

## TACKLING SKILLS REQUIREMENTS IN GREATER ESSEX

### SUMMARY OF KEY POINTS

#### Education and skills landscape in Greater Essex

**Opportunities and growth potential in key sectors** Opportunities exist in Essex for people to deploy skills in jobs across a wide range of sectors. The employer-led Employment and Skills Board in Essex has identified seven priority sectors with strong potential for growth, where a range of openings exist. Growth in construction and logistics will be driven by local developments such as house building, infrastructure, and port and airport expansion. Growth of care is being generated by an ageing population. Other priority sectors - manufacturing and engineering; health; IT, digital and creative; and finance and insurance - all have a strong presence and vital role in the future of the Greater Essex economy. Other sectors are also important, such as retail, accommodation and catering, and education.

**Symptoms of skills challenge:** While there is great potential, Essex also faces a skills challenge, evident not only in difficulties in recruiting people with higher level skills, but also in skills deficiencies amongst some existing employees. Symptoms of the skills challenge in Essex are highlighted by a lower share of people of core working age with at least Level 4 qualification. This has been rising but at 29%, is well below the UK average of 37%. Other symptoms are slow productivity growth and a high start-up rate which hasn't yet fed through into a faster rate of growth. Inadequate soft skills are also a drawback, especially for some young people seeking employment. Local authorities with lower than average levels of qualifications tend to have job vacancies that offer lower incomes. Job vacancies are concentrated in a few local authority districts.

**Qualifications across Greater Essex:** The broad range of provision includes:

*Further education and apprenticeships:* Essex has a vibrant further education (FE) sector with 40,000 enrolled at FE colleges and a further 40,000 working towards FE qualifications with other providers. There were 14,480 apprenticeship starts in 2015/16, with take up highest in district and unitary councils, where A-Level entrants tend to be at their lowest. The number of higher level apprenticeships has grown from 70 to 790 in the past four years.

*A-Level and GCSE attainment* Reviewing average attainment at A Levels in 2015/16, students at 22 core state-funded schools in Greater Essex achieved at least the England average grade, while 36 schools were below average. This indicates that there is room for improvement in A-Level attainment. At GCSE or Key Stage 4 in 2015/16, 52 schools in Greater Essex gained an above-average Attainment 8 score, and 42 schools a below-average score.

*Higher education (HE)* makes a key contribution, with graduates from Essex University, Anglia Ruskin University and Writtle University College, a source of high level skills for local and national labour markets. Essex University's Knowledge Gateway research and technology park and ARU's Medtech Campus provide opportunities for developing businesses in knowledge-based industries.

## Developing Greater Essex strategies for developing skills

**Employment and Skills Board (ESB) in Greater Essex:** The employer-led ESB is core to the developing skills strategy in Essex. The ESB is at the forefront of identifying skills requirements, frequently driven by technological change. The ESB's impact and influence is evidenced in building up an evidence base, establishing a network of over 150 businesses, holding job fairs to facilitate local recruitment, and engagement with young people about scope of career opportunities.

**Long term vision for skills in Greater Essex economy** Key aspects include:

- Employer-led system with employers at the centre of influencing training and skills.
- Sufficient supply of people with higher level qualifications that can be recruited by employers.
- Life time learning with individuals having opportunities to develop competences and skills.
- Awareness of career opportunities amongst young people and mature students.
- Government policy that is aligned with and supports local long term strategic objectives.
- Making Greater Essex a destination of choice for local, national and international businesses.

**The Commission is proposing measures that would enhance delivery of skills in Greater Essex:**

- *Raise attainment at GCSEs and A Levels* Reviewing how attainment at GCSEs and A Levels at schools can be improved and in which areas: average A Level results at core state-funded schools across many parts of Essex are below average.
- *Strengthen education and careers advice* Advice and guidance on education and career options post-16 should be strengthened with greater coordination across agencies involved. This would include schools establishing stronger links with the FE sector so that 16 year olds can make more informed choices. The Careers and Enterprise Company proposed by the Government needs to bring clarity and coordination, otherwise it will risk adding to the current complexity of provision in education and careers advice.
- *Develop extra-curricular learning to bridge the gap between education and technical/vocational training* Providing funding so that more school students and young people can be involved, for example, in extra-curricular learning at the weekend. This would enable students to find out more about sectors, such as logistics, to improve their understanding of those sectors and spark motivation that could lead to a career choice.
- *New models for training and apprenticeships* This should include provision for people entering professions where self-employment is the only viable career option and therefore formal in-work training options are limited.
- *Set out clear priorities for action and investment in post-16 education* Essex needs to agree clear priorities on how it believes the skills agenda can best be delivered, including priorities for 16-19 year olds, for apprenticeships and for adult education. This will help to ensure that both local and national sources of funding can be channelled into areas which are most in need of resources.
- *Review Essex approach to engagement with government* Engagement with government on skills has had limited success and needs to be more effective to ensure that Essex is best positioned to develop a local agenda that suits its requirements and makes the most of public funding.

## Taking forward the UK Government's Strategy for skills

The Commission would like to see the Government's response to the skills element of its Green paper on industrial strategy support development of skills in Greater Essex by:

- *Supporting an employer-led approach to enhancing skills.* Employers to have a key role in identifying sector-specific sector skills shortages; in influencing technical education routes provided by FE colleges; and in promoting awareness of career opportunities.
- *Increasing accountability and local voice in funding* A stronger local voice in funding decisions, along with clearer accountability for delivery and outcomes, is required to enable local employment and skills boards to deliver new skills based on local evidence.
- *Expanding and enhancing provision of higher level technical education in Greater Essex:* Greater Essex needs additional resources to scale up capability of FE colleges to deliver more professional and technical courses so that more students can gain qualifications that are required. The proposed new framework for technical qualifications is a much lower priority, while the proposed Institutes of Technology would not be relevant if only located outside Essex in another part of the South East LEP.
- *Recruitment and retention of qualified teachers in technical education* A larger number of teachers and lecturers of sufficient calibre need to be recruited and suitably rewarded to deliver qualifications that address skills shortages in key sectors. The Government needs to provide funding that enables the FE sector to offer competitive salaries if they are going to be able to recruit experienced professionals who have the skills to teach technical qualifications.
- *Better information for students on education and career choices* Government needs to ensure that students in school, sixth form college, FE or HE are properly informed about the range of qualifications and career options available locally. Closer involvement of the FE sector in schools is key.
- *Ensuring coherence in government delivery of skills,* in contrast with the confusion and short-termism that characterises some current programmes.
- *Enabling local businesses to navigate the skills system* Greater coherence in the national skills system would make it easier for smaller businesses to navigate and access the skills system locally.

## A. EDUCATION AND SKILLS LANDSCAPE

### 1. Symptoms of skills challenge in Essex

A major review of the Greater Essex economy in the Commission's first major report *Enterprising Essex: Opportunities and Challenges* provided direct evidence of the skills shortfall. This showed that the share of people with a Level 4 qualification was only 29% in the area covered by Essex County Council in 2015, below the 37% UK average. Progress is being made but Essex is barely keeping up with progress across England as a whole.

The report also provided other evidence pointing to other impacts of skills shortages and deficiencies. These relate to low educational attainment; weak productivity levels and growth; a high start-up rate not matched up by more rapid growth; and skills deficiencies found in recruitment and amongst existing staff. These challenges are summarised here:

**i. Low educational achievement** Skills deficiencies across the workforce are not helped by lower educational achievement, particularly at Key Stage 4. In local authorities across Greater Essex on average between 24% and 46% of students fail to reach a grade C GCSE at both English and Maths (Chart 1). The share of those not continuing in education or training and not have a job – the NEETS – is clustered between 5% and 7% for 16 year olds in nine local authorities. There is little variation in the share of NEETS in these authorities despite wide variation in the share of those students not gaining grade C at English and Maths GCSE. Elsewhere in Essex, NEETS share of 16 years olds is lower at 3% in Brentwood and 4% in Southend; but higher at 8% in Epping Forest and Tendring, and nearly 10% in Castle Point.

