LOCAL SKILLS DEFICITS AND SPARE CAPACITY

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Summary

This report aims to model potential skills gaps in 2030 in England and for eight areas within England, quantifying the potential loss of economic output these gaps could, all else equal, lead to. There are three steps in doing this.

1. **Modelling skills supply in 2030.** To do this, an estimated baseline of qualifications profiles in 2018 are produced using Labour Force Survey (which is more up to date but has a limited breakdown at local level) to augment Census 2011 data (which is older, but has a more detailed local breakdown). To model forward to 2030, those age groups that will be over State Pension Age are removed. It is assumed that young people entering the workforce will have the same qualification profile as young people today. It is assumed that there will be similar rates of improvement in adults' qualifications profiles as seen over the last decade, with the exception of higher skills where it is assumed that the rapid growth in higher education participation over recent decades will slow. Taken together, this gives qualifications profiles for 20-64 year olds for England and for the eight case study areas.

2. **Modelling skills demand in 2030.** Working Futures gives projections for England and for Local Enterprise Partnership (LEP) areas in England of demand for people with different qualification levels. This is based on a model of the economy incorporating past trends and assumptions about the future. This is then translated into demand for different qualifications based on the current qualification profile of different occupations and trends in these over time. We translate LEP data into local authority data by applying the rate of projected sectoral change in the LEP to the sectoral make up of each local authority, derived from the Business Register and Employment Survey (BRES). The current Working Futures projections run to 2024. We have projected these forward to 2030 by extending the rates of change projected by Working Futures. This obviously assumes both that Working Futures trends to 2024 are correct and that these trends continue to 2030.

3. **Quantifying and valuing potential skills gaps.** We substract skills demand from skills supply to give potential skills gaps. These are then grouped into low (no qualifications to below level 2), medium (levels 2-3) and high (level 4+) skills. Individuals receive some of the benefits of skills improvements through higher wages, and employers capture some through increased profitability and productivity. To convert the projected skills gaps into an economic output or Gross Value Added (GVA) at risk figure, we use earnings for people at different qualification levels today multiplied by the skils gaps at that qualification level multiplied by the ratio of GVA to wages and salaries in the economy (to reflect the share of benefits from skills improvements that go to individuals and employers) of 1.766 taken from national accounts data.

There are some important caveats to this analysis. The **first** is that employers could respond in a range of ways to any potential shortfall in skills, for example by changing their business strategies, automating work etc. So the skills gaps are only if all else is equal – they show potential skills gaps in the absence of policy or employer response. The **second** is that Working Futures represents a 'business as usual' scenario. In practice the Government and local authorities all seek, including through Local Industrial Strategies, to boost economic growth and hence the demand for skills. They also seek to increase the supply of skills. This analysis does not account for delivering this higher ambition or assume the success of current or future policy. **Thirdly**, in common with most reports, this analysis assumes that qualifications are a good proxy for skills. In practice, skills have a much broader definition, but qualifications are the most widely available and comparable unit of analysis.

The **fourth** caveat relates particularly to the local authority level analysis. Many people commute in and out of local authority areas, and employers are often able to draw on a potential workforce beyond local authority boundaries. This analysis therefore focuses on the extent to which the skills of people resident in a local authority (or groups of local authorities) compare to the skills required by employers based in that local authority (or group of local authorities).

Our analysis suggests a potential shortfall in England of 2.5 million highly skilled people in 2030 and surpluses of 3.1 million people both for intermediate skills and low skills. This puts at risk economic output of around £120 billion.

These results compare to a shortfall of 4.2 million highly skilled people and surpluses of 1.9 million people with intermediate skills and 6.2 million low skilled people in our previous analysis, published in 2017. The differences primarily arise from: i) different time frame, with the new analysis projecting to 2030 rather than 2024 as per the previous analysis; and ii) adjustments to methodology for modelling skills supply so as to better reflect upskilling in the workforce, changes since the 2011 Census, and the impact of international migration and migration within England and the UK on skills levels.

