

Graduate Employment in the Humber

Final Report

Report from HECSU/Graduate Prospects

+ Executive Summary

This analysis uses data from HESA's Destination of Leavers of Higher Education (DLHE) Survey 2016/17 to build a picture of graduate supply and demand in the Humber. Many of the findings and conclusions will apply in a post COVID-19 world but naturally there will be changes as a consequence of the pandemic, and those changes cannot currently be detailed.

This report only includes University data. The Humber benefits from a significant amount of higher level technical and degree provision in College Based Higher Education (CBHE), providing advanced level skills for a local workforce. This enables Humber residents to choose which provider route they prefer and includes foundation degrees, degrees and professional level qualifications. Unfortunately this data was not available to analyse effectively at the time of this report and the LEP intends to commission the CBHE data separately.

In total, 5,570 individuals originally from the region were awarded higher education qualifications in 2016/7, 1.1% of the total UK graduating cohort. 69.5% of the cohort had studied a first degree and 43.1% of all graduates from the Humber originated from East Riding.

2,285 first degree graduates originally from the region entered the workforce and the region employed 1,710 graduates. The Humber is therefore a net exporter of graduates.

The demographic profile of first degree graduates from and working in the region are reasonably similar. Women and BAME graduates are slightly more likely to stay within the region to work – this is in line with the UK population as a whole as these groups tend to be less mobile.

The majority of first degree graduates originally from the region attended institutions in Yorkshire and the Humber. 28% of Humber graduates attended the University of Hull. The majority of first degree graduates originally from the region went to work in Yorkshire and the Humber. 54.1% of graduates originally from the Humber went to work within the Humber region, with 25.8% of all Humber graduates going to work in Hull.

Hull was the largest location for employed graduates in the region, with 48% of all university leavers working in the region working within the city.

Meanwhile 49.8% of graduates working in the region after six months were working in Hull, and the large majority, 71.8%, were originally from the Humber.

52.6% of all working graduates originally from the region were working locally six months

after graduation. This is quite a high figure for an individual region of this size and outlines that this is quite a closed labour market; it may be healthier for diversity of skills and outlook if more graduates could be brought into the region.

The data suggests that rather more Humber graduates study business and arts subjects than the local labour market currently supports and that the region may be slightly undersupplied with prospective students of medical and allied subjects. Nevertheless outcomes for graduates originally from the region are good and at most levels slightly better than the UK average.

71.2% of graduates starting work in the region did so in a professional level role, with the figures ranging from 69.6% in Hull to 76.8% in NE Lincs. This relatively high figure might seem counter-intuitive considering the weakness of some local authority labour markets but few graduates move to NE Lincs without a job available to them.

Jobs in health (particularly medicine and nursing) were much more important to the graduate labour market in the region compared to the UK as a whole. The Humber also had a larger proportion of roles in education, social care and science than the UK average, but was well below the UK average for business and finance roles. Hull and its environs has a rather small business services sector for the size of settlement. On a related note Hull also has a rather small graduate-employing SME sector.

+ Introduction & Background

Introduction

The Humber Local Enterprise Partnership (LEP) has a commitment to driving growth across the Humber economy for the benefit of communities in the four local authority areas of Hull, East Riding, North Lincolnshire and North East Lincolnshire.

The LEP works closely alongside its partners to help facilitate growth through three main areas:

- + a skilled and productive workforce
- + thriving successful business
- + an infrastructure that supports growth

This analysis was commissioned by the LEP and conducted by the Higher Education Careers Services Unit (HECSU). The data is drawn from the annual Destination of Leavers of Higher Education Survey (DLHE), a census survey that examined the outcomes of all leavers from university six months after graduation. A form of DLHE was first conducted in the late 1950s and the survey here examined the 2016/17 cohort as they left university.

This was the last DLHE. The survey has been replaced by the

Graduate Outcomes survey which examines university leavers after 15 months, and which is due to report for the first time, and the 2017/18 cohort, in late May 2020.

DLHE was a very stable survey with a very high (80%) response rate. In this report it has largely been used as a tool for examining labour market outcomes. It can be viewed as a survey that took a wide range of information about the employment of 80% of recent leavers of higher education who found work. DLHE uses a relatively familiar set of coding tools, but the main difference between this and other national LMI is that it uses a bespoke version of SOC that adds a 5th digit devised by the Institute of Employment Research (who developed the official SOC) with input from HECSU, that allows a more detailed look at certain professional employment groups than is commonly possible with national statistics.

