carbon Capture and Storage	79	515	15	569	4,685	12
	Carbon Finance	25	6,319	0	109	24,487	0
	Energy Management	185	2,812	7	1,531	23,333	7
Renewables	Biomass	578	5,728	10	4,941	48,994	10
	Geothermal	1,008	10,701	9	7,508	81,417	9
	Hydro	54	544	10	485	5,100	10
	Photovoltaic	358	5,315	7	2,698	40,398	7
	Renewable Consulting	51	520	10	478	4,856	10
	Wave and Tidal	10	86	12	65	570	11
	Wind	846	14,017	6	5,325	94,157	6
	Total	11,465	122,222	9	86,885	939,627	9
	Total (%)	9	100		9		

Source: Low Carbon Environmental Goods and Services (LCEGS), BIS, May 2012

2.19. BIS estimates that Low Carbon Environmental Goods and Services in the East are worth around £11.5 billion – some 9% of the UK market employing some 87,000 people. The sector is made up of three broad market groups comprising environmental protection; clean technologies and processes including renewable energy and resource efficiency including recycling. Environmental Technologies is a developing sector that includes companies that have been created specifically to serve this market as well as companies from more traditionally defined

sectors (e.g. manufacturing) that are diversifying to take advantage of new opportunities. As such there is no exact boundary around the sector. It includes a range of businesses including the manufacture of pesticides & agrochemicals; offshore wind farms; activities associated with refuse and sewage treatment and disposal; recycling of a range of materials and industrial cleaning.

2.20. Environmental Technologies is a growing part of Essex's economy. The following table indicates there are around 650 Environmental Technologies businesses across the county employing around 8,550 people. The sector accounts for just under 1.5% of all jobs in Essex; marginally higher than the national average. The MEL sector study notes that the highest numbers of firms operating in Environmental Technologies are located in Southend, Chelmsford, Basildon and Colchester. In terms of numbers of jobs, Chelmsford is the key location for employment in Environmental Technologies followed closely by Harlow and Uttlesford; both of the latter two areas are characterised by small numbers of larger companies.

Essex Environmental Technology Firms 2011 & Employees (2010)

District	No. Firms	Employees
Basildon	72	713
Braintree	36	533
Brentwood	28	277
Castle Point	35	89
Chelmsford	81	1,348
Colchester	61	741
Epping	25	683
Harlow	29	900
Maldon	33	396
Rochford	25	212
Tendring	25	573
Uttlesford	44	524
Southend	117	710
Thurrock	48	855
Essex	649	8,554

Source: Essex Sector Propositions: Environmental Technologies, 2012 (Data sourced from Experian and NOMIS BRES)

2.21. The top ten Environmental Technologies[22] companies are illustrated in the table. The spread of companies geographically is noticeable as is the large proportion of industrial cleaning companies.

Top Ten Essex Environmental Technology Employers

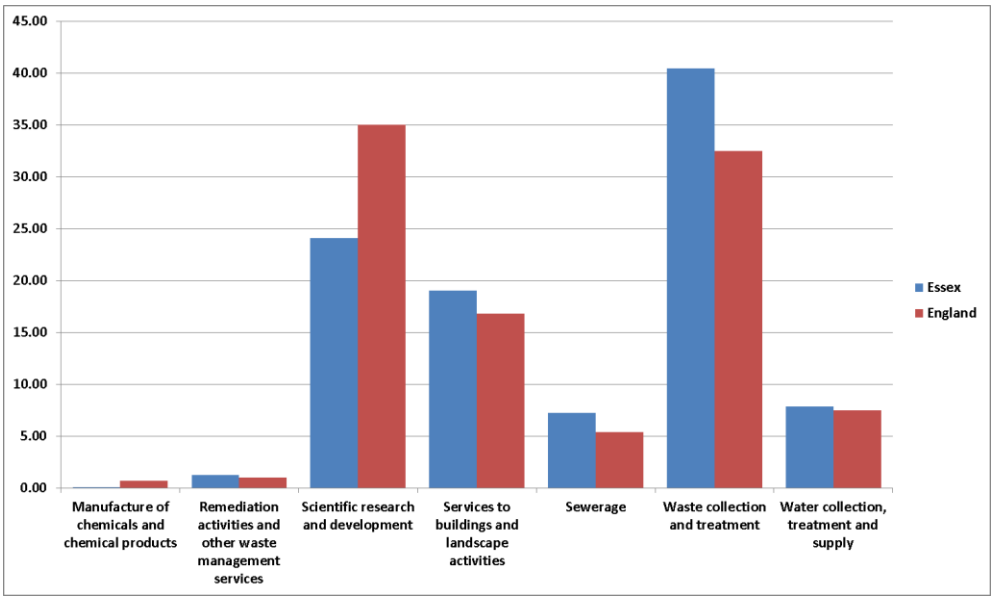
Company Name	District	Principal Activity Description	Number of Employees (includes derived)	Total Sales (includes derived) (£m)
LCC HOLDINGS LIMITED	Brentwood	Industrial cleaning	1203	11
LCC SUPPORT SERVICES LIMITED	Brentwood	Industrial cleaning	1203	11
MONTHIND HOLDINGS LIMITED	Colchester	Industrial cleaning	876	8
CITY & ESSEX LIMITED	Southend	Industrial cleaning	500	13
3 WAY CLEANING LIMITED	Thurrock	Industrial cleaning	248	6
MATT HYGIENE LTD	Brentwood	Industrial cleaning	150	4
ARGENTA DISCOVERY 2009 LTD	Harlow	Research and Development (nat sciences/eng'g)	140	14
ILLUMINA CAMBRIDGE LIMITED	Uttlesford	Research and Development (nat sciences/eng'g)	134	98
CLASSIC CLEANING SERVICES LTD	Harlow	Industrial cleaning	120	3
NATIONWIDE METAL RECYCLING LTD	Epping Forest	Recycling of metal waste and scrap	117	6

[22] Not all renewables & low carbon businesses are included as the MEL Research focuses on the Environmental Sector.

Source: Essex Sector Propositions: Environmental Technologies, 2012 (Data sourced from Experian)

2.22. The county has particular sub-sectoral strengths in waste collection and treatment, and scientific research and development (See Graph).

Environmental Technologies Sub-Sectors 2010 (%)



Source: Essex Sector Propositions: Environmental Technologies, 2012 (Data sourced from Experian and NOMIS BRES)

2.23. Despite a generally uncertain economic outlook in the short to medium term, the Environmental Technologies sector's longer term prospects look encouraging. New legislation and a general shift towards more sustainable modes of production, development and consumption in the UK are key reasons why the county offers a competitive location for investment. The sector has strong support from local universities and colleges, including research carried out at Essex Sustainability Institute.

2.24. Essex is set to become a global focal point for offshore wind energy in the Thames Estuary and major projects such as the Thames Gateway Sustainable Industries Park (SIP) are helping to reinforce the sector's presence. MEL Research (op. cit.) note that "*Essex offers unique advantage for offshore wind due to the proximity of its deep-water ports to the planned offshore wind farms, a well-established manufacturing economy, a mature port and logistics industry and access to a wide skills base*". The SIP will contain the UK's largest concentration of environmental technology companies focusing on the following key sub-sectors: recycling and reprocessing facilities, waste-to-energy and combined heat and power schemes and renewable energy techniques.

2.25. With the strength of its infrastructure, strategic location and international reach Essex offers an attractive proposition for the growth Environmental Technologies.

Health and Care Economy

2.26. One of the impacts of an ageing population is that older consumers will generate considerable demand for health and social care goods and services. UKCES note that *"healthcare appears to be a sector where ICT and other developing technologies may make a particular impact. There is likely to be a shift towards more technicians in the sector, or retrained existing practitioners, to use and implement new technologies*"[23]. The report notes a shift in focus from the treatment of

[23] Horizon Scanning and Scenario Building: Scenarios for Skills 2020, A report for the National Strategic Skills Audit for England 2010, March 2010

sickness to high technology health promotion and preventive care with emphasis on greater personal responsibility. Within the NHS there is continued pressure for efficiency and performance gains and improved and there will be greater private sector delivery of publicly financed health services.

2.27. There are almost 3000 health registered enterprises in Essex County. This is more than any other Eastern Region County/Area.

UK VAT and/or PAYE Based Enterprises in Health in 2011

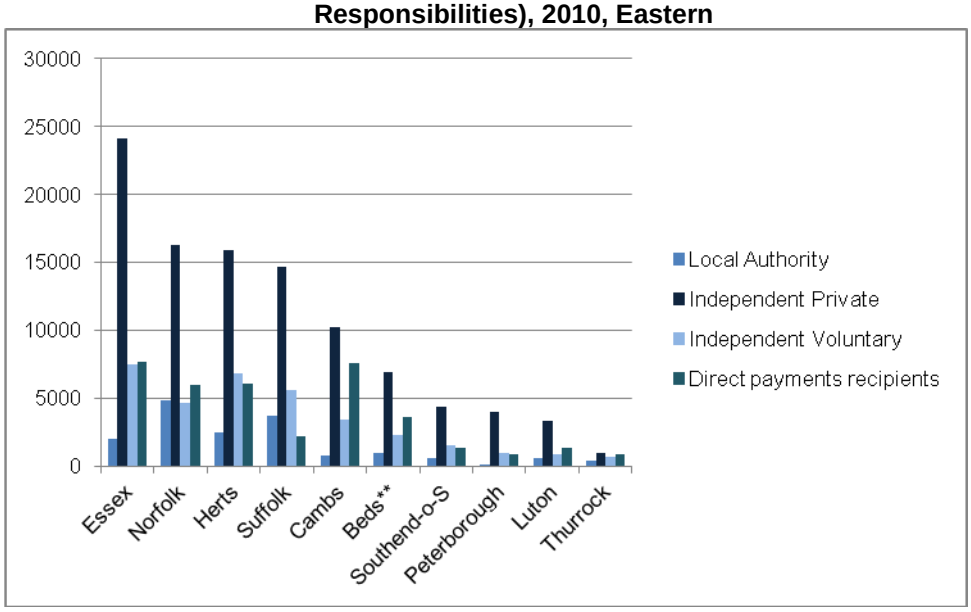
	Health	Total
ENGLAND	121785	2161190
EAST	12535	249990
Bedford UA	420	6490
Central Bedfordshire UA	460	11295
Luton UA	395	5555
Peterborough UA	375	6420
Southend-on-Sea UA	**420**	**6300**
Thurrock UA	**240**	**4875**
Cambridgeshire County	1260	28390
Essex County	**2960**	**60330**
Basildon	*320*	*6590*
Braintree	*290*	*6615*
Brentwood	*180*	*3830*
Castle Point	*125*	*2950*
Chelmsford	*390*	*7690*
Colchester	*470*	*7230*
Epping Forest	*250*	*6615*
Harlow	*170*	*2730*
Maldon	*125*	*3185*
Rochford	*125*	*3200*
Tendring	*340*	*4680*
Uttlesford	*175*	*5015*
Hertfordshire County	2350	54005
Norfolk County	1895	34975
Suffolk County	1760	31355

Source: ONS, IDBR, 2011

2.28. The sector is a substantial employer in Essex (See next Graph and Table). In addition to over 22,000 NHS employees the sector employs some 41,200 in Essex alone and includes the region's largest independent social care sector. The county contains a very vibrant private independent care sector representing almost a quarter of all regional jobs. It also has the highest number of direct payment recipients (those in receipt of these payments may be carers or service users ie they purchase a range of care services[24]).