In addition, the aim of national and local policy is to deliver a higher growth, higher skills economy than the Working Futures projections for employer demand imply. The demand for skills could rise if measures to improve productivity and growth, such as the Industrial Strategy and other local and national policy, were successful. All else equal this would increase the size of these skills gaps. National and local policy, including the Industrial Strategy, could seek to meet these gaps by increasing the supply of skills. Employers and policymakers need to respond by improving our skills base and the utilisation of skills at work as part of a wider Industrial Strategy.

Introduction

This note looks at the extent and nature of the potential skills gap that could be faced in the future through to 2030 – at both the level of England as a whole and in eight selected local areas:

- Nottingham City

- Staffordshire

- Gloucestershire

- Greater Lincolnshire

- Essex, Southend and Thurrock

- Lambeth, Lewisham and Southwark

- North of Tyne

- Southampton and Portsmouth

In addition to the combined analysis for the case study area of Essex, Southend and Thurrock, further disaggregated analysis covers for the three unitary authorities: Essex County Council, Southend and Thurrock[1]. Continuing trends towards higher skilled jobs suggest that significant changes in the pattern of demand for labour through to 2030 can be expected. How the supply of skills might compare against this changing demand over the future is assessed.

For the supply of skills we adopt a hybrid methodology which combines the results of two alternative scenarios: first, a more conservative projection based simply on aging forward the supply of skills for 2011 for 19 years and second an alternative scenario which also takes account of migration between areas from both elsewhere in England and the UK, and internationally and the effect of adult learning from the age of 25. We assessed the skills profile of the population in England using the second approach and found that it suggested that by 2030 that more than a half of the population aged 20-64 would have Level 4 plus skills. This scenario is based on projecting forward the increase in skills levels seen between 2011 and 2018 for another 12 years. The seven years to 2018 saw a substantial rise in participation in higher education and there must be uncertainty as to whether such a rate of progress will continue through to 2030.

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[1] While the Improvement and Development Agency for local government (IDeA) paid for the analysis at the level of England and for the eight case study areas, Essex County Council paid for the results to be disaggregated to the level of the three constituent unitary authorities.

Hence, the skills supply projections used are a weighted average of the two approaches with a 60% weight for the first approach and a 40% weight for the second approach. This weighted average projection suggested that in 2030 around 45 percent of the population aged 20-64 in England would have skills at Level 4 or above. This percentage is consistent with the assumption we used for the population of working age of 43 per cent for 2030 in our *Time For Action[2]* report.

The difference between the projections for labour demand and labour supply provides estimates of the resulting skills gaps or skills surpluses for England, the eight case study areas and the three disaggregated constituent parts of Essex, Southend and Thurrock. Where there are skills gaps, the economic output loss that can be expected to result as a consequence of these gaps at the English and local levels has been estimated.

At the local level it is important to understand the nature of the question that is being answered by this comparison of local demand and local supply. Local authority boundaries rarely match those for local labour markets. Hence for the local case study areas this comparison assesses the extent to which residents in the local area are expected to supply the types of skills that employers in the local area require.

However, not all people work in the local area in which they live. For example, based on data from the 2011 Census of Population one third of the employed residents of the Essex County Council area worked outside of this area. Similarly, not all the workers in any local area also live in the same area. For example, again using data from the 2011 Census showed that, more than two fifths of workers in Portsmouth and Southampton resided outside of these two cities. Hence, the calculations for the case study areas in this report do not answer either of the following questions:

- What, at 2030, is it anticipated will be the supply of skills available to local employers?

- What, at 2030, is it anticipated will be the supply and mix of jobs available to local people?

The supply of skills available to local employers will also include in commuters into the local area while the jobs available to local residents will include those they can commute to outside of the local area in which they live.

The Office for National Statistics (ONS) produce a geography known as Travel to Work Areas (TTWAs). TTWAs are intended to approximate local labour market areas. They are defined as self-contained areas in which most people both live and work. Specifically, they are defined as areas where at least 75% of the employed residents of that area work in the

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[2] Evans, S. and Egglestone, C. (2019), "Time Action: Skills for economic growth and social justice", Learning and Work Institute.

area, and also, that of everyone working in the area, at least 75% live in the area. Table 1 shows these two percentages for the case study areas in 2011.