Numerical data is rounded to the nearest 5 in accordance with established data protection guidelines on the use of this dataset.

Geographies

The Humber LEP area was established in 2011, covering the four local authority areas of Hull, East Riding, North Lincolnshire and North East Lincolnshire.

The Humber covers a diverse area, with a mix of industrial, urban, rural and coastal areas. Key settlements include the city of Hull and the towns of Grimsby, Scunthorpe, Beverley, Bridlington and Goole.

The region is a major international gateway and is recognised as the UK's Energy Estuary, contributing to over a quarter of the UK's energy. The ports in the Humber offer connections between the North and Midlands to Europe and beyond.



+ Graduate Supply

Supply

University population – How many people from the region graduated from university?

Overall, 5,570 graduates from UK HE institutions in the 2016/17 academic year were originally domiciled within the Humber region, 1.1% of the total UK graduating cohort. Much the largest group were standard first degree graduates, who made up 69.5% of all graduates originally from the Humber . 66% of all UK graduates had studied a first degree.

East Riding supplied the most graduates, with 43.1% of all graduates from the Humber originating in the local authority. 46% of all postgraduates from the Humber came from the East Riding. By contrast, 15.4% of all graduates, and 12.6% of postgraduates from the Humber were originally from North East Lincolnshire.

	Hull	East Riding	NE. Lincs	N. Lincs	Humber	United Kingdom
Doctorate	25	35	5	10	75	10515
Masters	120	225	60	80	485	60610
PGCE	80	145	45	55	325	20600
Other Postgraduate	75	145	35	50	305	29840
First degree	915	1670	630	655	3870	329325
HND/Foundation degree	45	45	20	25	130	13400
Other Undergraduate	120	135	60	60	375	33905
All graduates	1380	2400	860	930	5570	498200

Source: HESA Destination of Leavers of Higher Education Survey data 2016/17

Supply

Demographic Profile - *What is the demographic structure of the first degree graduate population?*

'From Humber' refers to graduates from 2016/17 who were originally from the Humber. They can be working anywhere in the UK

'In Humber' refers to graduates (from any domicile) working in the Humber 6 months after graduation.

2,285 first degree graduates originally from the Humber entered the workforce and the region employed 1,710 graduates. The region is therefore a net exporter of graduates.

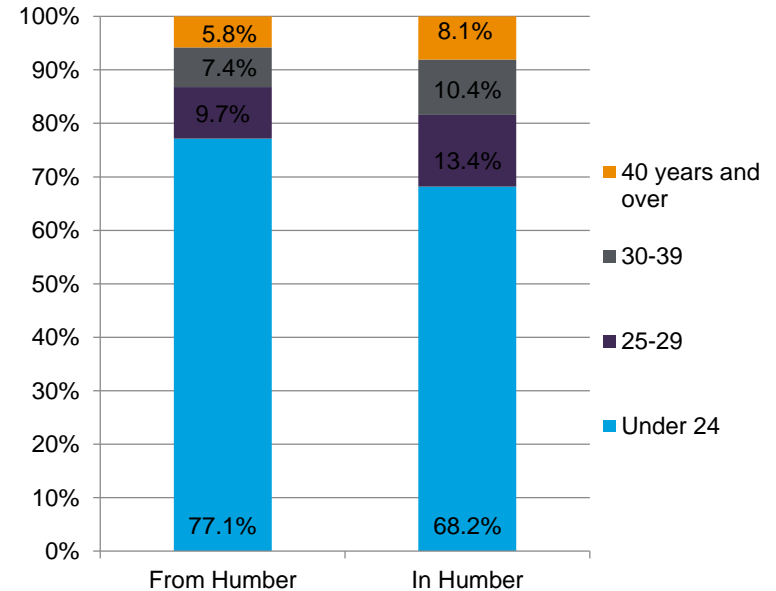
The majority of graduates both from the region and in the region were under 24 on graduation, but the age profile for those working in the region tended slightly older than that for graduates originating in the region.

60.4% of 2016/17 graduates from Humber, and 63.8% of 2016/17 graduates in Humber were women.