Chart 1

#### Key Stage 4: Lower achievers at core GCSEs and drop out rate from education & employment

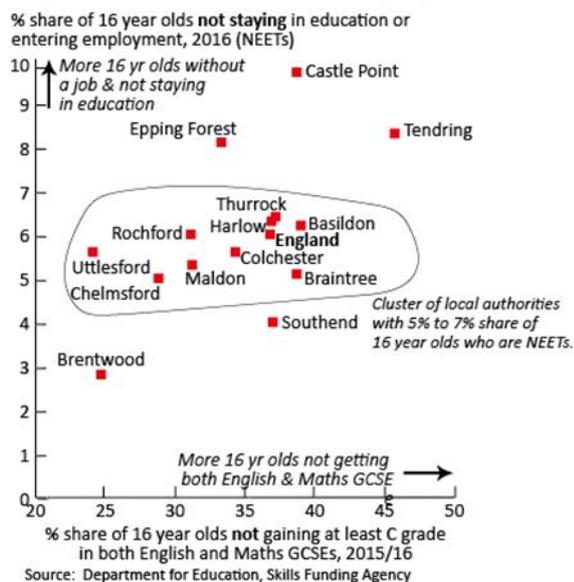
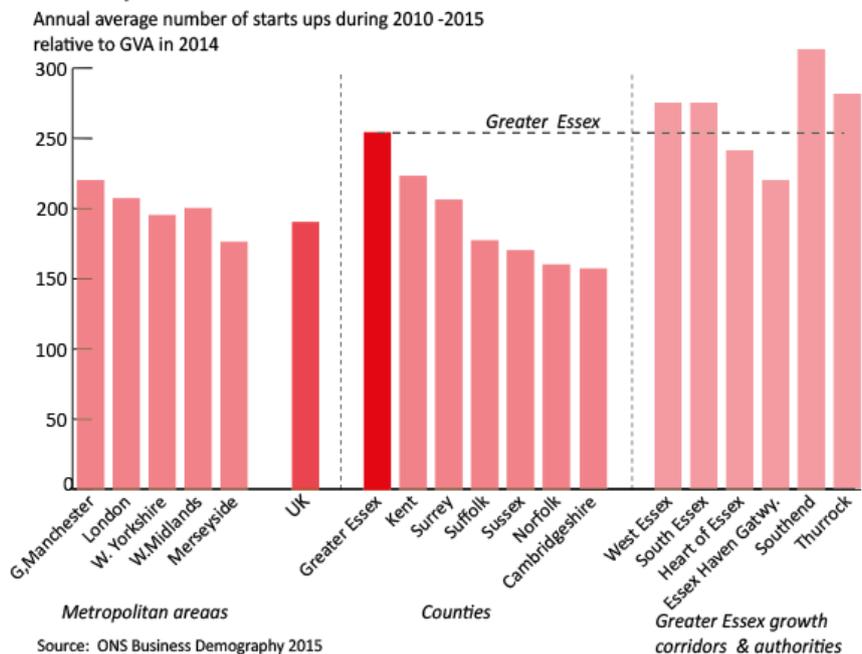


Table 1

Contribution of productivity and hours worked to GVA growth				
	GVA	Real	Real GVA	Hours
	per hour	GVA	per hour	worked
	worked		worked	per week
	£	Average change, % per year		
	2015	-----2005-2015-----		
Berks, Bucks & Oxfor	37.5	1.4	0.1	1.3
Surrey & Sussex	35.4	1.5	0.8	0.7
Hampshire	33.1	1.0	0.3	0.7
Bedfords & Herts	32.0	0.6	-0.4	1.0
Camb, Suffolk & norfo	31.5	1.3	0.6	0.8
<b>Greater Essex</b>	<b>31.1</b>	<b>0.8</b>	<b>0.0</b>	<b>0.8</b>
Kent	30.7	0.8	0.3	0.5
<b>UK</b>	<b>31.5</b>	<b>1.1</b>	<b>0.4</b>	<b>0.7</b>
London	41.9	2.4	0.7	1.6
Greater Manchester	28.4	0.8	0.4	0.3
Merseyside	28.9	0.6	0.3	0.3
West Yorkshire	27.8	0.6	0.2	0.4
West Midlands	27.6	0.6	0.1	0.4
West Essex	34.8	1.5	0.6	0.9
Heart of Essex	32.1	0.9	0.4	0.6
Essex Haven Gateway	29.3	0.6	-0.7	1.3
South Essex				
- Essex Thames Gateway	31.6	0.9	0.0	0.9
- Southend-on-Sea	28.5	0.4	1.2	-0.8
- Thurrock	28.6	0.0	-1.0	1.0

Source: ONS Sub-regional productivity data NUTS 2 & NUTS 3

**Chart 2**  
**Starts ups relative to GVA**



Data for NEETs indicates that 11.5% of 16-24 year olds in England were NEET in the fourth quarter of 2016, a share that has declined steadily from 16.4% five years earlier in Q4 2011. Attainment of qualifications gained at school, sixth form college and further education in Greater Essex is explored fully starting on page 9.

**ii. Weak productivity performance:** Evidence indicates that productivity performance is weak in two respects:

*Productivity levels below other counties in region:* Productivity in Greater Essex as measured by GVA per hour worked is lower at £31.10 than other county groups in the South East such as Berkshire, Buckinghamshire & Oxfordshire, as well as Surrey & Sussex, in each of which GVA per hour worked is over £35.00 (Table 1). Productivity in Greater Essex is also below other county grouping in the East of England and the UK average. London has the highest GVA per working hour at £41.90, although productivity in other large main metropolitan areas is lower than Greater Essex. Locally, GVA per hour worked is higher in West Essex and Heart of Essex and lower in Southend and Thurrock.

*Stalling productivity growth.* In general the UK has seen very weak productivity growth, with real GVA per hour worked averaging a rise of just a 0.4% a year between 2005 and 2015. In Greater Essex real GVA per hour worked was flat during this period: the 0.8% a year growth in real GVA in Greater Essex was entirely driven by an equivalent 0.8% annual rise in working hours. A decline over the decade in real GVA per hour worked in Essex Haven Gateway and Thurrock was offset by a rise in Southend, West Essex and Heart of Essex.

**iii. High start-up rate not yet reflected in higher growth.** The start-up rate in Greater Essex is well above the UK average, higher than many other counties in the South East and East of England and ahead of metropolitan areas (Chart 2). There is also a strong spread of start-ups across a range of sectors including professional, scientific and technical services; construction; business administration and support; and information and communication services. This spread doesn't point to any undue

concentration of start-ups in in low value-added sectors. This raises the question as to whether other factors such as inadequate skills may be constraining start-ups from achieving their full potential and constraining the growth rate of Greater Essex.

**iv. Skills deficiencies** A survey of 1000 businesses in Essex in 2014 touched on two areas in which skills deficiencies were prevalent:

*Difficulties in recruitment due to Inadequacy of skills* Half the businesses had undertaken recruitment and of these about a quarter, or 12% of all business establishments, found that vacancies had been hard to fill because of skills shortages. The skills found to be most lacking in applicants were technical, practical or job-specific skills.

*Skills deficiencies amongst existing staff* Some 28% of businesses considered there was a significant gap between the skills staff currently have and those that are required to meet future business objectives. Some 45% of businesses stated that skills most lacking amongst current staff are technical, practical or job specific skills; while 38% identified team working, problem solving and customer handling skills to be most lacking. A third of businesses considered that deficiencies of skills amongst employees was impacting on their business performance.

Another pointer to potential skills deficiencies in The Essex Economic Commission’s report was the wider gap in Essex between the 29% of people with at least Level 4 qualification and the 43% working in higher level occupations (Table 2). This 14% difference was double the UK average gap of 7%. The presence of a large gap, particularly in Castle Point and Harlow, represents a major challenge. Increasing the share of local people with higher level qualifications, is an ambition which needs to be matched by the aspirations of people locally.

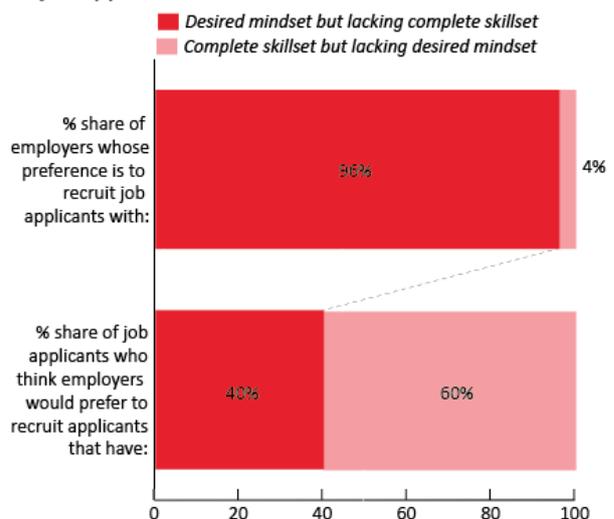
**Table 2**

Higher level occupational employment and qualifications			
% share of population, aged 16-64			
2015	% with NVQ4+	Occupation level 1-3	Difference
UK	36.9	44.0	7
<b>Heart of Essex</b>			
Chelmsford	33.7	48.9	15
Brentwood	32.5	51.6	19
Maldon	35.4	50.1	15
<b>West Essex</b>			
Epping Forest	35.0	48.8	14
Harlow	20.9	40.5	20
Uttlesford	38.2	42.3	4
<b>Essex Haven Gateway</b>			
Braintree	27.5	35.3	8
Colchester	32.5	39.2	7
Tendring	19.4	32.2	13
<b>South Essex</b>			
Basildon	28.9	44.9	16
Castle Point	19.0	48.6	30
Rochford	25.1	38.0	13
Thurrock	24.3	34.4	10
Southend	26.0	46.1	20
Essex CC	29.2	43.0	14

Source: ONS Nomis

**Chart 3**

**Relative importance to employers of mindset and skillset of job applicants**



Source: James Reed, Paul Stoltz

A smaller gap between the share of people with higher level qualifications and higher occupational levels could indicate that a district is better balanced in terms of skills availability and employment opportunities. This could apply in Uttlesford where the share of both are around the UK average. However in Tendring, where the local share of people with higher levels qualification and occupation are both at the lowest in Greater Essex, there is the combined challenge of raising qualification levels while also seeking to attract jobs in higher level occupations.