[24] At the national level 69% were service users and (31%) were carers.

Adult social care jobs by sector and CSSR (Council with Social Service Responsibilities), 2010, Eastern



Establishment type	England	Eastern	CSSR area									
			Beds**	Cambs	Essex	Herts	Luton	Norfolk	Peterborough	Southend-o-S	Suffolk	Thurrock
Local Authority	202200	16500	1000	800	**2000**	2500	600	4800	100	**600**	3700	**400**
Independent	1137300	135400	9200	13700	**31500**	22700	4300	20900	5100	**5900**	20300	**1800**
Private	811400	100900	6900	10200	**24100**	15900	3300	16300	4000	**4400**	14700	**1000**
Voluntary	325800	34500	2300	3400	**7500**	6800	900	4600	1000	**1500**	5600	**700**
NHS	73600	7100	*	*	*	*	*	*	*	*	*	*
Direct payments recipients	355000	37700	3600	7600	**7700**	6100	1300	6000	900	**1300**	2200	**900**
Total		196700	13900	22000	**41200**	31300	6200	31800	6000	**7700**	26300	**3100**

Source: Graph and Table from Skills for Care estimates using various sources contain with "*The size and structure of the adult social care sector and workforce in England 2011*"

2.29. The health and care sector has a considerable direct and indirect effect on the local economy. Carehome.co.uk list the following care sector assets in Essex:

- 127 suppliers of products and services (from medical technology and mobility equipment to specialist services and training);
- 504 local authority, NHS, private and voluntary sector care homes covering all major care categories.
- 21 hospitals and hospices and a number of significant care home groups and associations.

2.30. Looking at NHS statistics Essex Hospitals and Community Health Services (See Table) employ almost 23,000 staff. They account for more than a quarter of the regional total and have experienced slight growth in recent years compared to a national dip in numbers.

Staff Totals by Strategic Health Authority and Organisation – FTE Headcount

	01 September 2009	01 April 2012	% Change
East of England Strategic Health Authority	**94341**	**92759**	**-1.71%**
Basildon & Thurrock Uni. Hospitals NHS Foundation Trust	3585	3711	
Central Essex Community Services	.	892	
Colchester Hospital University NHS Foundation Trust	3001	3546	
Mid Essex Hospital Services NHS Trust	3216	3401	
Mid Essex PCT	984	140	
North East Essex PCT	1277	150	
North Essex Partnership NHS Foundation Trust	1755	1786	
South East Essex PCT	836	224	
South Essex Partnership University NHS Foundation Trust	1810	4188	
South West Essex PCT	1690	187	
Southend University Hospital NHS Foundation Trust	3690	3823	
West Essex PCT	947	849	
Essex Hospitals and Community Health Service Total	**22791**	**22896**	**0.46%**

Source: NHS Hospital & Community Health Service (HCHS) monthly workforce statistics

2.31. As is the case across the UK the demand for adult social care is projected to increase rapidly due to the ageing population. The size of the adult social care workforce will have to increase significantly to meet this demand and this will have a positive effect on associated care provision and related specialist products and services.

3. ENTERPRISE AND INNOVATION

This section looks at the business make-up of the County's economy, reflecting on enterprise dynamics, innovation and productivity.

Business Structure (Size and Make Up)

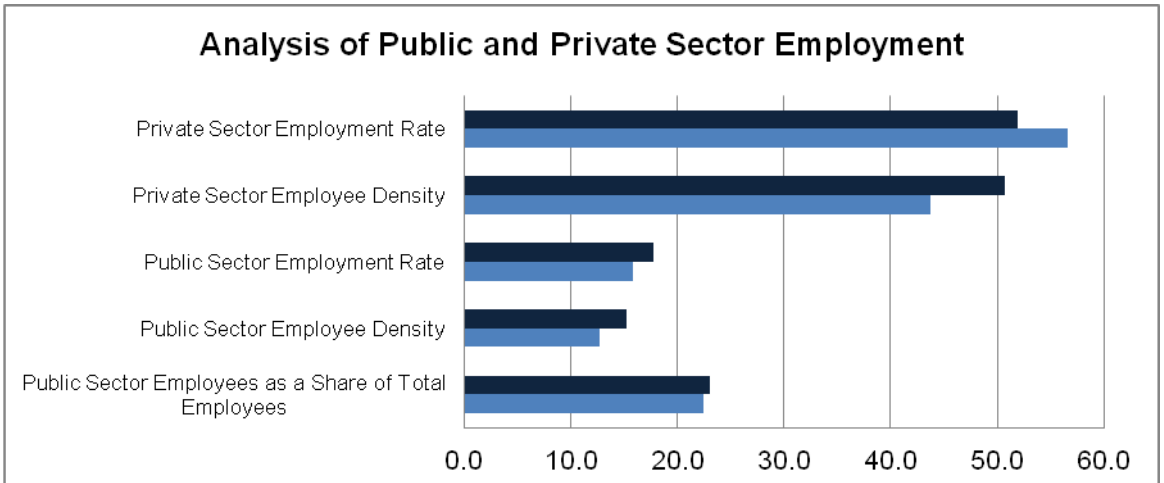
3.32. There were almost 52,000 enterprises in Essex in 2011. Their industrial make up broadly reflects the regional and national pattern. The one notable exception is construction which is 5 and 3 percentage points larger than England and the region respectively. The top two sectors (construction and professional and, scientific and technical) account for one third of all enterprises.

VAT and/or PAYE based enterprises by Industry (2011)

Region	England	East	Essex	Eng. (%)	East (%)	Essex (%)
Construction	223,355	32,040	9,420	13	15	18
Professional scientific & technical	294,200	32,640	7,650	17	15	15
Retail	158,520	16,815	3,920	9	8	8
Business admin. & support services	124,130	15,150	3,810	7	7	7
Production	112480	14,005	3,665	6	7	7
Information & communication	135,915	15,590	3,380	8	7	7
Arts ent. recreation & other services	125780	14,060	3,250	7	7	6
Wholesale	91,535	10,970	2,740	5	5	5
Accommodation & food services	104,355	11,010	2,450	6	5	5
Agriculture forestry & fishing	91,975	11,445	2,080	5	5	4
Transport & storage (inc. postal)	55,965	7,440	1,975	3	4	4
Property	65,775	7,165	1,835	4	3	4
Health	70,840	7,575	1,780	4	4	3
Motor trades	56570	7,370	1,770	3	3	3
Finance & insurance	38,765	3,825	1,005	2	2	2
Education	28,075	3,270	750	2	2	1
Public administration and defence	2,590	475	120	0	0	0
Total businesses	**1,780,825**	**210,845**	**51m600**			

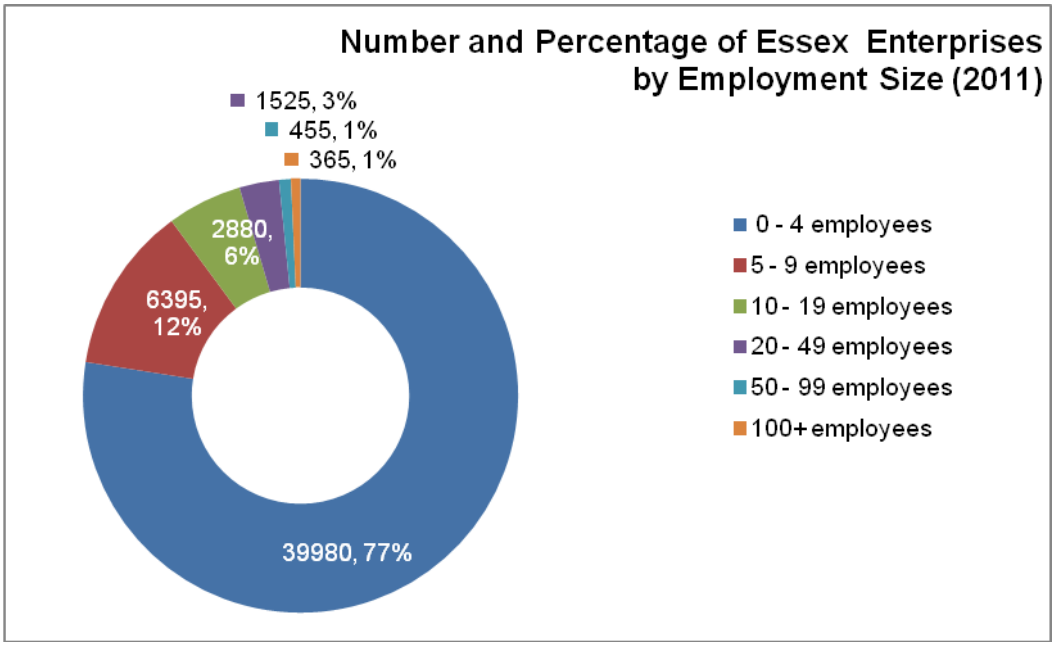
Source: Insight Essex, ONS

3.33. In terms of public and private sector employment Essex is below the UK average for public sector employment (in terms of its overall share, density and rate) and above average in terms of private sector employment density and rate.



	Public Sector Employees as a Share of Total Employees	Public Sector Employee Density	Public Sector Employment Rate	Private Sector Employee Density	Private Sector Employment Rate
UK	23.0	15.2	17.7	50.7	51.9
Essex	22.5	12.7	15.8	43.7	56.6

3.34. Looking at the size of local enterprises, like the UK and the region the vast majority of Essex business are micro businesses. Nine in every ten businesses has less than ten employees and there are over 46,000 of these. One percent of businesses employ over 100 people – there are 365 such enterprises in Essex (a manageable number from an account management perspective).