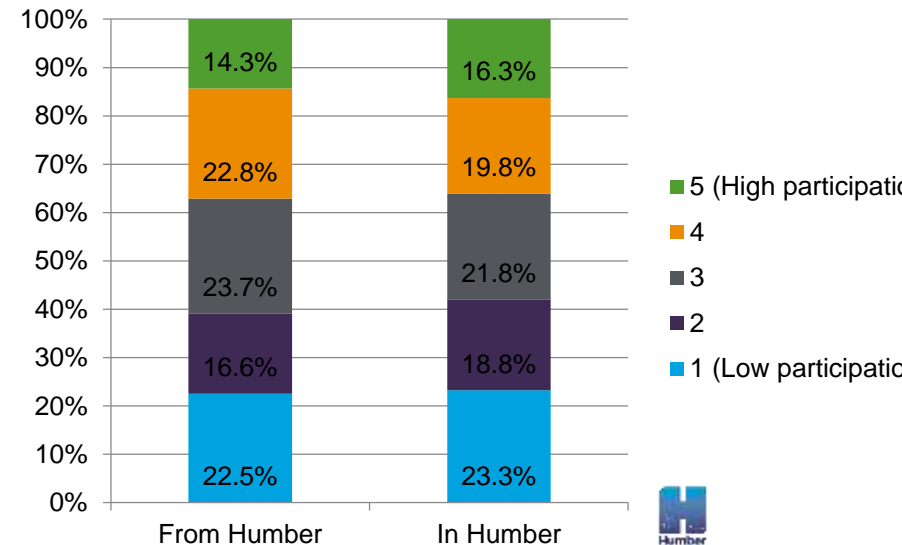
6.2% of 2016/17 graduates from Humber and 7.5% of 2016/17 graduates in Humber were from a BAME background.

POLAR3 is a categorisation of graduate background based on the proportion of the population in the individual's postcode of domicile who went to university. The 1st quintile consists of the bottom 20% of postcodes by level of participation in HE. The Humber has higher proportions of workers from both the highest *and* lowest background POLAR3 quintiles than the general population of graduates originally from the region.

Graduate age breakdowns



Graduate background (POLAR3)



Supply

Institution of study – where did first degree graduates from the region go to university?

The majority of first degree graduates originally from the region attended institutions in Yorkshire and the Humber. Much the largest group – 28% – of Humber graduates attended the University of Hull, with 6.4% attending Sheffield Hallam and 5.5% studying at Lincoln.

The only institution outside Yorkshire, the Humber, Lincoln and the North East to receive more than 2% of Humber graduates was Manchester Metropolitan University, with 2.2%.

Region of HE provider	Number of graduates	Proportion of population
North East	340	8.8%
North West	365	9.5%
Yorkshire and The Humber	1985	51.3%
East Midlands	515	13.3%
West Midlands	115	3.0%
East of England	55	1.4%
London	150	3.8%
South East	195	5.0%
South West	55	1.4%
Wales	60	1.5%
Scotland	35	0.9%
Northern Ireland	0	0.0%
Total	3870	100.0%

Institution	Number of graduates	Proportion of Humber graduates at institution
Hull	1085	28.0%
Sheffield Hallam	245	6.4%
Lincoln	210	5.5%
Northumbria	160	4.2%
Leeds Beckett	155	4.0%
York St John	120	3.1%
Open	105	2.7%
Newcastle	100	2.6%
York	100	2.5%
Manchester Metropolitan	85	2.2%
Leeds	85	2.2%
Bishop Grosseteste	80	2.1%
Huddersfield	75	1.9%

Supply

Graduate outcomes – what were graduates from the region doing after six months?

Graduates in the 'work and study' category are either working or taking further study full time (at least 30 hours a week) and then studying or working part time in addition. The very large majority were working full time.

Graduates in the 'Other' category are, for one reason or another, not currently in the workforce. Approximately 60% were travelling at the time of the survey.

Overall, 4,205 graduates at all levels who were originally domiciled in the region were surveyed in the 2016/17 DLHE. The majority of all leavers were in full-time work six months after graduation. 3.7% of all Humber graduates from 2016/17 were out of work six months after graduation, rising to 6.7% for undergraduate diploma holders and 7.2% for taught Masters – although these figures are not atypical of all-UK figures for these specific qualification levels.