*Deficiencies in soft skills* As well as qualifications and hard skills, employers are likely to assess applicants on a range of soft skills, which can relate to communication, decision making, self-motivation, team working and problem solving. The importance of these skills is picked up in the following section about required skills cited most often by employers in job postings.

For young people, development and acquisition of soft skills is crucial to employability. Soft skills at this stage may focus on transitioning to work, including essential requirements such as punctuality at work and being dressed appropriately. Experience of part time work in late teens can be a significant advantage in this context. A Reed survey of 2,300 young people aged 18-25, found that 70% of those who had had a part time job at school or college were in employment at the time of the study, compared with 42% for those who hadn't had a part-time job. Typically such jobs were in shops or in a bar or restaurant.

Other research has also flagged up the importance of the right mind set to employers. The mind set encompasses not only the soft skills such as communication and presentation, which are crucial at interview, but also evidence of drive, resilience and determination to succeed. The research amongst 800 employers by James Reed and Paul Stoltz revealed a gulf between what young people consider important and what employers are looking for. The survey showed that 96% of employers put the desired mind set of applicants ahead of a complete skill set compared with only 40% of young people (Chart 3). This means that 60% of young people thought that having a complete skill set was more important than the right mind set but only 4% of employers thought likewise.

## **2. Evidence on skills required from advertised job vacancies**

Detailed data compiled for the Employment and Skills Board on advertised local job vacancies provides further pointers on skills requirements and availability of jobs.

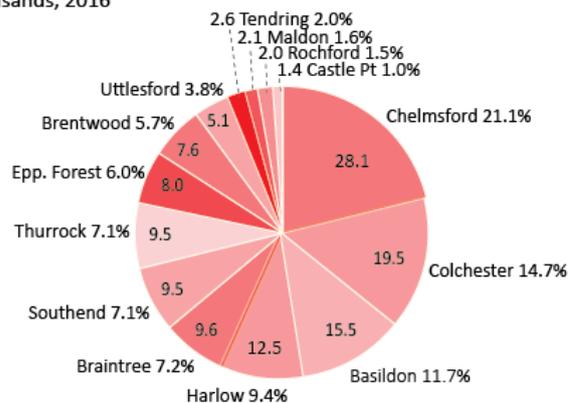
***Job vacancies heavily concentrated in a few locations:*** Chelmsford recorded the largest number of postings for job vacancies in 2015, 22% of the Greater Essex total (Chart 4). The four largest centres for vacancies - Chelmsford, Colchester, Basildon and Harlow - accounted for 60% of all postings around the county. Brentwood, Braintree, Southend and Thurrock in total accounted for a further 25%. The remaining 15% of vacancies are spread across the other six local authorities.

***Link between lower salaries and lower level of qualification locally*** Table 4 compares the weighted average salaries for job postings and vacancies around Essex in 2015. This indicates that average salaries on offer tend to be less in those authorities where a smaller share of people locally have level 4 qualifications. Five of the six local authorities with the lowest advertised salaries for job vacancies were also listed amongst the lowest seven local authorities when ranked on the share of those with a level 4 qualification. Exceptions are Maldon and Harlow. Advertised salaries in Harlow in 2015 were relatively high when compared with the share of those in the borough with Level 4 qualification. If local aspirations are low, then there is a risk that a higher proportion of new job

**Chart 4**

**Job vacancies in local authorities**

Thousands, 2016



**Total job vacancies in G. Essex 132,926**

Source: Labour Insight, Essex Employment and Skills Board

vacancies will be taken up by people who travel in to work from outside the borough. In Maldon average salary on offer locally is low relative to the share of people with higher level qualifications.

**Core skills crucial to recruitment** A range of baseline and specialist skills feature in those skills most commonly cited in research undertaken by Labour Insight. Baseline skills most likely to be required include the ability to work with colleagues and customers through communication and organisational skills and customer service (Table 5). Computer-related skills are core to delivery of service while important generic skills in approach to work include planning, being detail orientated, team work and writing.

Specialist skills requirements are closely connected with the type of occupation and the sector, with a much wider range of such specialist skills therefore likely to be mentioned in vacancies. Teaching, project management, repair and contract management, are the specialist skills to be most commonly cited (Table 5).

**Table 4**

Higher level qualifications and vacancies 2015			
Ranking share of people with Level 4 qualification		Ranking weighted average salaries for job vacancies	
% share of authority		£	
Uttlesford	38.2	Brentwood	35,100
Maldon	35.4	Chelmsford	33,141
Epping Forest	35.0	Basildon	30,981
Chelmsford	33.7	Harlow	30,122
Brentwood	32.5	Southend	29,774
Colchester	32.5	Colchester	29,602
Basildon	28.9	Epping Forest	28,530
<b>Braintree</b>	27.5	Uttlesford	26,518
Southend	26.0	<b>Thurrock</b>	26,311
<b>Rochford</b>	25.1	<b>Rochford</b>	25,648
<b>Thurrock</b>	24.3	<b>Tendring</b>	25,578
Harlow	20.9	Maldon	25,335
<b>Tendring</b>	19.4	<b>Braintree</b>	24,281
<b>Castle Point</b>	19.0	<b>Castle Point</b>	23,103

Source: Essex Employment and Skills Board, NOMIS

**Table 5**

Main skills required by employers in Essex			
Number of mentions in job vacancies, 2016			
Baseline skills		Specialist skills	
Communication	33268	Teaching	9976
Organisational	21158	Project management	5741
Customer service	12208	Repair	5353
Planning	10994	Contract management	4894
Microsoft Excel	10832	Product sales	4838
Detail-orientated	8969	Key performance. Indicators	4448
Team work	8632	Business development	4303
Writing	8143	Accountancy	4009
Sales	8112	Budgeting	3876
Business management	7389	Sales recruiting	3576

Source Labour Insight

### 3. Assessing qualifications across Greater Essex

An understanding of how Greater Essex compares to other local authorities in the take up of apprenticeships and achievement levels at A-Level provides a context for assessing qualifications across the county. Also important is the differing rates of attainment within the county.

**Apprenticeships starts and A-Level entries** There were 14,480 apprenticeships started in Greater Essex in 2015/16, accounting for 2.9% of the total of 498,000 apprenticeships in England (Table 6). Apprenticeships for 16-18 year olds account for 25% of apprenticeship starts in England, and 19-24 year olds a further 30%. Apprenticeships accounted for 0.81% of the local population, which is less than 0.92% in England as a whole but in line with many other counties in the South East. Apprenticeship starts are spread through the county, with seven councils having at least 1,000 students starting apprenticeships in 2015/16. Take up of apprenticeships is highest in Tendring, at 1.1% of the local population in 2015/16, and around 0.9% of the local population in Harlow, Basildon, Castle Point, Maldon and Thurrock.