This indicates that of the case study areas just three meet both of these 75% thresholds: Gloucestershire, Greater Lincolnshire and the North of Tyne Combined Authority. The combined area for Essex, Southend and Thurrock, and one of its three unitary authorities, the Essex County Council area, meet one but not both of these thresholds. Hence, the authorities in Gloucestershire, Greater Lincolnshire and North of Tyne can view the analysis in this report as providing evidence which is closer to answering the two questions above. However, even in these areas commuting in and out of them remains important. For example, around one in six of those working in Gloucestershire commute into the area from outside and around one in six employed residents of North of Tyne commute out of the area for work.

Table 1: Employed Residents Working in their Local Area Shares

	Share of All Employed Residents (%)	Share of Workers in the Local Area (%)
Nottingham	63.6	42.8
Staffordshire	58.5	68.8
Gloucestershire	83.4	84.0
Greater Lincolnshire	85.9	90.9
Lambeth, Lewisham and Southwark	30.0	34.5
North of Tyne	84.0	79.0
Portsmouth and Southampton	62.2	57.6
Essex, Southend and Thurrock	71.0	84.6
Essex County Council	66.3	78.9
Southend	55.3	64.1
Thurrock	45.9	57.6

Source: Census of Population 2011, L&W calculations

The potential skills gaps in 2030

Skills gaps for England and for the local case study areas have been calculated for 2030. These skills gap would constrain economic growth and the level of economic output if they are not closed.

These gaps are the difference between:

- the qualifications that will be needed for the expected volume and pattern of jobs in 2030 (future labour demand), based on Working Futures projections up to 2024 which have been extended through to 2030.

- the qualifications of the workforce in 2030 (future labour supply) based on the hybrid method which combines the results of two alternative scenarios: a more conservative projection based simply on aging forward the supply of skills for 2011 for 19 years and an alternative scenario which also takes account of migration between areas and the effect of adult learning from the age of 25. This hybrid method is described above.

In order to illustrate our analysis more simply and clearly, we have clustered the eight National Qualification Framework (NQF) qualification levels into three skills groups – high skills, intermediate skills, and low skills, as follows:

- Low skills are no qualifications plus qualifications below Level 2.

- Intermediate skills are Level 2 and Level 3 qualifications.

- High skills are Level 4 and above qualifications.

The skills gap in England

Figure 1 shows the difference between the composition of the projected employer demand for skills in England in 2030 and the skills we expect to be held by the population of working age in England in 2030 (labour supply).

The composition of the projected supply of skills for England does not match the expected shape of demand for skills for England in 2030. There are projected to be surpluses at both the low and intermediate levels, especially the former, and a shortage of people with high skill levels.

Table 2 shows the same information in a different way. It indicates that England potentially faces a deficit of high skills in 2030 amounting to around 2.5 million people if more is not done to increase qualifications levels in our country. In contrast, skills surpluses of over 3 million are anticipated at both the low and intermediate skills levels.