Humber	Doctorate	Masters	PGCE	Other Postgraduate	First degree	HND/ Foundation degree	Other Undergraduate	All graduates
Full time work	76.8%	65.3%	88.3%	77.7%	54.8%	31.2%	40.0%	58.1%
Part time work	7.1%	11.5%	7.5%	6.5%	13.3%	4.6%	15.0%	12.2%
Working and studying	3.6%	2.0%	2.1%	3.7%	6.3%	31.2%	11.7%	6.3%
Further study	1.8%	9.5%	0.7%	8.4%	18.5%	28.4%	20.6%	16.2%
Unemployed	3.6%	7.2%	0.7%	1.9%	3.6%	2.8%	6.7%	3.7%
Other	7.1%	4.6%	0.7%	1.9%	3.5%	1.8%	6.1%	3.4%

Source: HESA Destination of Leavers of Higher Education Survey data 2016/17

Supply

Location of employment – where did first degree graduates from the region go to work?

The majority of first degree graduates originally from the region went to work in Yorkshire and the Humber. 54.1% of graduates originally from the Humber went to work within the Humber region, with 25.8% of all Humber graduates going to work in Hull. The top 4 local authorities of employment for Humber graduates were the 4 local authorities that make up the region, with Leeds the next most important location of employment.

(note that the Metropolitan Regions of West Yorkshire, South Yorkshire and Greater Manchester have been broken into their constituent boroughs).

Region of Employment	Number of graduates	Proportion of population
North East	65	2.9%
North West	135	5.9%
Yorkshire and The Humber	1545	67.8%
East Midlands	130	5.8%
West Midlands	45	1.9%
East of England	50	2.2%
London	175	7.7%
South East	40	1.8%
South West	20	0.9%
Wales	5	0.3%
Scotland	15	0.7%
Northern Ireland	0	0.1%
Guernsey, Jersey and the Isle of Man	0	0.0%
Other EU	15	0.7%
Non-EU	30	1.2%
Total	2275	100.0%

Location of employment	Number of graduates	Proportion of Humber graduates
Hull	575	25.8%
East Riding	280	12.5%
NE Lincs	185	8.3%
N Lincs	165	7.4%
Leeds	90	4.1%
Lincolnshire	65	2.9%
York	65	2.8%
Sheffield	60	2.7%
N Yorks	45	2.0%
Newcastle	40	1.8%

Supply

Subject of study – what subjects did first degree graduates from the region study?

This analysis examines both the subject of study of Humber graduates in general and the subject of study of those who entered the labour market. Note that as the previous data shows the most common non-employment outcome for graduates is to go into further study, hence subject groups where further study is common, such as the maths and sciences, see a large difference between the figures as many Humber graduates took postgraduate courses on graduation. But the analysis of working graduates *from* Humber will be useful later on when we examine graduates working *in* Humber.

	From Humber	From Humber + working	Proportion from Humber	Proportion from Humber + working
Medicine and allied subjects	225	160	5.6%	7.0%
Nursing	380	290	9.4%	12.6%
Biological sciences	375	170	9.3%	7.4%
Psychology	165	85	4.1%	3.7%
Physical sciences	190	80	4.8%	3.5%
Maths	65	25	1.7%	1.2%
Engineering and building	230	140	5.7%	6.2%
IT	140	85	3.4%	3.7%
Social sciences	385	225	9.6%	9.8%
Law	165	95	4.1%	4.0%
Business studies	360	220	8.9%	9.6%
Media and creative arts	535	295	13.3%	13.0%
Languages	255	120	6.4%	5.2%
Humanities	210	105	5.2%	4.5%
Education	310	190	7.7%	8.2%
Combined	30	10	0.8%	0.4%

Source: HESA Destination of Leavers of Higher Education Survey data 2016/17

Supply

Graduate outcomes – what were first degree graduates from the region doing after six months?

Local outcomes are in line with those for all UK graduates, with a slightly lower overall unemployment rate (3.6% against 5.1% for the UK as a whole), balanced by a slightly lower rate of full time work (54.8% vs 56.7%). However further study rates across the region are slightly higher than the UK rate as a whole (18.5% vs 16.1%).

Graduates originally from East Riding have the highest level of further study (20.4%) and lowest unemployment rate (2.7%). Graduates from NE Lincolnshire show the opposite – the lowest level of further study (a still-respectable 15.9%, around the UK average) and the highest local unemployment rate, 4.7%.