By contrast five of these six districts have the lowest A-Level take-up (Chart 5). The comparison isn't exact as apprenticeship starts are based on residence of the student, while A-Level entrants are based on the location of the FE provider. On this basis, A-Level entrants for Tendring, Harlow, Basildon, Maldon and Braintree, account for no more than 0.2% of the local population, less than a

**Table 6**

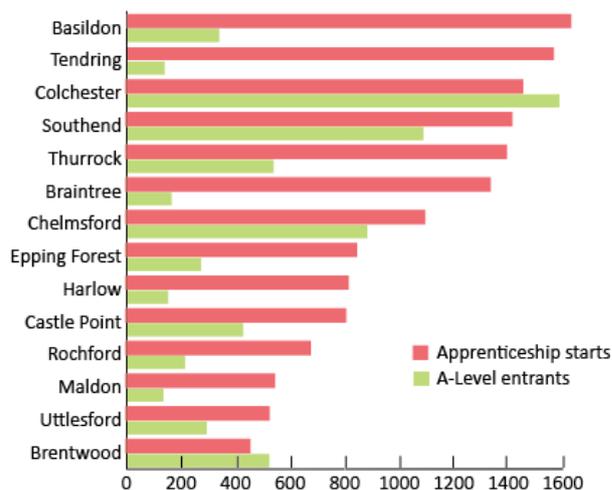
Apprenticeship starts and A Level entrants*				
2015/16				
	Apprenticeship starts	A Level entrants	Appr'ship starts	A Level entrants
Year to July	Number	Number	----% of local popn.----	
Suffolk	6320	2344	0.85	0.32
G. Essex	14480	6650	0.81	0.37
Kent	13830	6137	0.77	0.34
Norfolk	7630	2682	0.86	0.30
Cambridgeshire	5970	3213	0.71	0.38
Surrey	5710	5341	0.49	0.46
England Total	498000	192673	0.92	0.35
<b>Heart of Essex</b>				
Chelmsford	1090	874	0.64	0.51
Brentwood	450	516	0.59	0.68
Maldon	540	127	0.86	0.20
<b>West Essex</b>				
Epping Forest	840	265	0.65	0.21
Harlow	810	145	0.96	0.17
Uttlesford	520	286	0.62	0.34
<b>Essex Haven Gateway</b>				
Braintree	1330	157	0.89	0.10
Colchester	1450	1579	0.80	0.88
Tendring	1560	131	1.11	0.09
<b>South Essex</b>				
Basildon	1620	332	0.90	0.18
Castle Point	800	420	0.90	0.47
Rochford	670	206	0.79	0.24
Thurrock	1390	532	0.85	0.33
Southend on Sea	1410	1080	0.79	0.61
<b>Greater Essex</b>	<b>14480</b>	<b>6650</b>	<b>0.82</b>	<b>0.38</b>
Essex CC	11680	5038	0.82	0.35

\*Apprenticeships starts: local authority based on home postcode of learner  
A-Level entrants: local authority based on location of school or college  
A-Level entrants includes students who completed at least one A/AS level  
Source: Skills Funding Agency and Department for Education

**Chart 5**

**Apprenticeship starts and A Level entrants**

Number of apprentices and students, 2015/16



Source: Department for Education, Skills Funding Agency

**Table 7**

<b>Further Education Colleges</b>		-----Qualifications-----						
Type of learning 2014/15								
<b>Provider Name</b>		<b>Education &amp; Training</b>	<b>Apprenticeships</b>	<b>Community Learning</b>	<b>Workplace Learning</b>	<b>Total FE &amp; Skills</b>	<b>Total number of students</b>	
S. Essex College of Further & Higher Educatn.	Southend	10180	3090	-	100	<b>13310</b>	13510	
Colchester Institute	Colchester	6770	2200	80	100	<b>9100</b>	9430	
Harlow College	Harlow	5850	710	2830	-	<b>6920</b>	5780	
Chelmsford College	Chelmsford	3270	420	-	-	<b>3550</b>	4210	
SEEVIC Colllege	Castle Point	2550	820	180	-	<b>3530</b>	3170	
Writtle University College*	Chelmsford	1090	200	-	-	<b>1250</b>	2200	
Prospects College of Advanced Technology	Basildon	550	1040	-	10	<b>1550</b>	1240	
Epping Forest College	Epping Forest	2980	320	-	10	<b>3280</b>	1120	
<b>Total FE Colleges</b>		<b>33240</b>	<b>8800</b>	<b>3090</b>	<b>220</b>	<b>42490</b>	<b>40660</b>	
*Not a designated FE college but providing some FE qualifications								
Source: FE Colleges in Greater Essex								

quarter of the number of apprenticeship starts at around 0.9%. Colchester stands out as the largest centre for A-Levels, followed by Southend, Chelmsford, Thurrock and Brentwood. High take up of apprenticeships in some districts is in part linked to the location of the larger FE colleges offering qualifications across Essex.

**Role of Further education:** A vibrant further education (FE) sector providing professional and technical qualifications is spread across Greater Essex with a total of nearly 43,000 students attending FE Colleges in 2014/15. The largest FE colleges are South Essex College of Further And Higher Education, with 13,500 students, and Colchester Institute with 9,400 (Table 7). Over 33,000 students, more than three quarters of students enrolled at FE Colleges, are on education and training courses, with 8,800 on Apprenticeships. The remainder are in community learning and workplace learning. Most courses at FE Colleges are at level 2 and Level 3, with a small number studying Level 4 and above. The number of higher level apprenticeships from level 4 upwards has been rising, albeit from a low point, from 70 to 790 between 2011/12 and 2015/16.

In addition to the FE Colleges there are around a further 40,000 students working towards FE qualifications from other providers in Greater Essex, some publicly funded and some privately funded. The largest group here is over 18,000 students funded by Essex County Council, of whom 13,000 are involved in Community Learning, and most of the remainder on Education and Training courses. Greater Essex needs to make further progress in broadening the base of vocational qualifications across the county, in order that sufficient people with requisite skills are available to employers in key growth sectors. Suppliers of further education will continue to be central in the delivery of vocational qualifications that underpin these skills.

**A-Levels:** Attainment of core state funded schools at A Levels in Greater Essex is generally below the average grade C for England. Table 8 shows average attainment of each school in the county in 2015/16. The table separates out grammar schools and independent schools, which usually achieve average results of at least grade B, from core state-funded schools. Students at 22 core state-funded schools attain average of grade C or above, while in 36 schools the average grade is lower than grade C.

**Table 8**

Average grade at A Levels in Greater Essex											Core state funded		Grammar & independts grade A- to B-	
Schools & colleges with average grade in each category, 2015/16*											Total	Less than C		C or above C
	D-	D	D+	C-	C	C+	B-	B	B+	A-				
<i>Essex Haven Gateway</i>														
Colchester	●	--	●	●●		--	--	●	--	●	6	4	--	2
Tendring	●	●●	--	●●		--	--	--	--	--	5	5	--	--
Braintree	--	--	●●●	--		●	--	--	--	--	4	3	1	--
<i>Heart of Essex</i>														
Chelmsford	--	--	●	--	●●●●	●●●	--	●	●●	--	11	1	7	3
Brentwood	--	--	--	●	●●	●●	--	●	--	--	6	1	4	1
Maldon	--	--	●	●		--	--	--	--	--	2	2	--	--
<i>West Essex</i>														
Uttlesford	--	--	●●	--		●	●●	--	--	--	5	2	1	2
Epping Forest	--	●		●	●	●●	--	--	--	--	5	2	3	--
Harlow	--	--	●	--	●	--	--	--	--	--	2	1	1	--
<i>South Essex</i>														
Basildon	●	--	●	●		●●	--	--	--	--	5	3	2	--
Rochford	--	--	●●	●		--	--	--	--	--	3	3	--	--
Castle Point	--	--	--	●	●		--	--	--	--	2	1	1	--
Southend	--	●	●●	●●	●	--	●	●●●	--	--	10	5	1	4
Thurrock	--	--	●	●●		●	--	--	--	--	4	3	1	--
<b>Total Greater Essex</b>											<b>70</b>	<b>36</b>	<b>22</b>	<b>12</b>
England state funded schools average C grade	-----↑													
*Only grammar schools & some independent schools average grade A- to B-														
Analysis also excludes schools & colleges with fewer than 15 A Level students														
Source: Department for Education														

**Table 9**

Schools Attainment 8 score at Key stage 4											of which:			
Schools with Attainment 8 score in Greater Essex in each range, 2015/16*											Core state funded			Grammar & independts >60
	35-40	40-45	45-50	50-55	55-60	60-65	65-70	>70	Total	Up to 50	50-60			
<i>Essex Haven Gateway</i>														
Colchester	--	●●	●●	●●●●	--	●	--		12	4	5	3		
Tendring	--	●●	●●	●●	--	--	--	--	6	4	2	--		
Braintree	--	--	●●●●●	●●●	--	--	--	--	9	6	3	--		
<i>Heart of Essex</i>														
Chelmsford	--	--	●	●●●●●	●	●	--	●●	11	1	7	3		
Brentwood	--	--	--	●	●●	●●	--	--	5	--	3	2		
Maldon	--	--	--	●●	--	--	--	--	2	--	2	--		
<i>West Essex</i>														
Uttlesford	--	--	●	●●●●	●	--	--	--	6	1	5	--		
Epping Forest	--	●	●●	●●	●●	●	--	--	8	3	4	1		
Harlow	--	●	●●	●●	●●	--	--	--	7	3	4	--		
<i>South Essex</i>														
Basildon	--	●●●	●●	●●●	●	--	--	--	9	5	4	--		
Rochford	--	--	●●	●●	--	--	--	--	4	2	2	--		
Castle Point	--	●●	●	●●	--	--	--	--	5	3	2	--		
Southend	●●	●	●●	●●	●●	●●	●●	●●	15	5	4	6		
Thurrock	--	●●●●	●	●●●●	●	--	--	--	10	5	5	--		
<b>Total Greater Essex</b>									<b>109</b>	<b>42</b>	<b>52</b>	<b>15</b>		
England all state-funded schools average (49.9)	-----↑													
*Only grammar & some independent schools achieve Attainment 8 of over 60														
Core state funded schools achieve up to 60 points														
Source: Department for Education														

Only three local authorities - Chelmsford, Brentwood, and Epping Forest - have more schools attaining at least grade C, than those averaging less. Indeed, in Chelmsford and Brentwood 11 out of 13 schools, half of the 22 core state funded schools in Greater Essex, record an average of at least Grade C. In south Essex only five out of 20 core state funded schools average at least grade C and in Essex Haven Gateway only one out of 13.