Figure 1: Projected composition of skills demand and supply in England, 2030
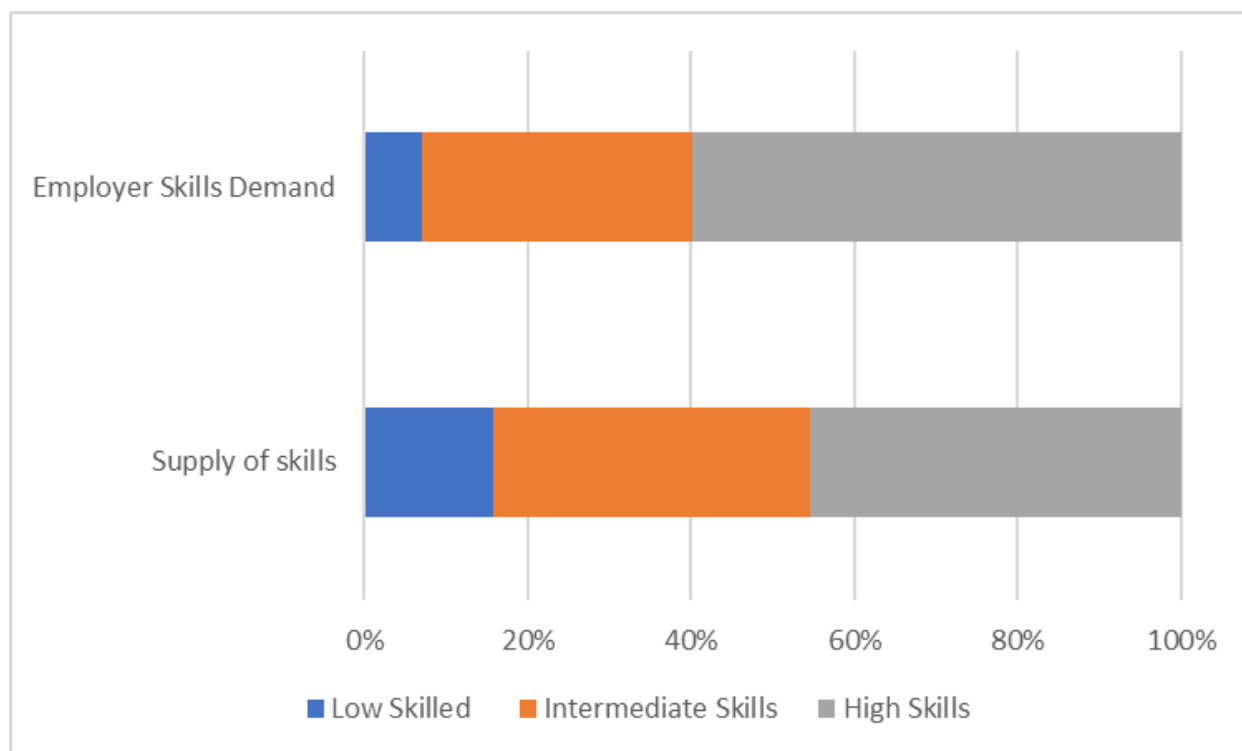
Table 2: Skills Levels and Needs in England in 2030, thousands

	Low Skilled	Intermediate Skills	High Skills
Supply of Skills	5,183	12,740	14,882
Employer Skills Demand	2,033	9,589	17,410
Skills Gap	3,150	3,150	-2,527

Note: The figures above are rounded to the nearest thousand.

Local skills gaps

The above analysis for England is repeated below for our eight case study areas and the three parts that make up Essex, Southend and Thurrock. In addition, for these local areas information from the 2011 Census on commuting into and out of these areas for work is presented to provide greater understanding of the local labour markets in these areas.

Nottingham

Table 3 shows the projected supply of skills and the expected demand for skills in Nottingham in 2030. Nottingham is projected to have a shortage of skills at both the intermediate and high levels, with an expected surplus of low level skills.

Table 3: Skills Levels and Needs in Nottingham in 2030, thousands

	Low Skilled	Intermediate Skills	High Skills
Supply of Skills	40	88	82
Employer Skills Demand	24	97	132
Skills Gap	17	-10	-49

Note: The figures above are rounded to the nearest thousand.

These local skills gaps between the expected skills on offer from local Nottingham residents and those expected to be demanded by Nottingham employers should be viewed in the context of significant in commuting into Nottingham for work shown by data from the 2011 Census (Table 4). Nottingham is a centre of employment for people who live within commuting distance. In 2011, more than half of the workers in Nottingham came from outside the city. On the assumption that this pattern of commuting continues through to 2030 then these skills gaps may be closed, or at least mitigated, by workers commuting into the area for work.

Table 4: Employed residents, workers and commuting in Nottingham

	Numbers (thousands)	Share of All Employed Residents (%)	Share of Workers In Area (%)
Employed Residents Working in Area	67	63.6	42.8
Out Commuters	38	36.4	
In Commuters	90		57.2
Net Commuters	51		
All Employed Residents	105		
Workers In Area	157		

Source: Census 2011

Note: The figures above are rounded to the nearest thousand

Staffordshire

Table 5 shows the projected supply of skills and the expected demand for skills in Staffordshire in 2030. Staffordshire is projected to have a surplus of skills at all levels in 2030, particularly at the intermediate level.