Source: Insight Essex, ONS

Enterprise Dynamics and Industrial Specialisation

3.35. Essex has a reputation for its entrepreneurship and the large number of SMEs which operate in the county. That said it has become harder to set up a business and the numbers of business start-ups have reduced, from almost 7,000 in 2007 to under 6,000 in 2010. Failures have increased too, from almost 6,000 in 2008 to just over 7,000 in 2010 (see table). The net effect is a deterioration in the overall volume of start-ups (net difference) and the registration rate per 1000 working age population. One and two year business survival rates are broadly comparable with

the regional and national levels. Essex business survival rates for 2008 businesses for one year were 92.3% and 74.2% for two years.

Business Start-Up Statistics

Area	England		East		Essex	
Year	2007	2010	2007	2010	2007	2010
Number - Registrations	246,700	207,520	27,600	22,580	6,880	5,875
Number - Closures	199,300	261,880	22,065	27,915	5,690	7,170
Net Difference: Registrations minus Closures	47,400	-54,360	-5,535	-5,335	-1,190	-1,295
Registration Rate per 1000 working age pop.	7	6	7	6	8	7
Closure Rate per 1000 working age population	6	8	6	8	6	8

Source: Insight East

3.36. The following table shows those sub-sectors which are important locally. Location quotients illustrate the geographical concentration of activity in particular areas compared to the national average. Trends over time are also illustrated as well as the absolute number of jobs. Location quotients greater than 1.25 are often a good indicator of export propensity / potential. Many of these sub-sectors are contained with the four priority sectors identified within the Essex EGS.

Industrial Specialisation

	Jobs	LQ GB=100	Change 98-08 (No)	%
Manufacture of office machinery and computers	1 727	470	- 572	-33%
Manufacture of radio, TV and communication equipment	2 857	267	- 905	-32%
Water transport	587	187	118	20%
Manufacture of medical precision and optical instruments	3 619	167	-1 658	-46%
Manufacture of motor vehicles, trailers and semi-trailers	4 887	164	199	4%
Air transport	2 609	151	972	37%
Publishing, publishing and reproduction	7 510	141	-3 444	-46%
Supporting and auxiliary transport activities	12 369	137	4 540	37%
Construction	32 650	132	9 444	29%
Other service activities	8 727	132	2 734	31%
Manufacture of electrical machinery	2 582	131	-1 456	-56%
Manufacture of furniture	3 418	128	-1 318	-39%
Manufacture of wood and products of wood	1 675	125	1	0%
Sale, maintenance and repair of motor vehicles	12 346	121	976	8%
Agriculture, hunting and related service activities	1 649	119	88	5%
Activities auxiliary to financial intermediation	7 330	116	1 340	18%
Research and development	2 517	115	-3 100	-123%
Retail trade, except of motor vehicles and motorcycles	61 824	113	4 485	7%
Collection, purification and distribution of water	643	113	- 285	-44%
Manufacture of fabricated metal products	6 943	112	-1 058	-15%
Renting of machinery and equipment	3 066	107	955	31%
Wholesale trade and commission trade	22 918	105	426	2%
Education	49 353	102	18 203	37%
Post and telecommunications	9 048	102	960	11%
Sewage and refuse disposal	2 334	102	173	7%
Manufacture of coke, petroleum products and nuclear fuel	489	102	317	65%

Source: ABI from NOMIS.

Productivity and Earnings

Headline GVA (£ '000)

	1999	2009	% Change
England	696,458	1,061,973	52%
East of England	71,016	106,888	51%
Essex	18,399	28,260	54%

Source: Nomis, ONS

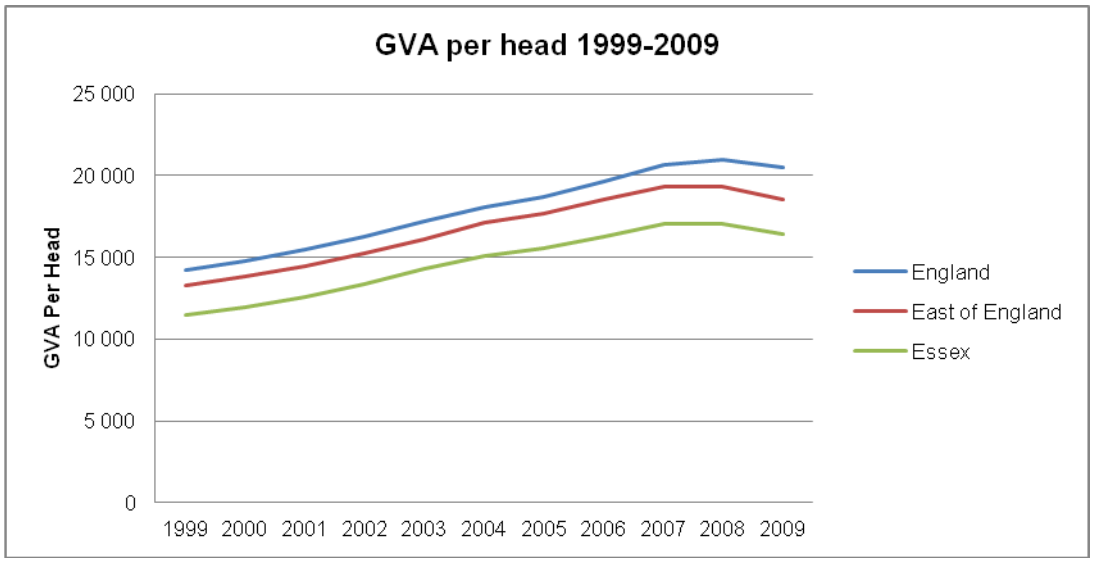
3.37. Essex has a sizeable economy with Gross Value Added (GVA) estimated to be in excess of £28 billion (2009). In absolute terms growth has outperformed England and the region in the decade between 1999 and 2009 (increasing by almost £10 billion over this period).

(Resident) GVA Per Head (£)

	1999	2009	% Change
England	14,204	20,498	44%
East of England	13,302	18,536	39%
Essex	11,518	16,427	43%

Source: Nomis, ONS

3.38. The table illustrates that resident GVA per head is below the regional and national figures though some ground has been gained against the region over a ten year period (1999-2009) and over time it has steady increased with a slight dip following the recession. The Essex LEA (2011) notes that the reason for Essex's poor performance is that many of our resident workforce commute to work in London and generate GVA there (but bring increased spending power back to Essex.) Taking the impact of commuting into account the County Council estimates that GVA is on a par with the regional average. Indeed average resident earnings (2011) in Essex (£29,446) are higher than working population earnings (£26,176)[25]. Essex resident earnings are also noticeably higher than the England or regional averages (£26,615 and £27,996 respectively).



3.39. Looking at the performance of sectors over time there are four sectors that have more than doubled in percentage terms (see Table). Seven sectors have experienced high growth and the

[25] NOMIS, Annual Survey of Hours and Earnings, 2011

rest have experienced more modest increases with the exception of manufacturing which experienced an 8% decline albeit from a high base. Exceptional and high growth industries are shaded dark grey and light grey respectively.

Change in GVA (£'000) by 20 Industries: Essex 1999-2009

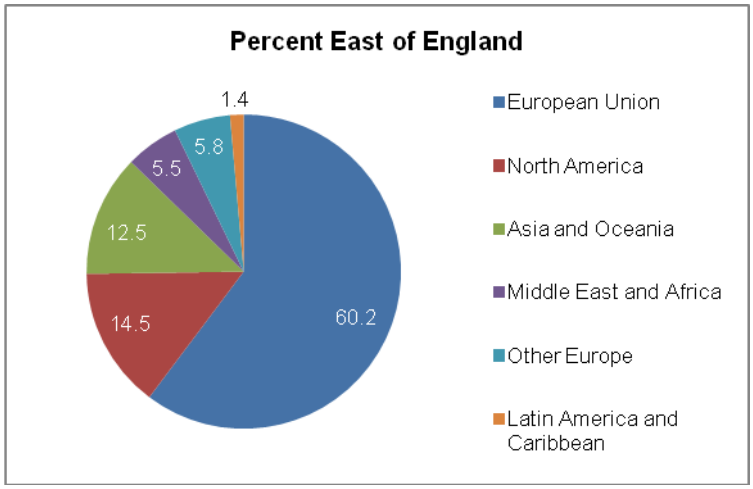
	1999	2009	Change (£)	Change (%)
Human health and social work activities	1 000	2 351	1 351	135%
Activities of households	59	136	77	131%
Water supply; sewerage, waste management	176	405	229	130%
Financial and insurance activities	984	2 263	1 279	130%
Education	925	1 845	920	99%
Administrative and support service activities	660	1 313	653	99%
Construction	1 766	3 054	1 288	73%
Public administration & defence; social security	739	1 260	521	71%
Other service activities	224	375	151	67%
Professional, scientific and technical activities	1 044	1 699	655	63%
Wholesale and retail trade, repair of motor vehicles	2 540	3 855	1 315	52%
Transportation and storage	1 323	1 913	590	45%
Accommodation and food service activities	549	752	203	37%
Real estate activities	1 586	2 126	540	34%
Arts, entertainment and recreation	280	345	65	23%
Information and communication	849	997	148	17%
Mining and quarrying	38	44	6	16%
Electricity, gas, steam and air-conditioning supply	254	277	23	9%
Agriculture, forestry and fishing	243	259	16	7%
Manufacturing	3 142	2 875	- 267	-8%
Total GVA	18 382	28 145	9 763	53%

Source: Nomis, ONS

International Trade

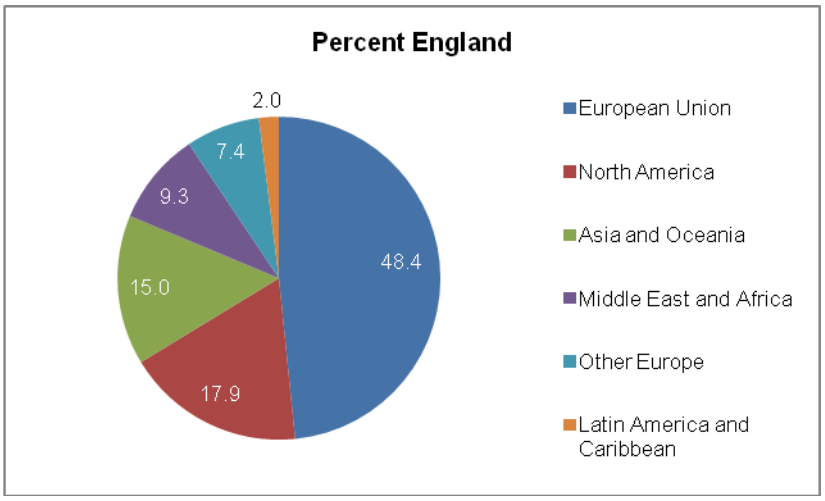
3.40. Reflecting its location European Union makes up 60% of the region's exports good market (12% higher than England). Major investment in ports and logistics has the potential to increase the ability of firms to export further afield in the wake of 'flat' EU GDP predicted growth (see earlier).