These comparisons measure average attainment in schools. Some establishments have a large annual intake, in which a wide variation in outcomes is likely. In any individual school, whatever the average, there should be the opportunity for all students to achieve their potential.

**GCSE attainment** The standard of GCSE grades has implications not only for expected attainment at A Level but also for levels of literacy and numeracy for the majority of students that go on to further education. Table 9 for schools shows scores at Attainment 8 set out on a similar basis to the A Level table. Attainment 8 is a newly developed score intended to show students' attainment across a wider field of subjects than the five or more GCSEs commonly used as a standard. Attainment 8 is based on eight qualifications including English, maths, sciences, computer science, history, geography and languages.

Against an average score of 49.9 for schools in England, 52 core state funded schools in Essex gained an above average Attainment 8 score in 2015/16 of over 50, compared with 42 schools where the score was below 50. This points to above average attainment in Greater Essex at GCSEs, whereas at A Levels attainment in the majority of schools is below average for England. In the past two years, 2014/15 and 2015/16, the share of those in Essex gaining five or more GCSEs including English and Maths has been ahead of the average for England, whereas in the previous five years Essex share had been below the England average. For A-Levels Essex has been consistently lower than the England average point score per A Level entry and remained so in the past two years. So there has been some improvement in relative GCSE performance in 2014/15 and 2015/16 relative to the average for England but A Level performance remains behind the England average.

#### **4. The role of local universities and higher education**

The local economic contribution of universities can be viewed in a number of ways:

- Students add to local population, employment and spending.
- Graduates are a source of high level skills for the local and national labour markets.
- Products of research generate opportunities for staff and students to establish new businesses, as well as attracting new businesses and investment to the locality.
- Operational requirements of universities lead to local procurement of goods and services.

**Essex University** has 14,000 students, employs 2,500 people and has annual turnover of £207m. The Knowledge Gateway research and technology park on the Colchester Campus is targeted at knowledge-based enterprises in science, technology and the creative sector. Drawing on the university's reputation for analytics, data science and support for SMEs, it has the potential to employ more than 2,000 people (see also page 21).

**Anglia Ruskin University (ARU)** is based in Chelmsford and Southend as well as Cambridge. In total, it has 2,300 staff, with an annual turnover of £198m, providing academic courses to 39,400 students in 177 countries. Students are studying in a number of locations, including 16,500 offsite. Out of around 20,000 higher education students on site, some 6,500 are based on the Chelmsford campus

and 200 at the Harlow centre. ARU helps some 2,000 businesses each year to grow more quickly and to partner with other organisations in the delivery of educational and commercial projects. The Medtech Campus partnership with Chelmsford, Harlow and Southend is intended to provide a lead in this key sector (see also page 21). ARU is also building a medical school, scheduled to take its first intake in September 2018, to improve the local supply of doctors.

**Writtle University College** Writtle University College, near Chelmsford, is one of the oldest specialist institutions in the UK, having been established in 1893. It offers a range of land-based, design and sport courses at various levels of academic study including postgraduate, undergraduate, further education and apprenticeships. There are 760 students on higher education courses.

## **5. Diversity of skills funding for learning**

Skills funding is sourced from a diverse range of sources, mostly designed, managed and delivered centrally. In total, the Local Government Association, in its Work Local vision, has estimated that there are a total of 17 different funding streams managed by eight departments or agencies, spending more than £10bn a year.

Some of the major providers or managers for adult learning are the Education and Skills Funding Agency (ESFA), the Department of Work and Pensions (DWP), local authorities and programmes funded by the European Social Fund which are managed and delivered nationally by ESFA and DWP. A summary of broad groupings for these sources of funding are set out in the text box on page 14.

Adult learning is a crucial area in upskilling people with poor numeracy and literacy skills, and enabling those in low skilled work to move into more demanding roles. Adult learning is crucial in reskilling people whose skills are less in demand. It is also important to help adults who are long-term unemployed; have learning disabilities; or have long-term ill health to access job opportunities and transition into employment.

Key issues that stand out from the approach to funding are:

- *Multiplicity of agencies and government departments* which are working to separate agendas and objectives.
- *Local needs may not be a priority* in determining the allocation and distribution of funds. Some agencies that win contracts to supply services to improve skills may have limited understanding of local needs and priorities.
- *Method of funding and delivery* means that the funding allocated for skills training can be eroded through the process of procurement. Management fees charged as a national programme is sub-contracted can mount up to the point that it becomes unviable to deliver at the local level.

Overall, skills funding for learning not only for adult education, but also for post-16 and apprenticeships, needs to be better coordinated and linked to local requirements.

## **Disparate sources of skills funding for adult learning**

### **Education and Skills Funding Agency (ESFA)**

*Adult Education Budget:* ESFA allocated £25m to Greater Essex providers in 2016/17, for a combination of: education & training qualifications; community learning non-formal courses; and workplace learning related to basic or higher level skills.

*ESFA Adult Apprenticeships:* £13m allocated

*ESFA Apprenticeships Support Fund:* £35,000 for promotion activities

### **Department of Work and Pensions (DWP)**

*Work and Health Programme* from autumn 2017: £3.3m a year to support long-term unemployed, those with major health conditions and people that are 'hard to help'.

*Flexible Support Fund:* £1.4m for Essex to support individuals move closer to work or into work.

### **Local authority funded**

Essex County Council provides a £0.8m a year over three years to supporting vulnerable people with mental health conditions and further £433,000 a year over three years to support vulnerable adults with learning difficulties and disabilities.

### **National Careers Service**

Some £35k is supplied to Greater Essex for careers advice.

### **European Social Fund**

i. The *ESFA* also operates as a co-financing organisation for the European Social Fund to ensure that EU funding is correctly spent. Various providers – Skills Training UK, Ixion and East Kent College – provide a range of programmes related to improving numeracy; basic skills to low skilled employed adults; higher skills at Level 3+; and digital skills, to a total of 3,360 people.

ii. *Big Lottery:* £7.2m is provided by the European Social Fund in Greater Essex to support 1,800 participants to move people who are most detached from the labour market towards employment.

There are range of organisations offering support to different groups of people including:

- Papworth Trust to ESA claimants.
- North Essex Partnership Trust to mental health.
- 4SX Essex Carers to Carers.
- Essex Rural Skills to Older Workers aged 45-59.
- Gingerbread to lone parents.
- Ixion to JSA claimants

iii. *DWP* also has a £4m budget for Essex from the European Social Fund covering 2,025 participants that is delivered by Reed in Partnership to promote sustainable employment. Target clients include unemployed for more than six months; those requiring basic skills; as well as lone parents, people aged 50+, ex-offenders, those with learning difficulties and disabilities that are needing English as a foreign language, and people with few qualifications.

## **B. LONG TERM VISION FOR SKILLS IN THE GREATER ESSEX ECONOMY**

### **1. Scale of opportunity to deploy skills in the future**

Considerable opportunities exist for people across the workforce to deploy skills in jobs requiring higher level skills. The Employment and Skills Board has identified seven sectors with potential for growth. A range of opportunities exist in each of these sectors over the long term:

*Construction and infrastructure* is the largest of the priority sectors and is growing rapidly. Demand for residential, commercial and infrastructure developments requires a rise in the workforce in Essex from 65,000 to between 77,000 and 89,000 by 2021.

*Manufacturing and engineering* remains international in scope with broad opportunities to export. Basildon and Braintree are the main centres of employment in Essex, with 7,000 in each authority.

*Health care* has a highly qualified workforce, with nurses making up half of employment. The health sector is facing a critical shortage of nurses, doctors and other medical professionals, so a wide range of openings exist.