These local skills surpluses should again be viewed in the context of the commuting patterns prevalent in Staffordshire as shown by data from the 2011 Census (Table 6). Around two fifths of workers resident in Staffordshire commuted out of the area for work. More than a fifth (22%) or 76,000 travelled to the urban areas of Stoke, Birmingham, Wolverhampton, or Walsall for work.

Stoke was the largest single destination for people to commute out of Staffordshire for work in 2011 – accounting for 32,000 out commuters or 9 percent of all the employed residents of Staffordshire. The urban areas of Birmingham, Wolverhampton and Walsall were also significant destinations for out commuters from Staffordshire accounting for 44,000 outcommuters or 13 percent of all the employed residents of Staffordshire. Stoke was also the largest single source of workers commuting into Staffordshire for work in 2011 – accounting for 24,000 in commuters or 8 percent of all workers in Staffordshire. Overall in 2011 there was substantial net out commuting of workers from Staffordshire. If this pattern of commuting were to continue through to 2030 then these skills surpluses may be reduced or even eliminated by workers commuting out of the area for work.

Table 5: Skills levels and needs in Staffordshire in 2030, thousands

	Low Skilled	Intermediate Skills	High Skills
Supply of Skills	70	223	184
Employer Skills Demand	51	168	176
Skills Gap	19	55	7

Table 6: Employed residents, workers and commuting in Staffordshire

	Numbers (thousands)	Share of All Employed Residents (%)	Share of Workers In Area (%)
Employed Residents Working in Area	199	58.5%	68.8%
Out Commuters	141	41.5%	
In Commuters	90		31.2%
Net Commuters	-51		
All Employed Residents	340		
Workers In Area	290		

Source: Census 2011

Note: The figures above are rounded to the nearest thousand

Gloucestershire

Table 7 shows the projected supply of skills and the expected demand for skills in Gloucestershire in 2030. Gloucestershire is projected to have a surplus of skills at the low and intermediate levels and a deficit of high skills. As noted above Gloucestershire is one of three case study areas that meets the two containment ratios used to defined TTWAs which are intended to approximate largely self-contained local labour markets. In addition, commuting flows for work into and out of Gloucestershire very largely balance each other out (Table 8). Hence, on the assumption that this pattern of commuting continues through to 2030 then, relative to other case study areas the projected supply of, and demand for skills shown in Table 7 provides a much fuller assessment of both the total quantum and composition of labour that is expected to be available to employers in Gloucestershire in 2030 and also the total quantum and composition of jobs that is anticipated to be available to workers in Gloucestershire in 2030.

Table 7: Skills levels and needs in Gloucestershire in 2030, thousands

	Low Skilled	Intermediate Skills	High Skills
Supply of Skills	55	156	142
Employer Skills Demand	19	116	183
Skills Gap	36	40	-40

Table 8: Employed residents, workers and commuting in Gloucestershire

	Numbers (thousands)	Share of All Employed Residents (%)	Share of Workers In Area (%)
Employed Residents Working in Area	200	83.4%	84.0%
Out Commuters	40	16.6%	
In Commuters	38		16.0%
Net Commuters	-2		
All Employed Residents	240		
Workers In Area	238		

Source: Census 2011

Note: The figures above are rounded to the nearest thousand

Greater Lincolnshire

Table 9 shows the projected supply of skills and the expected demand for skills in Greater Lincolnshire in 2030. It is anticipated that the area will have surpluses of low and intermediate level skills, but a deficit of high level skills. As noted above Greater Lincolnshire is another of the three case study areas that meets the two containment ratios used to defined TTWAs (Table 10). Hence, again compared to other case study areas the projected supply of, and demand for skills shown in Table 9 provides a much fuller assessment of both the total quantum and composition of labour that is expected to be available to employers in Greater Lincolnshire in 2030 and also the total quantum and composition of jobs that is anticipated to be available to workers in Greater Lincolnshire in 2030.