Destination of Export Goods 2010 (East)



Source: BIS analysis of information provided by HMRC

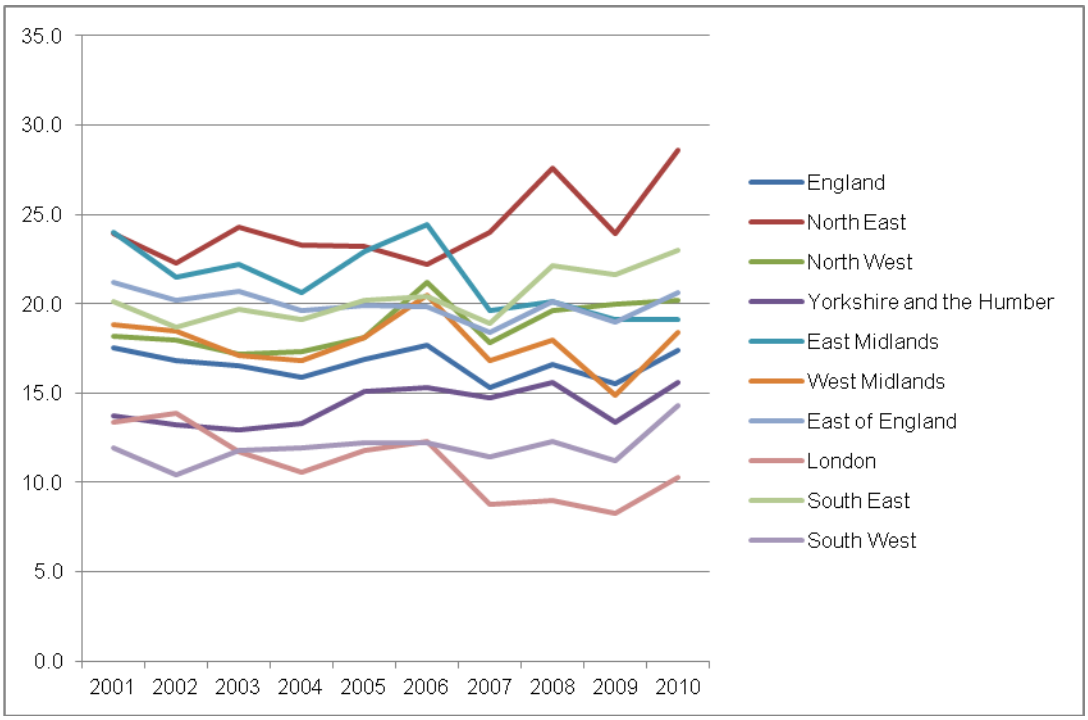
Destination of Export Goods 2010 (England)



Source: BIS analysis of information provided by the Statistics and Analysis of Trade Unit, HM Revenue and Customs

3.41. Looking at the value of exports as a percentage of headline regional GVA between 2001 and 2010 the East deteriorated slightly quicker (from 21.2% to 20.6% a fall of 0.6%) than the national level (from 17.5% to 17.4% 0.1%). That said it still stands at 3.5% ahead of the national position.

Value of Exports of Goods and Services as a percentage of Headline Regional GVA

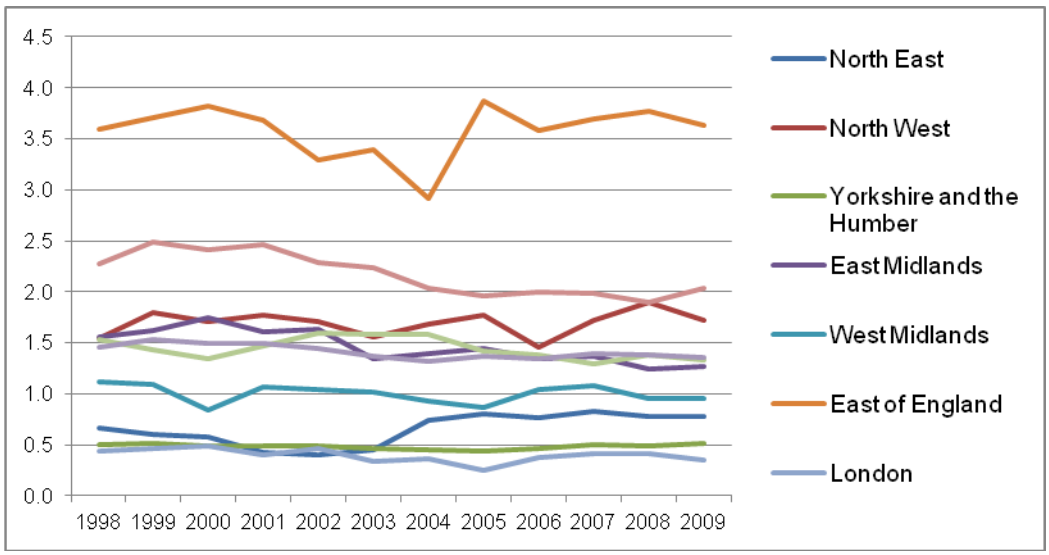


Source: BIS analysis of information provided by the Statistics and Analysis of Trade Unit, HM Revenue and Customs and Regional Gross Value

Innovation

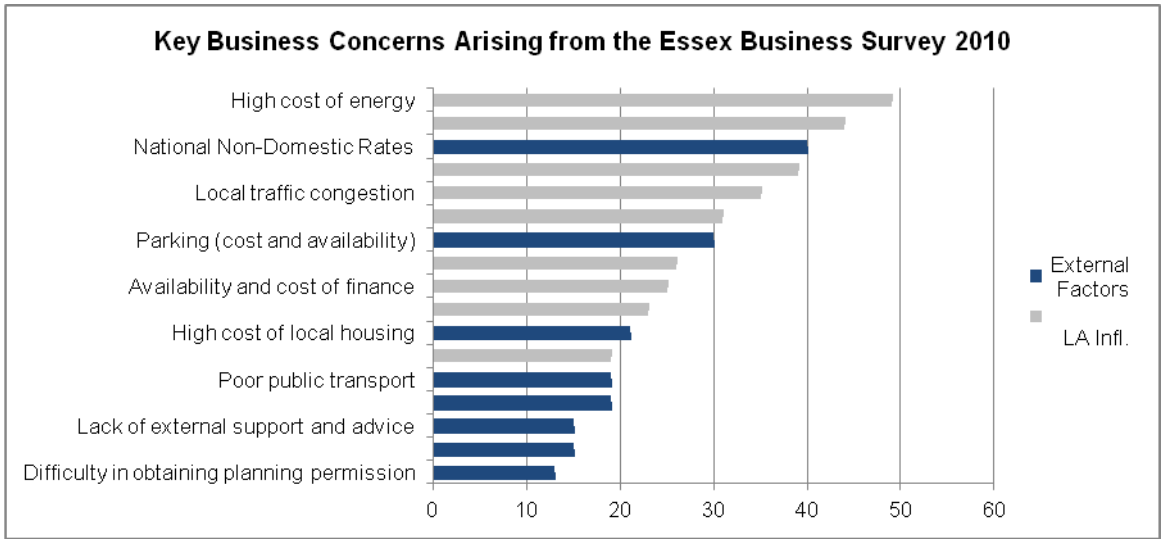
3.42. After the South East the Eastern Region has the highest share of innovation active businesses in the UK at around 40%[26]. Looking at business research and development (R&D) the East of England has more than twice the percentage spend of total workplace based GVA compared the national average - at 3.6% compared to 1.4% nationally (See chart).

Business Enterprise R&D as percentage of total workplace based GVA



Source: Annual Business Inquiry, Office for National Statistics

Business Barriers to Growth



Source: Essex County Council

3.43. The Essex Business Survey 2010 identified locational related factors that are important to businesses. Energy costs (49%), followed by increasing competition (44%) are the factors that are most likely to be impacting on the performance of Essex businesses currently. Two-fifths of Essex-based businesses are also concerned about the impact of business rates (40%) and the low profitability of the sector (39%). Local traffic congestion is impacting the performance of a

[26] First Findings from the UK Innovation Survey, BIS, Science and Innovation Analysis, MAY 2012

third of businesses in Essex (35%). The previous chart illustrates both external factors and those over which the local authority of public sector may have some influence.

3.44. The LEA notes that the high cost of labour is highlighted as a factor by three industries; agriculture and mining (42%), manufacturing (33%) and construction (36%), compared to an average of 26%. The majority of businesses (47%) were fairly satisfied with the area as a location for investment. There was a slight peak in levels of dissatisfaction in the Haven Gateway area (11%; average 7%).

3.45. There was some variation by size band too. Micros (1-4 employees) were more concerned about the limited demand for their products (24%). Businesses with between 5 and 24 employees were more concerned about the impact of business rates. Businesses with 25-99 employees (60%) and those that have been in the area for longest (55% of those in the area for 11+ years) were most likely to cite the high cost of energy as a factor impacting on their business. For larger businesses employing 100 or more staff, local traffic congestion (51%) and exchanges rates (34%) were more likely to be impacting on their businesses.

4. EDUCATION, SKILLS AND EMPLOYMENT

This chapter looks at changing demography and at educational and skills attainment. It also highlights key employment and unemployment patterns and characteristics.

Changing Demography and Dynamics

4.46. Essex's age distribution is slightly different from the national and regional picture, with proportionately more people in the 45-64 and 65+ age ranges (26.6% and 18.1% respectively in Essex, compared with 25.3% and 16.5% in England). This is balanced by less in the 15-34 age range (23.7% in Essex; 26.4% in England). This pattern is likely to continue too. The balance of people of working age to older people is predicted to become more pronounced across all Essex districts over the next 20 years or so (Equality and Diversity, Needs Assessment, 2011). For every person over 65 there will only be 2.4 of working age by 2033, compared with 3.7 now, although more people are likely to be working beyond 65 because they can't afford to retire. This will increase reliance on informal caring arrangements and on social care.

4.47. Although quality of life for most Essex residents is good, 6.8% of Essex residents live in seriously deprived small areas, defined as those in the 20% most deprived nationally (IMD 2010). Essex has some of the most affluent and some of the most deprived areas in the country, with Tendring being the most deprived. Many of the most deprived areas also experience the lowest levels of life expectancy.

Education and Skills

4.48. Essex is comparable with the region in relation to its performance at the end of KS5 in terms of 5+ grades A*-C but when you include English and Maths it is slightly below the regional performance. The total pupil cohort is 15,893 (8,165 boys and 7,728 girls).