*Logistics* is a highly sophisticated industry, impacted by technical and environmental changes and consumer demand. Demand is rising with expansion of logistics, particularly at ports, London Gateway and Tilbury, as well as at London Stansted and London Southend airports. Consequently, there is a growing logistics sector, particularly in Thurrock and Uttlesford. An ageing workforce in logistics will require a large infusion of new blood over the next decade.

*Care:* In Essex an ageing population means that 137,000 people will need care support by 2030 and nationally 2 million new workers will be required in health and care by 2022.

*IT, digital and creative* is a fast moving sector with a quarter of all tech enterprises less than two years old. Advance in technologies, particularly digitisation, is driving a cross-over between IT and creative sectors. Colchester, Chelmsford and Southend are leading clusters.

*Finance and insurance:* A wide range of opportunities exist in this sector across Essex. Chelmsford, Basildon and Brentwood are the largest centres for finance and insurance. The sector is facing growing skills shortages in Essex, with increasing numbers of hard-to-fill vacancies.

Comparisons for these sectors of employment, numbers of job vacancies and level of salary are detailed in Table 10. Other sectors are also very important to the Essex economy, including retail and distributive trades, in which 132,000 people are employed. Accommodation and eateries employ 48,000 people while education employs 61,000.

**Table 10**

<b>Priority sectors in Essex</b>			
2015			% of jobs
	Employment	Job vacancies	advertised
	Thousands	Thousands	with salaries over £30,000
Construction	65	10	58
Manufactg. & Engineerg.	50	13	58
Health	47	12	54
Care	45	6	34
Logistics	37	7	17
IT, Digital & creative	30	17	67
Finance & insurance	26	12	42

Source: Essex Employment and Skills Board Evidence Base Spring 2016

## **2. Key aspects of the future vision for skills in Greater Essex:**

***Employer led influence in delivering priority training and skills*** Employers are at the centre of informing and facilitating skills development. Employers' insight on emerging trends will influence FE and HE courses on offer so that higher level qualifications are delivered that:

- Support the development of new technologies and opportunity sectors.
- Match developments in the local economy: related to expansion of airports and seaports and logistics.
- Deliver the step change in construction and infrastructure.

With many sectors and activities poised for further expansion, access to sufficient numbers of people with the right skills is essential to driving future growth.

***Sufficient supply of qualified people:*** People with technical qualifications, at a higher level where necessary, will be readily available for recruitment by employers. The development of higher level qualifications will enable businesses to recruit people with the skills and qualifications that they require.

***Life time learning*** Individuals will have the opportunity to develop their competences and skills through their career. In-work apprenticeships, funded in part by the new apprenticeship levy, will play an important role in upskilling existing employees so that they are equipped with the skills to exploit the technologies of the future.

***Government policy strategic and long term*** Government, nationally and locally, develops strategies and policies that support national and local skills requirements. Delivery of policy will be firmly based on long-term strategic priorities, not on short term fixes. There will be clear alignment of delivery across Government departments and public sector providers. At present, too often public sector policy is disjointed, not aligned, short term, characterised by competing objectives, and ultimately of little benefit in skills development.

***Greater Essex destination of choice*** Greater Essex will be established a destination of choice in which businesses can invest and where employers can attract and retain highly skilled individuals, with good social and economic infrastructure. The reputation for of Greater Essex will be based on local skills and quality of life. There is appetite for expansion amongst businesses. More enterprises will be drawn into Essex to take advantage of its proximity to London and the international connections conferred by the presence of growing ports and airports. Good connectivity by road and rail through Essex to the rest of the UK will also be an attraction.

***Awareness of career opportunities*** Information on career opportunities will be available to both young people and mature students so that they can access suitable qualifications for launch on to a career path. All local providers of careers advice should be accountable at the local level to ensure services to young people and adults are informed by the Essex Skills Evidence Base and take account of services offered by other providers to ensure alignment of careers guidance and to avoid duplication.

***Ability to recruit sufficient technical staff*** Universities, schools and colleges will be able to recruit sufficient people with technical qualifications to teach technical and professional qualifications.

## **C. REVIEW OF UK GOVERNMENT AND GREATER ESSEX STRATEGIES FOR DEVELOPING SKILLS**

### **1. Key planks required in UK skills strategy**

Key developments in the employment market include a long term shift to higher level skills from lower level skills. Perhaps the biggest continuing challenge is the ability to adapt to continuous technological change which influences the nature of skills requirements in all sectors. So, technological development is a key driver not only in advanced manufacturing; the IT, digital and creative industries; and financial and insurance services; but also in logistics, health and construction. Managing and embracing technological developments is therefore generic to all sectors.

In order to adapt to trends and developments a national and local strategy for skills needs to be formulated. Some of the key strands of this strategy which require action at national, regional and local levels include the following:

***i. Developing a cohesive and coherent employer led strategy***, in which local businesses play a central and leading role in shaping the local strategy.

***ii. Identify and address skills shortages*** The UK has a long standing shortfall of skills in two broad areas, which need to be addressed:

- Shortage of highly skilled technicians below graduate level.
- Sector specific skills gaps, particularly related to Science, Technology, Engineering and Maths (STEM) graduates.

***iii. Ensure that funding is aligned with local strategy and local requirements***. Funding should support coherent employer-led strategy, based on insight into local skills deficiencies, otherwise there is a risk that wider aims and strategy will not be delivered.

***iv. Upgrade vocational qualifications, particularly levels 4 & 5*** In order to meet the growing technical requirements across a range of sectors, including digital and creative as well as engineering and manufacturing, a much larger number of students are required at Levels 4 & 5.

***v. Facilitate lifelong learning to upskill workforce*** In work apprenticeships could have a crucial role in helping to upskill the workforce, particularly for larger employers. FE should continue to provide a range of professional and technical qualifications. As employees progress and become more productive, businesses can grow and offer new entry level opportunities.

***vi. Address low attainment in literacy and numeracy:*** Core competence in numeracy and literacy is a pre-requisite for employment hence the importance of students emerging from schools and further education with competence. England is behind many countries in northern and eastern Europe in standards of numeracy and literacy. The OECD's Programme for the International Assessment of Adult Competencies' (PIACC) undertakes international surveys of Adult Skills. Its latest survey in 2016 showed that England is just below the OECD average, 20<sup>th</sup> out of 34 countries in numeracy, and scores slightly better on literacy, being 14<sup>th</sup> out of 35 countries.

***vii. Raise quality of careers information and advice*** which in schools is often poorly resourced and a low priority. Careers education and advice emanates from a plethora of organisations, but

frequently doesn't reach school students who most need it. In a 2015 Reed survey of 2,300 young people aged 16-25 across the UK, 63% said that they lacked information about the range of career options available, while 56% indicated that no-one discussed vocational training options with them.

## **2. How is Essex addressing the challenge of meeting skills requirements?**

The scale of the opportunity for deploying new skills in Essex was highlighted at the outset of Section 2 on the long term vision for skills in Essex. This revolves around opportunities in many sectors, including development of ports, airports and major infrastructure projects.

**Employment and Skills Board (ESB)** The employer-led Employment and Skills Board in Essex, which is chaired by Suzanne Jude of Raytheon, has been at the forefront of identifying skills requirements, frequently driven by technological change. Skills gaps are identified at the level of seven key sectors for the 12 borough councils and two unitary councils that span the greater Essex area. Key sectors and lead employers are set out in the box below.

A key output of the ESB is the annual Skills Evidence Base report, produced annually since 2013 and now in its fourth edition. Underpinning the summary report are detailed statistics at the level of the seven key sectors and the 12 borough councils and two unitary authorities. The information used represents a combination of published data and statistics, feedback from local businesses, and information on planned future developments. While the work of the ESB is supported and resourced by Essex County Council, the role of local government officials on the Board is kept to a minimum to ensure that the Board remains employer led.

### **Employment and Skills Board in Essex**

Suzanne Jude ( <i>Chair</i> )	Raytheon UK
Alison Calnan ( <i>Vice Chair</i> )	Ford UK
David Bell ( <i>Vice Chair</i> )	FSB

*Lead employers for the seven key sectors:*

Tracey Kart	Konica Minolta
Daniel Wylie	Aldanat Care
Alan Cadman	Cadman Group
Adele Carnera	IFDS
Dr Sunil Gupta	NHS CCG
Paul Coffey	Coast Digital
Trevor Hutchinson	DP World

*Sector group:*

*Advanced manufacturing & engineering  
Care  
Construction  
Finance & insurance  
Health  
IT, Digital & Creative  
Logistics*

Liz Austin	London Stansted Airport (MAG)
Andrew Ames	Creative and Cultural Skills
Anthony Cotterill	University of Essex (HE)
Angela O'Donoghue	South Essex College (FE)
Simon Thompson	Association of Secondary Headteachers
Dr Paul Hayman	South Essex Teaching School Alliance
Nigel Hookway	Essex Primary Headteachers Association
Councillor Ricky Gadsby	Essex County Council

The impact and influence of the ESB is evidenced in a number of ways:

***Influencing local training providers to deliver new and enhanced qualifications:*** Data compiled by ESB, through its annual evidence base, has provided FE colleges with the evidence to develop provision of qualifications in areas where there is growth in demand and where gaps have been identified. FE colleges in Essex are working closely with large employers to deliver level 4/5 apprenticeship programmes funded from the apprenticeship levy. This will raise the skills base, enabling faster growth of businesses in Essex and generating more jobs. Further development of FE is still required to meet employers' requirements. Part of the challenge in Essex is associated with difficulties in attracting sufficient calibre of staff to teach relevant courses. Capping of income per student means that FE colleges are unable to pay the going rate for the industry.