Outcome after six months	Hull	East Riding	NE Lincs	North Lincs	Humber	All UK graduates
Full time work	52.8%	53.3%	57.7%	58.6%	54.8%	56.7%
Part time work	16.0%	12.2%	12.8%	12.9%	13.3%	12.2%
Working and studying	7.1%	6.5%	6.6%	4.2%	6.3%	5.4%
Further study	17.4%	20.4%	15.9%	18.1%	18.5%	16.1%
Unemployed	4.1%	2.7%	4.7%	4.2%	3.6%	5.1%
Other	2.6%	5.1%	2.3%	1.9%	3.5%	4.5%

Source: HESA Destination of Leavers of Higher Education Survey data 2016/17

Supply

Graduate outcomes – what jobs were graduates from 2016/17 from the Humber doing six months after graduation?

Humber graduates had reasonably similar employment outcomes to graduates as a whole. Overall, 72.4% of Humber graduates were in professional level employment, compared to 73.8% of all graduates, a disparity perhaps due to a slightly lower propensity for Humber graduates to enter business service-oriented roles in finance, marketing, sales or IT. This could be due to the regions' relative distance from labour markets strong in these jobs – Leeds being the closest.

Type of employment	Humber Domiciled	All graduates
Managers	3.8%	3.9%
Health	18.4%	18.2%
Education	6.4%	5.8%
Legal, social and welfare	8.7%	5.1%
Science	1.5%	1.1%
Engineering and building	4.3%	4.5%
IT	3.7%	4.6%
Business and finance	8.1%	10.8%
Marketing and sales	6.7%	7.7%
Arts, design, media	5.7%	6.5%
Other professionals	5.1%	5.7%
Education and health support	5.6%	4.3%
Clerical, secretarial	4.5%	5.6%
Retail and service	11.0%	10.4%
Other occupations	6.6%	5.8%

+ Graduates working in the Humber

Workforce

Workforce– *Who is working in the region?*

Overall, 2,510 graduates from UK HE institutions in the 2016/17 academic year were working within the Humber region after six months, 0.9% of the total UK graduating cohort. Much the largest group were standard first degree graduates, who made up 66.6% of all graduates working in the Humber. 66% of all UK graduates in work had studied a first degree.

Hull was the largest location for employed graduates in the region, with 48% of all university leavers working in the region working within the city. More graduates at each level went to work in NE Lincolnshire than in N Lincolnshire except at Masters level, where the reverse was the case.

	Hull	East Riding	NE. Lincs	N. Lincs	Humber	United Kingdom
Doctorate	30	5	0	0	40	6340
Masters	95	55	25	30	205	34145
PGCE	105	85	55	35	280	16510
Other Postgraduate	80	30	25	20	155	17980
First degree	830	380	240	220	1670	184085
HND/Foundation degree	30	10	5	5	55	6370
Other Undergraduate	40	25	15	15	95	13425
All graduates	1215	595	370	330	2510	278855

Source: HESA Destination of Leavers of Higher Education Survey data 2016/17

Workforce

Demographic Profile - *What is the demographic structure of the first degree graduate population?*

'From Humber' refers to graduates from 2016/17 who were originally from the Humber. They can be working anywhere in the UK.

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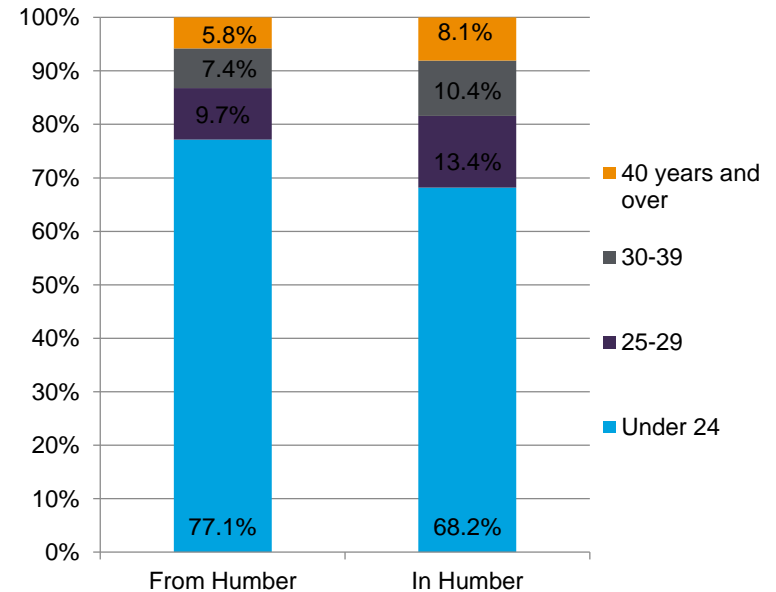
The majority of graduates both from the region and in the region were under 24 on graduation, but the age profile for those working in the region tended slightly older than that for graduates originating in the region.