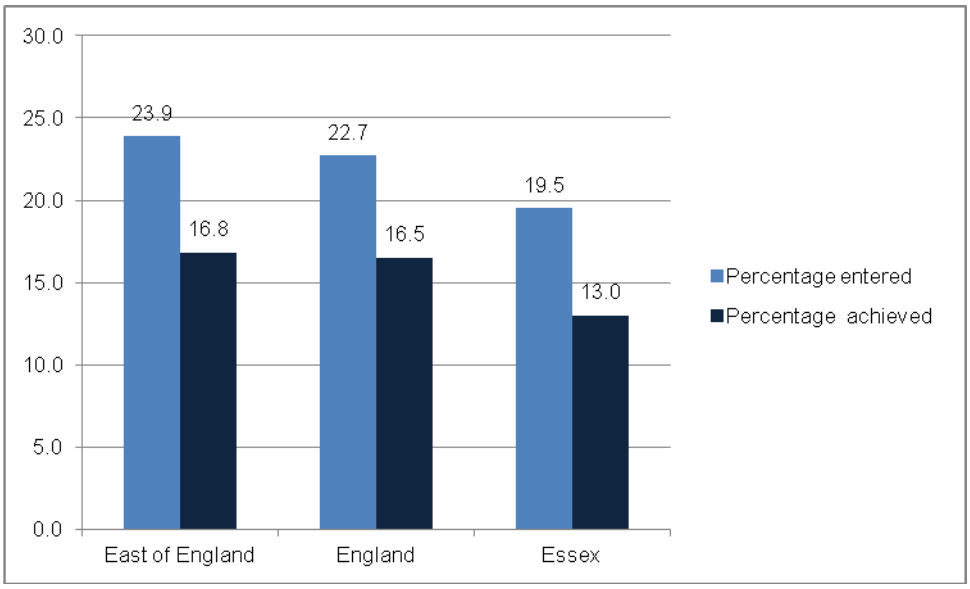
GCSE and equivalent results of pupils at the end of Key Stage 4 by gender for each Local Authority1 and Region

	Number of end of Key Stage 4 pupils			Percentage of pupils at the end of Key Stage 4 achieving at GCSE and equivalents:					
Government Office Region Local Authority				5+A*-C grades			5+ A*-C inc. English & mathematics GCSEs		
	Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total
East of England	**33,053**	**31,628**	**64,681**	**73.7**	**81.5**	**77.5**	**54.8**	**62.8**	**58.7**
Bedford	936	895	1,831	73.4	83.0	78.1	51.7	60.6	56.0
Cambridgeshire	3,003	2,976	5,979	72.9	80.7	76.8	54.5	63.0	58.7
Central Bedfordshire	1,488	1,369	2,857	72.4	80.4	76.2	54.7	63.0	58.7
Essex	**8,165**	**7,728**	**15,893**	**73.8**	**82.8**	**78.2**	**53.7**	**62.2**	**57.8**
Hertfordshire	6,568	6,315	12,883	79.9	86.7	83.2	62.4	71.0	66.6
Luton	1,219	1,194	2,413	79.1	79.6	79.4	55.3	56.3	55.8
Norfolk	4,557	4,353	8,910	66.4	74.7	70.5	51.1	58.9	54.9
Peterborough	1,163	1,129	2,292	75.0	83.6	79.2	44.7	53.0	48.8
Southend-on-Sea	1,080	995	2,075	78.1	84.5	81.2	61.9	68.1	64.9
Suffolk	3,963	3,803	7,766	67.4	77.0	72.1	50.5	58.3	54.4
Thurrock	911	871	1,782	82.8	86.1	84.4	56.2	63.7	59.9
England	**322,213**	**306,992**	**629,205**	**75.5**	**82.7**	**78.8**	**54.6**	**62.2**	**58.3**

Source: DfE: GCSE and Equivalent Results in England - 2010/11 (Provisional)

4.49. There are fewer pupils entering and achieving the English Baccalaureate in Essex than the region or nationally.

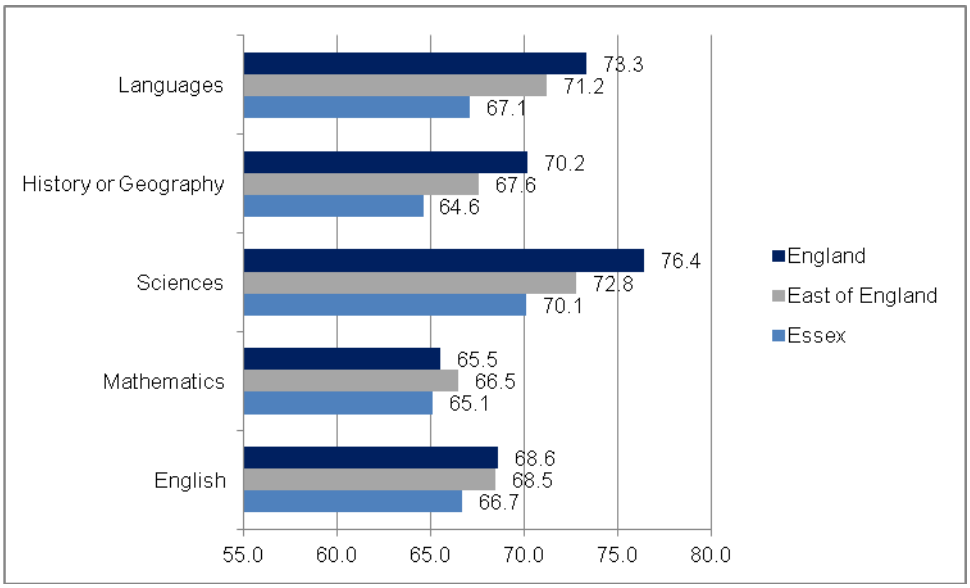
Percentage of Pupils Entered and Achieving the English Baccalaureate



Source: DfE: GCSE and Equivalent Results in England - 2010/11 (Provisional)

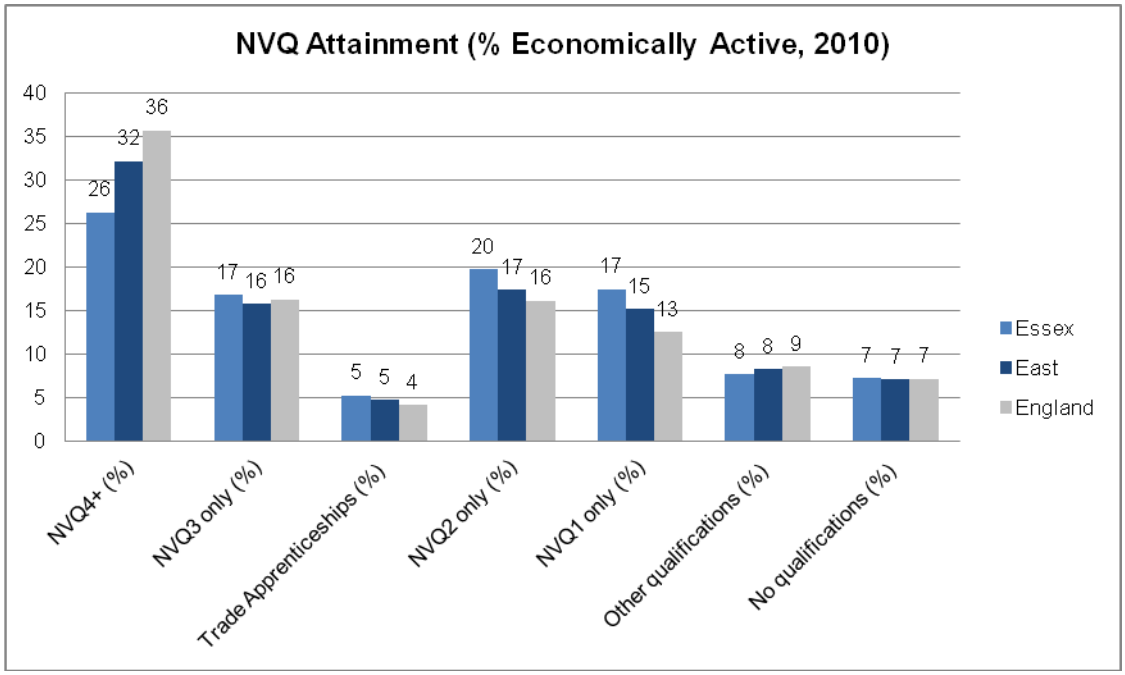
4.50. In terms of the percentage of pupils achieving the components of the English Baccalaureate Essex generally performs 6.2% and 6.3% lower than the national average in terms of Science and Languages.

Percentage of pupils achieving the components of the English Baccalaureate:



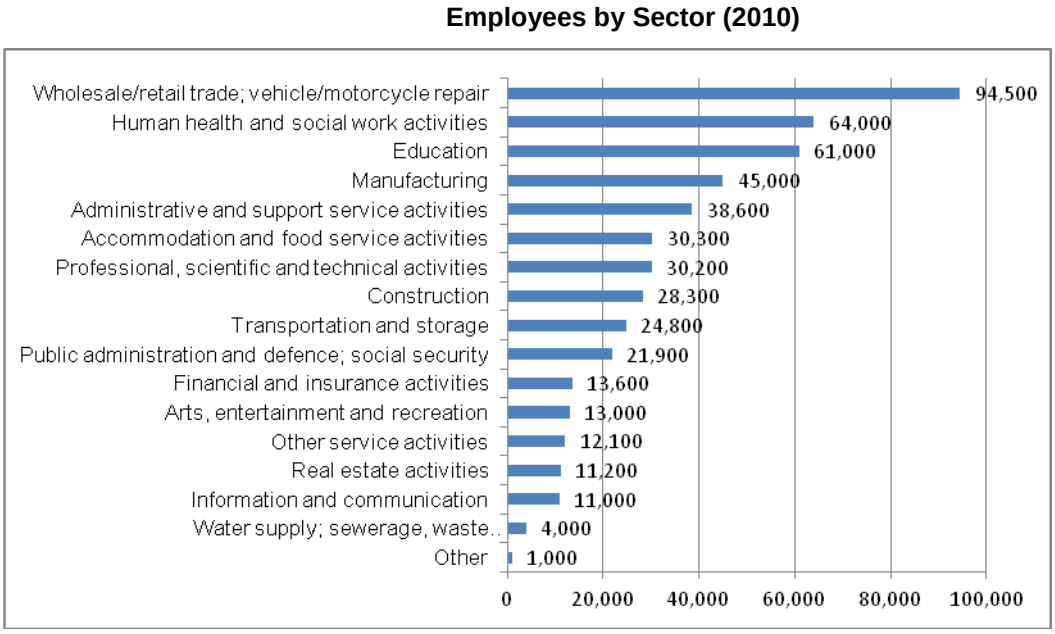
Source: DfE: GCSE and Equivalent Results in England - 2010/11 (Provisional)

4.51. Looking at NVQ attainment (See next chart) it is interesting to note that Essex's attainment levels are skewed towards lower levels. Only just over one quarter of Essex economically active residents have achieved NVQ level 4 or above – a 10 percentage point difference to levels nationally equating to over 70,000 learners. Nearly 53,000 of the working age population do not have qualifications. This may in part be explained by the older working age profile in Essex.