***Developing an employer voice to government through a network of over 150 businesses*** The broad network of businesses involved in its network has informed ESB's voice in how European Structural and Investment Funds are spent; in contributing to post-16 education and training reviews for Essex; and citing examples of how skills system hasn't met employer needs. While it has improved the local delivery of skills provision, the ESB has had limited success in influencing national skills policy.

***Engaging young people about the scope of career opportunities accessible locally in Essex***

Engagement with young people in schools has been actioned in different ways through:

- *Distribution of 'What's your thing' guide* on careers options to 20,000 young people in 100 schools in Essex, Southend and Thurrock.
- *Delivering Education and Industry STEM programme*, through a range of activities to 30 schools and 800 students in the latest year, which enthuse and excite young people about careers in priority sectors. Activities include industry taster days, master classes, mentoring and competitions.
- *Launching the Essex Enterprise Adviser Network*, with 41 Enterprise Advisers from 38 Essex businesses to work with 25 schools across Essex. This network provides openings for work experience, highlights apprenticeship opportunities, and offers support with the process of recruitment, including writing applications and CVs and undertaking mock interviews.

***Holding job fairs*** to enable more than 20 local employers to recruit from the local labour market.

Each sector faces its own challenges but the particular issues in construction have resulted in the development of a strategic plan, which is summarised in the box on page 20. The aim is to raise the supply of people and skills into the industry to support future growth in demand.

**Upskilling workforce** Upskilling of workforce will involve:

- *Capitalising on the apprenticeship levy* It will be important for larger enterprises in Essex to take advantage of the introduction of the Apprenticeship Levy on UK employers to expand their own training of employees. The levy was introduced in April 2017 to fund new

*Sector case study:*

### **Strategic Plan for Construction Employment and Skills in Greater Essex**

**The challenge:** Growth in construction and infrastructure means that employment is predicted to increase from 85,000 in 2015 to between 97,000 and 109,000 by 2021, implying a net rise of between 12,000 and 24,000. Occupations already in short supply, where shortages need to be addressed, include trades such as civil engineering operatives, wood trades, steel and structural erectors. There are also acute shortage in professional occupations such as surveyors, site management and project management.

**The ambition** is to increase:

- The number of people working in construction annually by between 2,400 and 4,800.
- The number of construction learning aims delivered in Essex from 7.2% to 10%, which converts to growth in learner numbers from 4,700 to 6,500.
- The proportion of construction apprenticeship starts from 3.5% to 10% of all apprenticeship starts.

**Issues to address** relate to negative image of the sector amongst young people, adults and within FE and HE, which results in too few students studying construction. There are also concerns around inadequacy of courses, which may not always meet employers' requirements.

**The solutions** A wide ranging plan of activity has been agreed by the ESB and the Construction Industry Training Board:

*For young people and schools,* activity is focused on:

- Producing improved information, using videos and social media campaigns promoting construction, with the aim of moving 400 people into employment or relevant training by 2019/20.
- Promoting access to the sector through recruitment of enterprise advisers from construction, in-school events, industry visits, work experience and taster days. A total of 20 employers are involved in school activities that support the curriculum and 40 advisers have been trained resulting in 4,000 young people receiving relevant and consistent information.

*For FE and HE,* the priority will be to ensure that training facilities and equipment are in place to increase capacity and deliver employer led training. Examples of new provision intended to make provision for about 300 people per annum from 2018/19 include:

- Creation of STEM Innovation Centre on Colchester Institute's Braintree campus: the second phase will create a Centre for Advanced Technology in the north of the county.
- Purchase of specialist training equipment to support curriculum delivery in construction procurement funded by Colchester Institute.
- South Essex College (SEC) Grays' campus has changes its focus to building technology at levels 3 & 4, based on ESB evidence. SEC is also investing in facilities in Basildon to support construction training.
- National Institute for Advanced STEM Technology in Basildon, part of Prospects College of Advanced Technology: following completion part of its focus will be on building services and construction infrastructure sectors.
- Advanced Manufacturing Centre in Harlow: this project is mainly focused on engineering but will also provide facilities for construction training.

*For adult entrants,* aim is to build awareness of opportunities and draw in new entrants through:

- Construction careers fair, part of ESB jobs fair programme.
- Local communications campaign.
- Utilising careers fact sheet to target parents.

apprenticeships at a rate of 0.5% on those employers with annual pay bills in excess of £3m. The Government estimates that less than 2% of UK employers will pay the levy and each employer will receive an allowance of £15,000 to offset against their levy payment. Employers will be able to access funds generated by the levy to invest in their own apprenticeship training programmes.

- *Provision of a range of professional and technical qualifications by FE colleges for which employers and employees pay. These qualifications include Association of Certified Chartered Accountants (ACCA), Association of Accounting Technicians (AAT), Chartered Institute of Personnel and Development (CIPD) and Chartered Management Institute (CMI).*
- *Enabling employers to make effective use of Advanced Learner loans to support those employees requiring financial support to undertake new training.*

**Other Essex initiatives** Beyond the important role of the Employment and Skills Board a number of initiatives to support development and deployment of skills have been taken in the fields of higher and further education.

**Essex University's The Knowledge Gateway** research and technology park at Essex University is a key location in the eastern region for knowledge-based enterprises in science, technology and the creative sector. Parkside Office Village already accommodates 20 SMEs with the second phase to create space for up to seven more businesses from 2018. Also, the £10m Innovation Centre will have space for more than 50 growing start-ups following completion in 2018. Overall there is potential to employ more than 2,000 people at the Knowledge Gateway.

**Anglia Ruskin University's MedTech Campus** based on three sites in Chelmsford, Harlow and Southend, brings together all of the essential components of the innovation process, and will help to drive business growth in the MedTech sector in Essex. The venture is a partnership between Anglia Ruskin University and Chelmsford City Council, Harlow District Council and Southend-on-Sea Borough Council. With some 120 acres of land, there is up to 1.7m sq.ft. of floor space for MedTech and ancillary businesses. The founding partners are supported by a number of other key stakeholders in industry, local and central government and the NHS.

### **3. How can Essex focus its local support for development of education and skills?**

Identification of priorities in skills requirements through The Employment and Skills Board has helped to bring focus to the development of qualifications in Essex. The Commission believes that there are a number of issues which could be the focus of new initiatives, which include:

- ***Raising attainment at GCSE and A Levels across Essex.*** While the vast majority of core state-funded secondary schools across Essex are adjudged to be good or outstanding, there is room for improvement in average attainment, particularly at A Level, in parts of the county. Table 8 shows, for example, that in Essex Haven Gateway 12 out of 13 core state funded schools achieved average A-Level grade that was below the England average. In South Essex, 15 out of 20 are below average. Average A-Level attainment in some authorities, such as Chelmsford and Brentwood, is typically above average.

*Key message: The question for local authorities is whether OFSTED assessments for schools that are rated good and outstanding should be reflected in higher levels of average attainment at GCSE and A-Levels than is currently being achieved in some schools across Essex?*

- **Strengthen advice and guidance on education and qualification options to 16 year olds.** Many students may drift into A Levels after GCSEs without any clear understanding of wider options that may be available. Some then find the A-Level curriculum unsuitable and drop out within the first year of A Levels. It is only at this stage that such students may be guided towards opportunities in the FE sector. This drop out of students at A-Levels may be averted with more education and guidance in Year 11 when students are doing GCSEs, so that they are then better able to make more informed choices about the options that are most suitable for them.

*Key message: Schools need to establish links with the FE sector so that GCSE students are aware of the broad range of post-16 education opportunities and can make more informed choices.*

- **Engaging more school students and young people in extra-curricular learning** to bridge the gap between education and technical/vocational training, which would contribute to an improved understanding of the nature of particular sectors. Building on the ESB's work to engage more young people with priority sectors, funding could be considered, for example, for taster sessions to be run at the weekend at FE colleges. For example, a computer application that gave school students the opportunity to plan movement of freight in a lorry would provide an insight into logistics and could help to spark motivation leading to a career choice.