Table 9: Skills levels and needs in Greater Lincolnshire in 2030, thousands

	Low Skilled	Intermediate Skills	High Skills
Supply of Skills	131	269	184
Employer Skills Demand	44	199	237
Skills Gap	87	71	-53

Table 10: Employed residents, workers and commuting in Greater Lincolnshire

	Numbers (thousands)	Share of All Employed Residents (%)	Share of Workers In Area (%)
Employed Residents Working in Area	341	85.9%	90.9%
Out Commuters	56	14.1%	
In Commuters	34		9.1%
Net Commuters	-22		
All Employed Residents	397		
Workers In Area	375		

Source: Census 2011

Note: The figures above are rounded to the nearest thousand

Lambeth, Lewisham, and Southwark

Table 11 shows the projected supply of skills and the expected demand for skills in Lambeth, Lewisham, and Southwark in 2030. The tri-borough area is projected to skills surpluses at all three skills levels.

Table 11: Skills levels and needs in Lambeth, Lewisham and Southwark in 2030, thousands

	Low Skilled	Intermediate Skills	High Skills
Supply of Skills	54	121	503
Employer Skills Demand	14	69	429
Skills Gap	40	51	74

The area is a relatively small part of the much wider London conurbation. Very high rates of in and out commuting for work is a feature common to many London boroughs. Seventy percent of the employed residents of the tri-borough area work outside of this area while around two thirds of the workers in the area come from outside the area (Table 12).

Table 12: Employed residents, workers and commuting in Lambeth, Lewisham and Southwark

	Numbers (thousands)	Share of All Employed Residents (%)	Share of Workers In Area (%)
Employed Residents Working in Area	110	30.0%	34.5%
Out Commuters	257	70.0%	
In Commuters	209		65.5%
Net Commuters	-48		
All Employed Residents	367		
Workers In Area	319		

Source: Census 2011

Note: The figures above are rounded to the nearest thousand

The London CBD pulls in labour from across the capital and in 2011, 27% of the employed residents of the tri-borough area ,or 98,000 people, worked in Westminster / City of London the core of the London CBD. On the assumption that this pattern of commuting continues through to 2030 then the calculated skills surpluses in the tri-borough area do not represent the skills that might be available to employers in Lambeth, Lewisham, and Southwark in 2030, or what jobs are available for the residents of these boroughs. This is simply because there is so much in and out commuting into and out of the area.

North of Tyne

Table 13 shows the projected supply of skills and the expected demand for skills in the North of Tyne combined authority. North of Tyne is projected to have surpluses of both low and intermediate skills and a shortage of high skills in 2030.

Table 13: Skills levels and needs in North of Tyne in 2030, thousands

	Low Skilled	Intermediate Skills	High Skills
Supply of Skills	81	194	183
Employer Skills Demand	46	182	197
Skills Gap	35	12	-15

North of Tyne is the third case study area that meets the two containment ratios used to defined TTWAs (Table 14). Hence, again compared to other case study areas the projected supply of, and demand for skills shown in Table 13 provide a much fuller assessment of both the total quantum and composition of labour that is expected to be available to employers in the combined authority in 2030 and also the total quantum and composition of jobs that is anticipated to be available to workers in the combined authority in 2030. This is dependent on the general patterns of commuting prevalent in 2011 continuing through to 2030.

Table 14: Employed residents, workers and commuting in North of Tyne

	Numbers (thousands)	Share of All Employed Residents (%)	Share of Workers In Area (%)
Employed Residents Working in Area	256	84.0%	79.0%
Out Commuters	49	16.0%	
In Commuters	68		21.0%
Net Commuters	19		
All Employed Residents	304		
Workers In Area	324		

Source: Census 2011

Note: The figures above are rounded to the nearest thousand

Portsmouth and Southampton

Table 15 shows the projected supply of skills and the expected demand for skills in Portsmouth and Southampton. Portsmouth and Southampton are projected to have surpluses of low skills and intermediate skills, and a shortage of high skills in 2030.

Table 16 indicates that combined the two cities of Portsmouth and Southampton experienced high rates of both in and out commuting for work in 2011. If such a pattern of commuting is maintained through to 2030 then compared to a number of the case study areas, the needs of employers in the area are more likely to be met by in commuters and workers in the area are more likely to out commute for work. In 2011, around a fifth of workers from Portsmouth or Southampton worked in Eastleigh, Winchester, Havant or Fareham, and these four areas also accounted for around a fifth of those working in Portsmouth or Southampton.