Employment and Unemployment

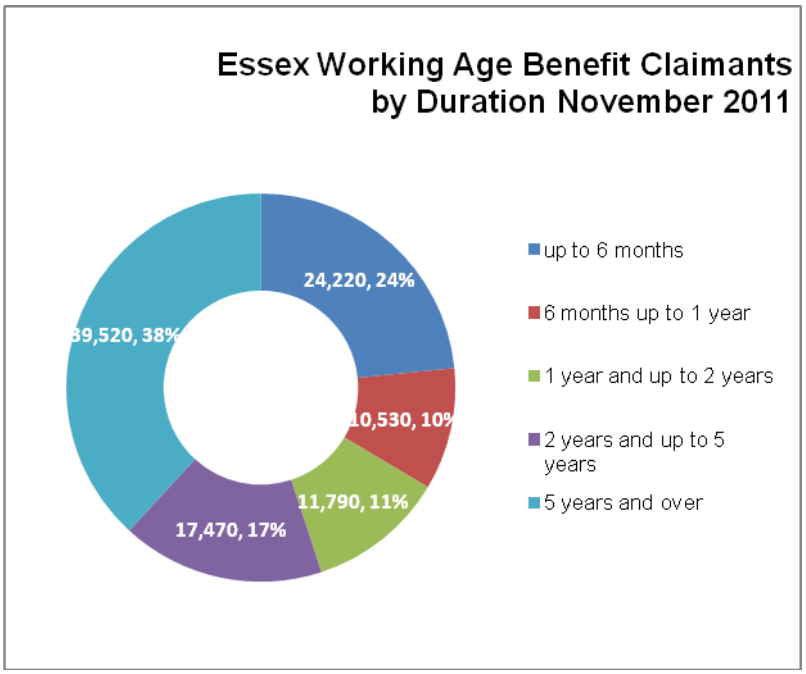
4.52. The following chart illustrates the distribution of employment in key sectors. There are just three sectors employing over 50,000 – wholesale, health and education.



Source: NOMIS, Business Register and Employment Survey, Rounded to Nearest 100

4.53. Looking at the duration of the working age population on benefits there are in excess of 103,000 people in Essex claiming any form of benefit. Two thirds of these have been in receipt on a long term basis (see Chart). The numbers of 'official' youth claimants masks the real extent of those not in education, employment or training. Though showing a slight decline over recent months, over 2,000 16-19 year olds in Essex were not in education, employment or training (NEET) (May

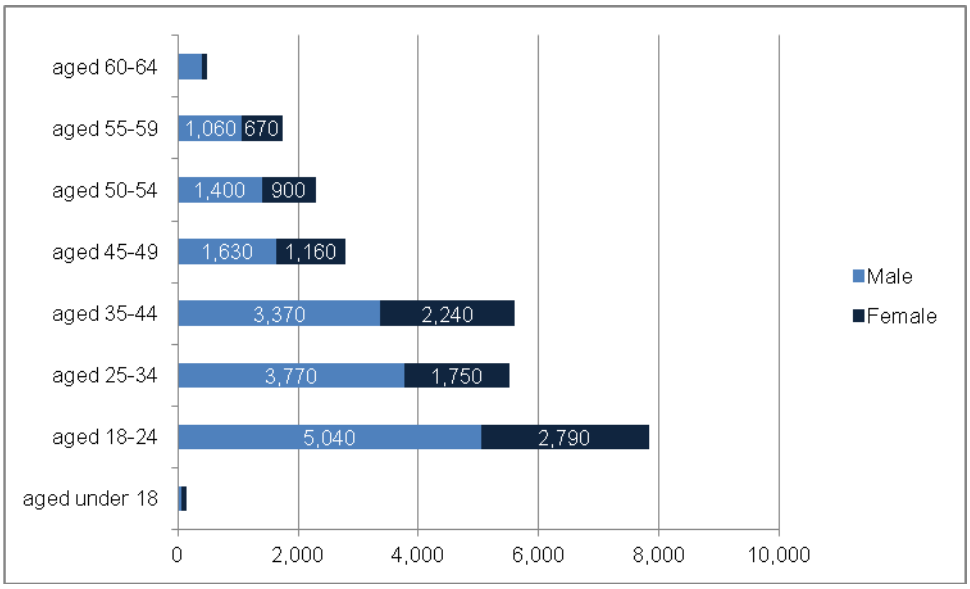
2012)[27]. This is down from 2730 in 2010. That said the EGS notes that the County Council has recorded a large increase in the number of 'Unknowns' too – young people whose status they are not aware of. Unknowns have gone up and remain high compared to previous years.



Source: Nomis, ONS

4.54. In November 2011 there were 26,360 JSA claimants of which two thirds (16,730) were male. 30% (7,960 claimants) of claimants were under 25 (see Chart). This is a national phenomenon and these proportions closely match regional and national patterns.

Essex JSA Claimants by Age and Sex (November 2011)



Source: Nomis, ONS

[27]Essex County Council

4.55. The claimant count has more than doubled in Essex in the last decade – in proportionate terms at a higher level than the region or nationally.

Claimant Count by Gender 2003-2012

	Male	Female	Total
May 2003	9,024	3,679	12,703
May 2004	8,259	3,544	11,803
May 2005	8,667	3,516	12,183
May 2006	9,933	4,127	14,060
May 2007	9,885	4,316	14,201
May 2008	9,018	3,873	12,891
May 2009	21,047	8,184	29,231
May 2010	18,459	7,969	26,428
May 2011	16,457	9,112	25,569
May 2012	17,203	9458	26,661
Essex Increase 2003-12	8,179	5779	13,958
Essex % Increase	90.6	157.1	109.9
East % Increase	75.2	141.2	81.1
England % Increase	51.1	120.6	68.6

Source: Nomis, ONS

5. LOCATIONS FOR GROWTH

This chapter looks at housing, employment, population and retail growth.

Housing Growth

5.56. The following table shows that the number households in the East will grow by 25% outpacing national projections by five percentage points. The number of one person, lone parent and couple households with no other adults are projected to be greater than the national level too.

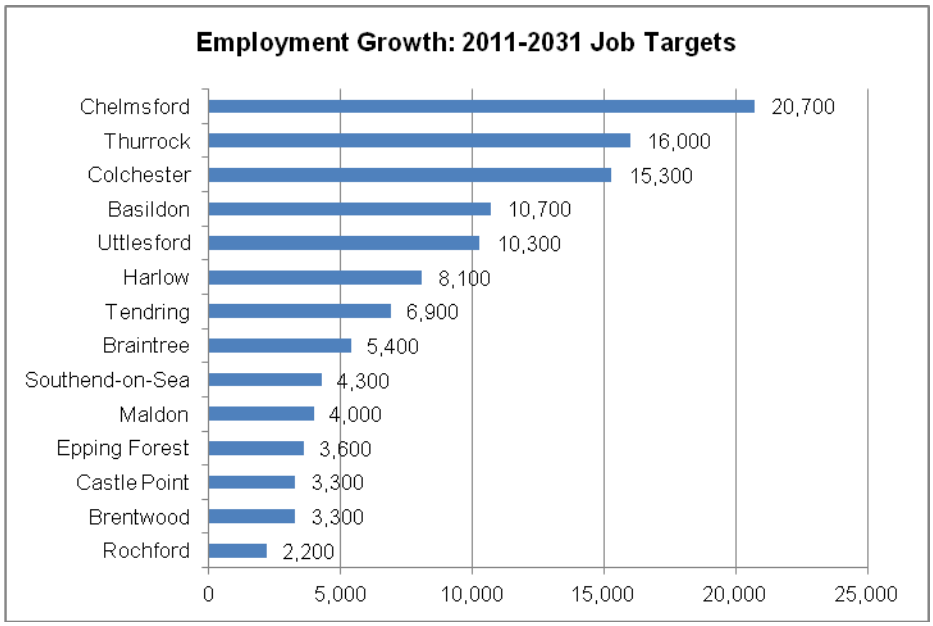
Household Projections by Household Type (England & East), 2013-33 (Thousands unless stated)

Year	One Person Households	Couple Household with no other Adult	A Couple and one or more other adult	A Lone Parent	Other Households	All Households	Private Household Population	Average Household Size (Persons per household)
2013	861	1,220	195	178	111	2,565	5,900	2.3
2018	957	1,285	182	203	109	2,736	6,186	2.3
2023	1,063	1,337	168	228	107	2,903	6,476	2.2
2028	1,165	1,388	156	247	107	3,063	6,743	2.2
2033	1,262	1,432	148	263	107	3,212	6,983	2.2
% Change East	47	17	-24	48	-4	25	18	-6
% Change England	39	11	-21	41	0	20	14	-6

Source: Housing and Planning Statistics 2010, DCLG

Employment Growth

5.57. The next chart shows the recommended job targets for Greater Essex. Of the 114,100 jobs predicted 46% (52,000) are in three locations - Chelmsford, Thurrock and Colchester.

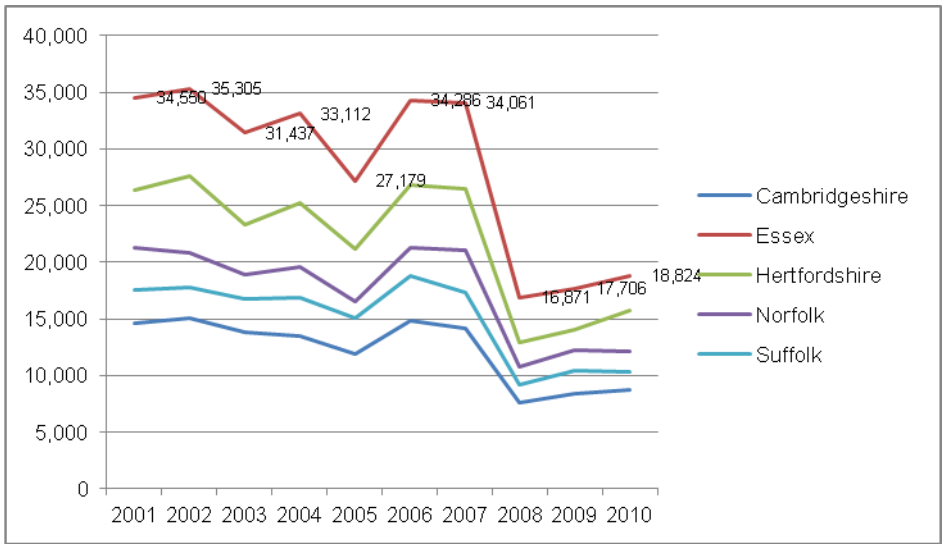


Source: Roger Tym and Partners: Essex Jobs Targets March 2010

Population Growth

5.58. Chapter three in the growth strategy notes the challenges raised by households seeking residential mortgages. The next chart illustrates the scale of the problem in Essex. Sales fell by 46% in the decade between 2001-10 (in similar proportions to regional and national levels).