*Key message: Establishing new ways of engaging young people with sectors of which they have limited understanding would help to inform their choices.*

- **Increase support for innovative training and qualification opportunities, including for self-employment** Many young people aged 16-19 have qualifications in digital and creative skills. Employment opportunities in this sector are limited and many young people therefore have to set themselves up as self-employed and attract clients themselves. Many people could benefit from undertaking an apprenticeship in self-employment so that they have the opportunities to develop foundation skills including marketing, finance, tax and administration. Acquiring these skills would be beneficial to the development of their own businesses. This is particularly important in Essex which has a higher than average start-up rate for new businesses and is more dependent on smaller firms to drive economic growth.

*Key message: Establishing new models of training and apprenticeship which should include provision for people entering professions where self-employment is the main option and formal in-work training options are limited. This would help to ensure that qualifications are closely targeted to needs of people starting new businesses.*

- **Setting out clear priorities for action and investment in post-16 education:** Concern is expressed about the disparate sources of funding for post-16 education, for apprenticeships, and for adult education, which may not adequately address local requirements.

*Key message: Essex needs to agree clear priorities on how it believes the skills agenda is best delivered including priorities for 16-19 year olds, for apprenticeships and for adult education?*

- **Reviewing Essex approach to engagement with government** Essex has sought to engage with Government through a variety of routes regarding the skills agenda and the potential benefits of devolved powers and funding. However, this has so far had limited success in influencing national skills policy.

*Key message: The question is whether a fresh approach to Essex engagement with Government on skills is required to secure a more productive engagement which meets the aspirations and ambitions of Essex stakeholders in taking forward the skills agenda.*

#### **4. How can the Government's response to its Green paper further support development of skills in Essex?**

The publication of the Green paper 'Building our Industrial Strategy' provides strong endorsement of the crucial role of further education in generating a flow of people with high level technical and professional qualifications which are required across a range of sectors and technologies.

The objective here is to review the context for the Government's proposals. The Commission would like to see the Government's response to the skills element of its Green paper support development of skills in Greater Essex in a number of ways:

**i. Supporting an employer-led approach to enhancing skills:** The Green Paper acknowledges the key role that employers have in the following ways:

- The introduction of the Apprenticeship Levy: 'puts businesses in control of apprenticeship provision'.
- For the new 15 streamlined technical routes to technical education: 'it will be essential for routes to be led by employers to meet the needs of our industrial strategy'.
- Apprenticeships represent a vital component of local skills delivery but still account for the minority of 16-19 learner choices. So the effectiveness of local delivery of 16-19 learning needs to be shaped by the requirements of local businesses and the growth needs of the local economy. Young people need a better understanding of career and development options available to them, so that they can make more informed choices.

This employer-led approach is welcome as far as it goes, but understates other ways that employers can influence delivery of the skills agenda. In Essex this has included:

- **Identifying sector specific skills shortages:** The Government is placing emphasis on establishing a single authoritative view of the skills gaps faced by the UK now and in the future. The intention would be to build on other national assessments undertaken by various organisations including the UK Commission for Employment and Skills and the Low Pay Commission. While a cohesive national view is important, sector skills gaps have local characteristics which need to be addressed locally. An understanding of skills gaps in part therefore needs to be bottom up, drawing on intelligence from local employers, as well as top down, including local and regional breakdowns of national data, where these are available.

While a cohesive national strategy is important, a key part of the solution to resolving skills gaps therefore needs to be addressed locally, as in Essex, through an employer led strategy. The focus in Essex on key sectors has facilitated a better understanding of areas in which skills provision has required enhancing.

*Key message: The Government needs to facilitate the expertise of local employment and skills boards to deliver new skills based on local evidence. A stronger focus on local budgets is required, with local accountability for delivery and outcomes.*

- **Use analysis of skills gaps to influence technical education routes provided by FE colleges**  
Establishing a national system of 15 streamlined routes represents a much lower priority than scaling up the level of provision to meet current and future requirements. Employers in Essex already work with FE colleges to help deliver the right focus on technical qualifications locally. So, the employer-led approach in Essex has helped to shape the courses provided by FE colleges and could be a key component of a new national approach to skills.

*Key message: Strong partnerships between local employers and further education suppliers need to be established to facilitate an improved understanding of skills requirements so that FE can best supply the skills required at a local level. This understanding should be supported by flexible funding from Government to enable local provision to adapt to changing local employer demand.*

- **Promoting awareness of career opportunities:** The range of channels to have been used by the ESB in Essex to communicate available careers locally are set out on page 19. This includes information on how skills can fit with a range of career options; opportunities to access taster days, master classes and work placements, and to consult enterprise advisers.

*Key message: Government needs to encourage a range of ways in which students in school, sixth form college, FE or HE can find out and be motivated by the range of career options available locally.*

Beyond the ways in which Government support an employer-led strategy there are other avenues in which it can support development of skills in Greater Essex by:

**ii. Attracting more teachers capable of delivering technical qualifications** The capability to deliver a higher quality further education is heavily dependent on the ability to attract more teachers and lecturers who are qualified to a higher level. The FE colleges in Greater Essex have struggled to attract staff of sufficient calibre not helped by unattractive levels of pay. Sustained growth in the volume of students with higher level vocational qualifications will require larger number of qualified teachers.

*Key message: Plans should be put in place to attract the larger number of teachers and lecturers of sufficient calibre to deliver the new technical education routes. The FE sector needs to be in a position to offer competitive salaries if they are going to be able to recruit experienced professionals who have the skills to teach technical qualifications.*

**iii. Enhancing provision of higher level technical education**

Higher level apprenticeships in Greater Essex have grown from 70 to 790 between 2011/12 and 2015/16. This represents a strong start, but further progress is required. The Government is

proposing a single framework of approved technical qualifications at Levels 4+ but, as already indicated, this is much less of a priority than supplying the additional resources needed to fund the growth in students and courses that are required at both lower and higher levels.

The resources available for new Institutes of Technology that are intended to increase provision of higher levels of technical education seem inadequate. They also run the risk of duplication and cutting across and undermining provision that is already in place.

*Key message: The key issue in Greater Essex is for the Government to enhance the capability of FE colleges to scale up the delivery of professional and technical courses so that more students can gain qualifications that are required. The proposed new framework for technical qualifications is not a priority. The proposed new Institutes of Technology would be irrelevant if only constructed outside Essex in another part of the South East LEP. Even if located in Essex a new Institute of Technology should be required to collaborate with existing providers to avoid duplication.*

**iv. Ensuring coherence in government delivery of skills**, in contrast with the confusion and short termism that characterises current programmes.

Development of a strategy for skills should be characterised by key principles, which are set out in the box below. In summary, strategy should be long term, be aligned across public sector agencies, support local requirements, have clear priorities and be effectively communicated.

**v. Enabling local businesses to navigate the skills system** Greater coherence in the national skills system would make it easier for smaller businesses to navigate and access the skills system locally.

#### **Key principles to govern development and delivery of government policy on skills**

Key principles should cover the Government's approach to development and delivery of policy on skills, as well as how these are or can be put into practice nationally and locally.

Firstly, a strategic response to development and delivery of requisite skills should:

- Prioritise those issues that most need to be addressed.
- Be understood by the multiplicity of stakeholders concerned about enhancing skills.
- Be responsive to local skills needs.

Secondly, any initiatives put forward to develop skills should therefore:

- Form part of a coherent strategy.
- Be aligned across organisations involved, to ensure overlap and discontinuity is avoided.
- Take account of long term requirements, and not be short term and time limited.
- Be rooted in an understanding of local requirements.

Thirdly, the organisations responsible for delivery initiatives, both public and private sector, should work collaboratively with other local providers and be locally accountable for outcomes.

## **SOURCES**

### **Department for Education, Skills Funding Agency**

16 year olds not staying in education or entering employment (NEETs), 2016

Apprenticeship starts, 2015/16

A-Level entries, 2015/16

Schools & colleges average grade at A Levels, 2015/16

Schools Attainment 8 score, 2015/16

### **Employment and Skills Board**

Average salaries for job vacancies, 2015

Job vacancies in local authorities, 2016 (sourced from Labour Insight)

Main skills required by employers, 2016 (sourced from Labour Insight)

Priority sectors: employment and job vacancies, 2016

### **Further Education Colleges in Greater Essex**

Types of learning for main FE colleges

### **Local Government Association**

Work Local vision, 2017

### **Office for National Statistics**

Business Demography 2015

Sub regional productivity data 2015

### **OECD**

Programme for the International Assessment of Adult Competencies (PIAAC), 2016 survey

### **Reed in Partnership**

Young people and employment, Out UK Survey, 2015