60.4% of 2016/17 graduates from Humber, and 63.8% of 2016/17 graduates in Humber were women.

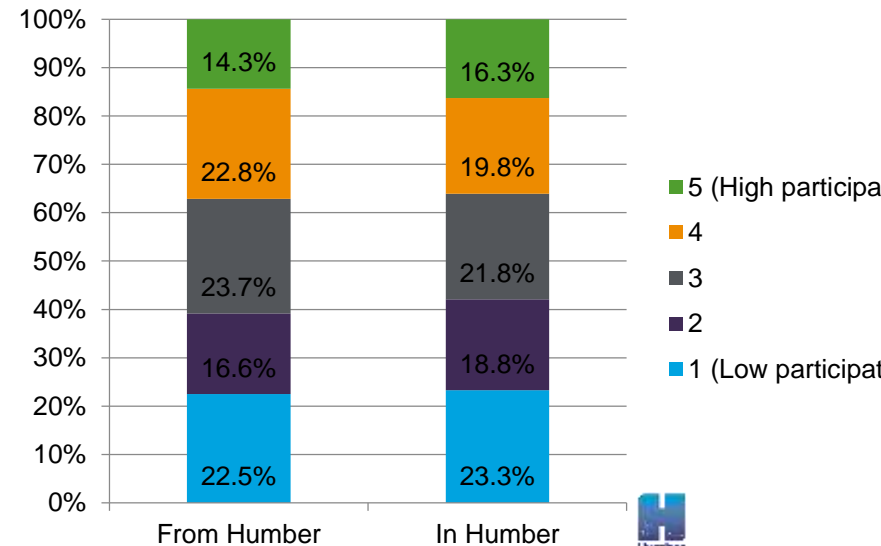
6.2% of 2016/17 graduates from Humber and 7.5% of 2016/17 graduates in Humber were from a BAME background.

POLAR3 is a categorisation of graduate background based on the proportion of the population in the individual's postcode of domicile who went to university. The 1st quintile consists of the bottom 20% of postcodes by level of participation in HE. The Humber LEP has higher proportions of workers from both the highest *and* lowest background POLAR3 quintiles than the general population of graduates originally from the region.

Graduate age breakdowns



Graduate background (POLAR3)



Source: HESA Destination of Leavers of Higher Education Survey data 2016/17



Workforce

Subject of study – what subjects did first degree graduates working in the region study?

This analyses the subjects taken by graduates from the Humber originally, and the subjects taken by employers in the local labour market. From this we can see that rather more students from the region study business subjects and the arts than is required by current labour market demand, but that there are not enough Humber students studying medical and allied subjects to meet the region’s needs (even if they all stayed locally to work). Other subjects are reasonably balanced and, given that some Humber students will naturally work elsewhere, a good retention policy could see most of the region’s graduate needs met by local residents.

	From Humber + working	Working in Humber	From Humber + working	Working in Humber
Medicine and allied subjects	160	210	7.0%	12.2%
Nursing	290	240	12.6%	13.9%
Biological sciences	170	130	7.4%	7.6%
Psychology	85	65	3.7%	3.7%
Physical sciences	80	75	3.5%	4.5%
Maths	25	15	1.2%	0.8%
Engineering and building	140	100	6.2%	5.7%
IT	85	60	3.7%	3.5%
Social sciences	225	175	9.8%	10.1%
Law	95	55	4.0%	3.3%
Business studies	220	120	9.6%	6.9%
Media and creative arts	295	150	13.0%	8.8%
Languages	120	70	5.2%	4.0%
Humanities	105	80	4.5%	4.6%
Education	190	165	8.2%	9.7%
Combined	10	10	0.4%	0.6%

Source: HESA Destination of Leavers of Higher Education Survey data 2016/17



Workforce

Location of origin- *Where did graduates starting work in the Humber originally come from?*

49.8% of graduates working in the region after six months were working in Hull, and the large majority, 71.8%, were originally from the region. 52.6% of all working graduates originally from the Humber were working in the Humber six months after graduation.