Housing Market: Property Sales by district, 2001-2010



Source: DCLG, Land Registry

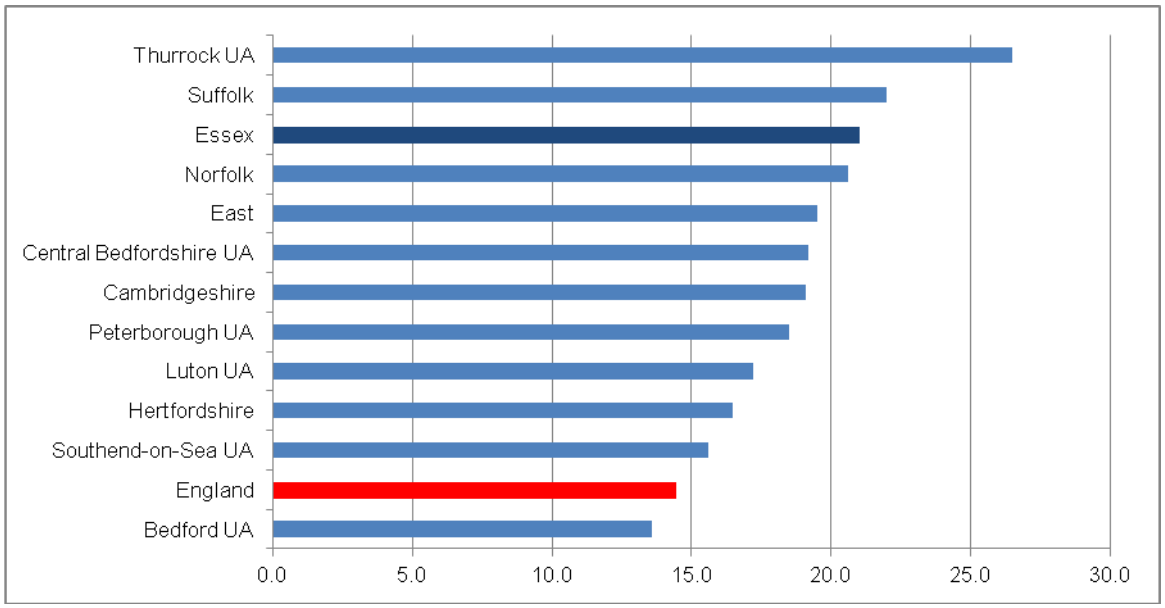
5.59. The table and the charts show the scale of projected population increases in Essex. The East is the fastest predicted growing region with Essex outperforming the regional average in percentage terms. By 2030 the 2010 population is predicted to grow by nearly 300,000 or just over a fifth (21%).

Projected Population Increase: by Region, 2010 to 2030 (Thousands and Percentage)

	2010	2020	2030	Change (No.)	Change (%)
England	52198	56040	59738	7540	14.4
East	5827	6410	6966	1139	19.5
Essex	1416	1568	1714	298	21.0
Hertfordshire	1101	1194	1283	182	16.5
Norfolk	865	954	1043	178	20.6
Suffolk	725	806	885	160	22.0
Cambridgeshire	613	673	730	117	19.1
Central Bedfordshire UA	257	282	306	49	19.2
Thurrock UA	160	183	202	42	26.5
Luton UA	194	213	228	34	17.2
Peterborough UA	173	191	205	32	18.5
Southend-on-Sea UA	165	177	191	26	15.6
Bedford UA	159	170	181	22	13.6

Source: ONS

Projected Population Increase (Percentage), 2010 to 2030



Source: ONS

Retail Growth

5.60. Retailing is one of the most dynamic sectors of the economy. The recent and forecast retail turnover for key centres in Greater Essex is set out in the following table (those areas with substantial forecast growth are shaded in grey).

Forecast Retail Turnover of Comparison Goods (£m)

Retail Location	Turnover 2009 Base Position	Forecast Turnover 2019	Increase	Percentage
Colchester*	577,900	950,600	372,700	39
Lakeside	529,850	734,777	204,927	28
Chelmsford	486,899	720,156	233,257	32
Southend-on-Sea	426,162	628,143	201,981	32
Basildon	423,326	624,046	200,720	32
Lakeside Retail Warehousing	363,162	530,868	167,706	32
Harlow	305,878	451,768	145,890	32
Braintree (inc Outlet)*	146,660	223,210	76,550	34
Clacton-on-Sea*	125,450	203,000	77,550	38
Brentwood	67,200	96,033	28,833	30
Rayleigh	57,555	84,710	27,155	32
Loughton	41,457	59,976	18,519	31
Maldon*	34,700	54,050	19,350	36
Saffron Waldon**	34,280			
Island	31,725	46,403	14,678	32
Billericay	23,758	34,412	10,654	31
Wickford	10,939	16,243	5,304	33
Great Dunmow**	7,280			

Sources: Lakeside Basin SIR Study, GVA Grimley, March 2009, * North Essex Retail Study, GVA Grimley, 2006, **Uttlesford Retail Study, Hepher Dixon, 2005 (2003 Data)

6. INFRASTRUCTURE

This chapter looks at locations for growth and infrastructural requirements focusing on broadband performance, transport trends and current and potential energy capacity.

Broadband Performance

6.61. Overall broadband performance is below the national level on all key measurements (see table) including the average maximum speeds of the existing broadband connections and the percentage of existing broadband connections currently not achieving 2Mbit/s downstream speeds. This is also the case for the percentage of addresses which are within the coverage area of superfast broadband networks and the number of existing broadband connections as a proportion of residential and non-residential addresses.

Fixed Broadband Performance

	Average modem sync speed (Mbit/s)	Receiving less than 2 Mbit/s	Superfast availability	Take up
England	7.6	14.0%	61.0%	69.0%
Essex County	6.8	16.9%	50.0%	72.0%

Source: OfCom Communications Infrastructure Report 2011: Fixed Broadband Data

Transport

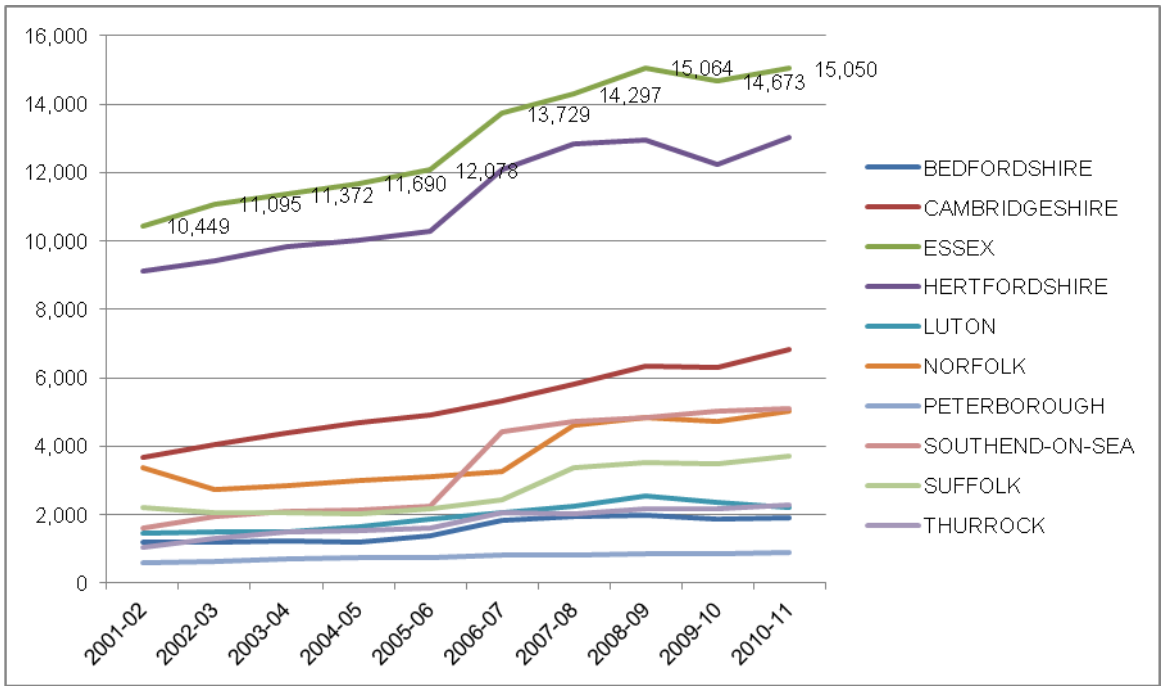
6.62. The rail network is at or close to capacity and passenger numbers are close to all time record levels with further substantial growth predicted. Overdependence on the car has increased the volume of traffic by 6.2% over the last 10 years, causing delays and impacting on air quality with an increase in carbon dioxide emissions. Our Joint Strategic Needs Assessment also notes that satisfaction with bus services nowhere exceeds 66% and is lowest in rural districts like Uttlesford, Maldon and Braintree.

6.63. There were 148.1 million journeys to/from/within the East of England during 2010-11, an increase of 6.2% on 2009-10[28]. 120.1 million journeys were to/from other regions and 28.1 million were within the East of England which represented increases on 2009-10 of 6.6% and 4.5% respectively. Routes to London dwarf all other journeys - 93.3% of all journeys to/from the East of England involved London.

6.64. The next chart shows that of East of England passenger journeys within the region they are highest in Essex and have risen 69% in the last decade to over 15,000. The subsequent chart shows that journeys to and from other regions have not witnessed the same level of growth but in volume terms are high.