Table 15: Skills levels and needs in Portsmouth and Southampton in 2030, thousands

	Low Skilled	Intermediate Skills	High Skills
Supply of Skills	39	125	133
Employer Skills Demand	11	78	149
Skills Gap	28	48	-16

Table 16: Employed residents, workers and commuting in Portsmouth and Southampton

	Numbers (thousands)	Share of All Employed Residents (%)	Share of Workers In Area (%)
Employed Residents Working in Area	109	62.2%	57.6%
Out Commuters	66	37.8%	
In Commuters	80		42.4%
Net Commuters	14		
All Employed Residents	175		
Workers In Area	190		

Source: Census 2011

Note: The figures above are rounded to the nearest thousand

Essex, Southend and Thurrock

Table 17 shows the projected supply of skills in our two scenarios and the expected demand for skills in the combined area of Essex, Southend and Thurrock. Below we also assess our projections for the three unitary areas. The combined area has a projected surplus of both low and intermediate skills, and an expected shortage of high skills in 2030. These apparent surpluses of low and intermediate level skills may be reduced and the shortage of high level skills sharpened by net out commuting from the combined area.

Table 17: Skills levels and needs in Essex, Southend and Thurrock in 2030, thousands

	Low Skilled	Intermediate Skills	High Skills
Supply of Skills	219	482	374
Employer Skills Demand	41	274	499
Skills Gap	179	208	-125

In 2011, the difference between out commuting and in commuting for work in the combined area was over 100,000 (Table 18). In 2011, 29 percent of workers commuted out of the area for work with around three quarters of these (accounting for 22% of all workers residing in the area) working in London. Hence, if this pattern of commuting is maintained until 2030, then part of the supply of labour that is expected to be provided by workers from the area would meet the needs of London rather than local employers.

Table 18: Employed residents, workers and commuting in the combined area of Essex, Southend and Thurrock

	Numbers (thousands)	Share of All Employed Residents (%)	Share of Workers In Area (%)
Employed Residents Working in Area	478	71.0%	84.6%
Out Commuters	195	29.0%	
In Commuters	87		15.4%
Net Commuters	-108		
All Employed Residents	673		
Workers In Area	564		

Source: Census 2011

Note: The figures above are rounded to the nearest thousand

Essex County Council

Table 19 shows the projected supply of skills and the expected demand for skills in the Essex County Council area in 2030. As for the wider combined area of Essex, Southend and Thurrock, the Essex County Council area has a projected surplus of both low and intermediate skills, and an expected shortage of high skills in 2030.

In 2011, a third of workers resident in the Essex County Council area work outside of the area with London being the predominant destination with around one fifth of workers resident in the Essex County Council area working there. Hence, again, if the commuting patterns of 2030 are similar to those pertaining in 2011 then, part of the supply of skills that are expected to be embodied in workers there would be meeting the needs of external, especially London, employers rather than local employers. Hence, the apparent surpluses of low and intermediate level skills may be reduced and the shortage of high level skills sharpened by net out commuting from the combined area of Essex, Southend and Thurrock.

Table 19: Skills levels and needs in Essex County Council area in 2030, thousands

	Low Skilled	Intermediate Skills	High Skills
Supply of Skills	165	384	307
Employer Skills Demand	33	223	410
Skills Gap	132	160	-103

Table 20: Employed residents, workers and commuting in Essex County Council

	Numbers (thousands)	Share of All Employed Residents (%)	Share of Workers In Area (%)
Employed Residents Working in Area	359	66.3%	78.9%
Out Commuters	182	33.7%	
In Commuters	96		21.1%
Net Commuters	-86		
All Employed Residents	542		
Workers In Area	455		

Source: Census 2011

Note: The figures above are rounded to the nearest thousand

Southend

Table 21 shows the projected supply of skills and the expected demand for skills in Southend. Southend has a projected surplus of both low and intermediate skills, and an expected shortage of high skills in 2030.