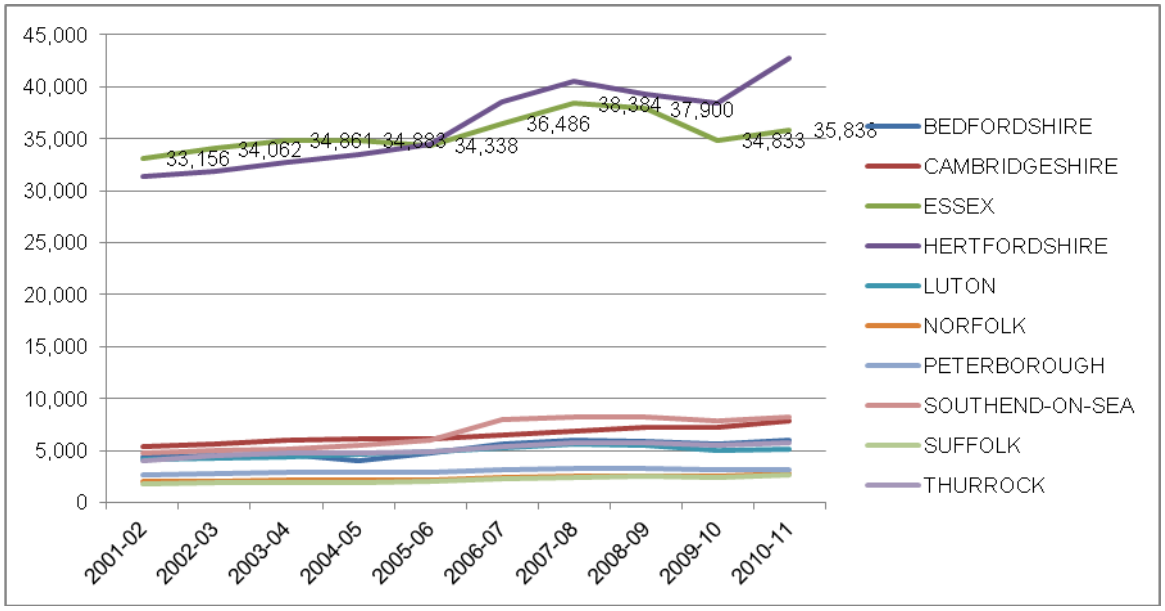
[28] Regional Usage Profile, April 2012, Office of Rail Regulation

East of England Passenger Journeys (Thousands)



Source: Regional Usage Profile, April 2012, Office of Rail Regulation

East of England passenger journeys to/from other Regions (Thousands)



Source: Regional Usage Profile, April 2012, Office of Rail Regulation

6.65. In terms of strategic transport rail priorities the Local Transport Plan (June 2011) notes the need to lobby for Government for additional capacity on the Great Eastern Main Line and West Anglia mainline to accommodate growing commuter demand. It also cites the importance of competitive journey times for Essex Thameside services and an enhanced local role in the rail franchise process.

6.66. The recent Rail Prospectus for East Anglia (July 2012) notes that "an efficient rail network is essential to help Essex businesses to be more productive, innovate and grow, and to attract

investment and unlock sustainable growth opportunities". The prospectus highlights that the Essex economy is driven by our main towns and cities and our international ports and airports. Rail provides an essential link to and between these economic centres. Continued investment rail network will relieve the growing pressure on our roads to accommodate increased movement of both people and freight anticipated to and from London, Chelmsford, the ports, Stansted and the Enterprise Zone in Harlow.

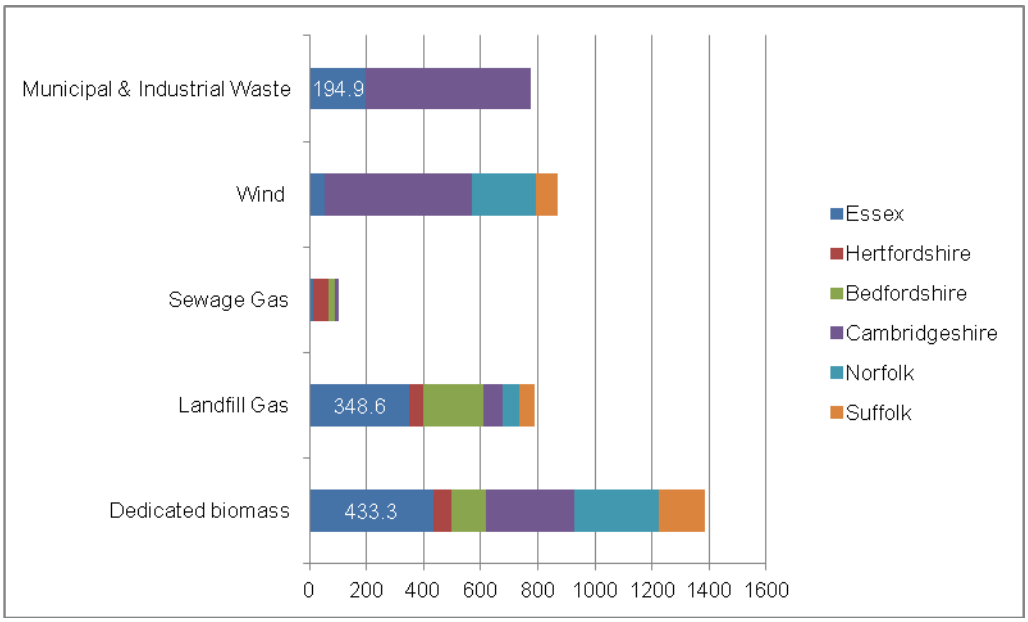
6.67. The Essex Transport Plan highlights road priorities too including identifying an agreed and deliverable solution to address congestion at the Thames Crossing and adjacent M25 junction 30/31; and lobbying for enhancements to the A12 and A120 (to access Harwich port).

Energy

6.68. The LEA (Detailed Appendix, p251) notes that although the water companies appear confident about maintaining supplies up to 2031, assuming the successful implementation of metering, some Districts have expressed concerns. There are some localized issues that need to be resolved.

6.69. Recent energy generation data shows 433.3 GWh produced by dedicated biomass, 348.6 GWh produced by landfill gas and 194.5 GWh through municipal and industrial waste. Other sources account for a small proportion of total energy generation.

Energy generation by County showing distribution across the region (GWh per year), 2011



Source: East of England Renewable and Low Carbon Energy Capacity Study, AECOM & TLP

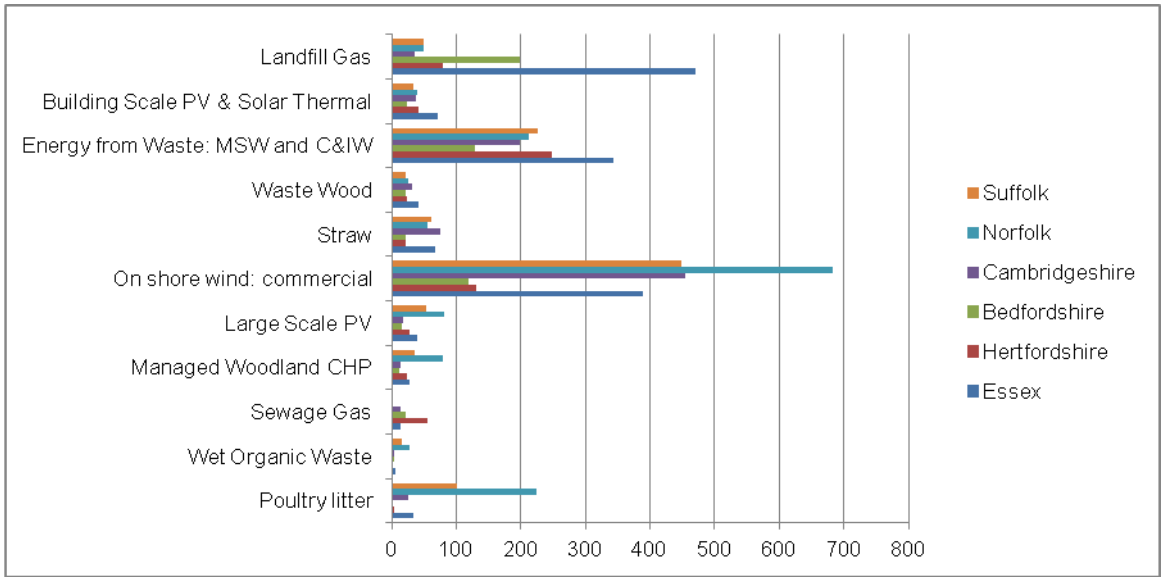
6.70. The next table and chart illustrate electricity generating technologies and resources for 2020. Put simply they illustrates a potential scale and variety of technology in the county that is significantly different from the current position. It also shows that the output produced from landfill and building scale PV and solar thermal will be high and in volume terms there is considerable potential for on shore wind and energy from waste.

2020 resource uptake for electricity generating technologies and resources given in terms of annual output (GWh)

	Poultry litter	Wet Organic Waste	Sewage Gas	Managed Woodland CHP	Large Scale PV	On shore wind: commercial.	Straw	Waste Wood	Energy from Waste: MSW & C&IW	Building Scale PV & Solar Thermal	Landfill Gas	Other
Essex	34	6	13	28	40	388	68	41	344	72	471	2
Hertfordshire	4	2	55	23	27	130	22	23	248	42	80	1
Bedfordshire	0	3	21	12	15	118	21	21	129	23	198	1
Cambridgeshire	26	3	13	13	18	455	75	32	198	37	36	5
Norfolk	225	27	-	79	81	683	55	26	212	40	49	2
Suffolk	101	16	-	35	54	448	62	21	226	33	50	3
Totals (Gwh)	390	57	102	190	235	2222	303	164	1357	247	884	14
Essex Share %	8.7	10.5	12.7	14.7	17.0	17.5	22.4	25.0	25.4	29.1	53.3	14.3

Source: East of England Renewable and Low Carbon Energy Capacity Study, AECOM & TLP, note excludes technologies under 10 GWh

2020 resource uptake for electricity generating technologies and resources given in terms of annual output (GWh)



Source: East of England Renewable and Low Carbon Energy Capacity Study, AECOM & TLP, note excludes technologies under 10 GWh

6.71. One major scheme at the post planning stage awaiting construction currently is the 60MWe Tilbury Green Power Plant which will generate enough to power for around 100,000 homes. Hadfield Wood Recyclers has entered a long-term agreement with Tilbury Green Power to provide recovered wood to the facility for the boiler. Once operational in 2015 it will utilise up to 210,000 tonnes per year of recovered wood from its catchment area in the East of England and Greater London.

6.72. In addition to the renewable energy/low carbon opportunities identified earlier Essex has undertaken work to further explore the development of a Renewables Transport Infrastructure[29] including the development electric vehicle charging points powered by renewable energy such as solar PV and wind power, and local waste to energy or waste to fuel. The study explored current opportunities around supporting infrastructure Electric Vehicles (EVs), but also planning for future opportunities, primarily around second and third generation biofuels.

[29] Renewable Transport for Essex, Essex County Council, June 2011