Table 21: Skills levels and needs in Southend in 2030, thousands

	Low Skilled	Intermediate Skills	High Skills
Supply of Skills	27	49	32
Employer Skills Demand	3	24	47
Skills Gap	24	25	-15

In 2011, Southend experienced high rates of both in and out commuting for work. Forty five per cent of workers resident in Southend worked outside the town (Table 22), 22 per cent working in the Essex County Council area and 19 per cent in London. The Essex County Council area was also a very important supplier of labour to employers in Southend in 2011: 31 percent of people working in Southend then being resident in the Essex County Council area. Hence, if the commuting patterns of 2030 are similar to those relating to 2011 then the skills available to employers in Southend will depend very substantially on workers from the Essex County Council area and the jobs available to workers living on Southend will include not just local jobs but also those at workplaces in London and the Essex County Council area.

Table 22: Employed residents, workers and commuting in Southend

	Numbers (thousands)	Share of All Employed Residents (%)	Share of Workers In Area (%)
Employed Residents Working in Area	37	55.3%	64.1%
Out Commuters	30	44.7%	
In Commuters	21		35.9%
Net Commuters	-9		
All Employed Residents	67		
Workers In Area	58		

Source: Census 2011

Note: The figures above are rounded to the nearest thousand

Thurrock

Table 23 shows the projected supply of skills and the expected demand for skills in Thurrock. Thurrock is projected to have surpluses of low and intermediate skills and a shortage of high skills in 2030. Thurrock has very high rates of in and out commuting for work. In 2011, more than half of workers resident in Thurrock commuted out of the area for work, with around a third of Thurrock workers working in London (Table 24). In addition, around two in five workers working in Thurrock commute into the area with around one in six coming from the Essex County Council area and around another one in six being out commuters from London. Hence, similar to Southend if the commuting patterns of 2030 are similar to those in 2011 then the skills available to employers in Thurrock will depend very substantially on workers from the Essex County Council area and London and the jobs available to workers living in Thurrock will include not just local jobs but also those at workplaces outside the area, especially in London.

Table 23: Skills levels and needs in Thurrock in 2030, thousands

	Low Skilled	Intermediate Skills	High Skills
Supply of Skills	27	50	34
Employer Skills Demand	4	27	41
Skills Gap	23	23	-7

Table 24: Employed residents, workers and commuting in Thurrock

	Numbers (thousands)	Share of All Employed Residents (%)	Share of Workers In Area (%)
Employed Residents Working in Area	30	45.9%	57.6%
Out Commuters	35	54.1%	
In Commuters	22		42.4%
Net Commuters	-13		
All Employed Residents	65		
Workers In Area	51		

Source: Census 2011

Note: The figures above are rounded to the nearest thousand

Potential losses of economic output

A shortage of skills at all levels can constrain economic growth. There is strong relationship between skills and productivity. Thus, any shortfall in the qualifications needed by employers will lead to reduced productivity and lower economic growth, subject to how employers choose to respond to these (for example, by changing their business models to rely more on technology). The projected skills gaps for England, and each of the case study areas have been used to calculate the potential loss of economic output in 2030. The results of our calculations are shown in Table 25 For England we estimate that the potential loss of economic output in 2030 could be around £120 billion in today's prices.

Table 25: Potential economic output lost, £billion, 2030

Area	GVA at risk (£bn)	GVA at risk (%)
England	-£119.6	-7%
Nottingham	-£4.0	-28%
Staffordshire	£0.0	0%
Gloucestershire	-£1.9	-10%
Greater Lincolnshire	-£2.5	-10%
Lambeth, Lewisham and Southwark	£0.0	0%
North of Tyne	-£0.7	-3%
Portsmouth and Southampton	-£0.8	-6%
Essex, Southend and Thurrock	-£6.0	-13%
- Essex CC	-£4.9	-13%
- Southend	-£0.8	-19%
- Thurrock	-£0.2	-5%

In most of the local case study areas we project a potential loss of economic output consequent on the existence of skills gaps, all else equal. There are two exceptions to this, for Staffordshire and for Lambeth, Lewisham and Southwark. In these two areas comparing the expected skills of the local population and the skills requirements of jobs expected to be located in the local area shows no skills shortages at any level and hence no loss of economic output. However, both of these areas were net exporters of labour in 2011. Hence, if this picture of commuting still pertains in 2030 then some of the skills expected to be embodied in the local population can be expected to be filling jobs outside of these two areas rather than helping to meet the needs of local employers.