Apart from the Humber itself, only Lincolnshire (45), North Yorkshire (35) and Doncaster (25) supplied 25 or more graduates to the region.

Domicile (Region)	Hull	East Riding	North East Lincs	North Lincs	All working in Humber
North East	15	5	0	0	25
North West	45	15	5	10	75
Yorkshire and The Humber	635	325	195	185	1335
East Midlands	35	15	20	10	85
West Midlands	20	5	0	0	25
East of England	20	5	0	5	30
London	20	0	10	0	30
South East	15	5	5	0	25
South West	10	5	0	0	15
Wales	5	0	0	0	10
Scotland	5	5	0	0	15
Northern Ireland	5	0	0	0	5
Total	830	380	240	220	1670

Workforce

Institution of origin- *Where did graduates starting work in the Humber study?*

46.5% of graduates working in the region after six months had attended the University of Hull, rising to 60.9% of graduates working in the City of Hull. Other institutions supplying a significant number of graduates to the region included Lincoln (80 graduates), Sheffield Hallam (65), The Open University (55), York St John (55), Leeds Beckett (50), Northumbria (45), Bishop Grosseteste (35, but the institution is also an important supplier of teaching graduates), York (35), Huddersfield (30) and Leeds (30).

Location of institution	Hull	East Riding	North East Lincs	North Lincs	All working in Humber
North East	40	30	10	10	90
North West	50	20	20	15	100
Hull	505	135	90	45	775
Yorkshire	105	100	35	65	305
East Midlands	50	35	50	50	185
West Midlands	15	10	5	10	40
East of England	5	0	0	5	15
London	10	5	5	0	25
South East	25	20	15	15	75
South West	15	5	0	5	25
Wales	5	5	5	5	15
Scotland	10	5	5	0	25
Total	830	380	240	220	1670

Workforce

Occupations – *What jobs did graduates working in the region do?*

Jobs in health (particularly medicine and nursing) were much more important to the graduate labour market in the region compared to the UK as a whole. The Humber also had a larger proportion of roles in education, social care and science than the UK average, but was well below the UK average for business and finance roles and Hull and its environs has a rather small business services sector for the size of settlement; Leeds is a nationally important centre of business support activity and this might be a contributing factor. Overall 71.2% of graduates starting work in the region did so in a professional level role, with the figures ranging from 69.6% in Hull to 76.8% in NE Lincs. This relatively high figure might seem counter-intuitive considering the weakness of some local authority labour markets but few graduates move to NE Lincs without a job available to them.

Type of employment	Hull	East Riding	NE Lincs	North Lincs	Humber	All graduates
Managers	2.0%	4.2%	1.7%	4.4%	2.8%	3.9%
Health	23.6%	16.9%	37.3%	30.7%	25.0%	18.2%
Education	6.0%	7.3%	10.8%	6.1%	7.0%	5.8%
Legal, social and welfare	8.3%	5.7%	12.4%	10.1%	8.5%	5.1%
Science	3.4%	1.0%	0.8%	0.9%	2.2%	1.1%
Engineering and building	2.5%	6.3%	3.3%	3.9%	3.6%	4.5%
IT	4.9%	3.9%	0.8%	0.9%	3.6%	4.6%
Business and finance	4.7%	6.0%	2.5%	1.8%	4.3%	10.8%
Marketing and sales	5.0%	7.8%	1.2%	3.9%	5.0%	7.7%
Arts, design, media	3.2%	4.2%	0.4%	3.9%	3.1%	6.5%
Other professionals	6.2%	6.8%	5.4%	6.1%	6.2%	5.7%
Education and health support	4.3%	7.8%	5.8%	7.5%	5.7%	4.3%
Clerical, secretarial	6.1%	5.2%	3.3%	3.5%	5.1%	5.6%
Retail and service	12.3%	10.4%	8.3%	8.8%	10.8%	10.4%
Other occupations	7.7%	6.5%	5.8%	7.5%	7.1%	5.8%

Source: HESA Destination of Leavers of Higher Education Survey data 2016/17

Workforce

Institution of origin- *What industries employed graduates in the region?*

The local manufacturing sector is far more important to the region than it is to the UK as a whole, whilst as suggested by the occupational data, legal and accountancy, management and consultancy and business services are much less important to the local graduate labour market than elsewhere. Public sector employment also takes a greater share of graduate employment than in the rest of the UK.

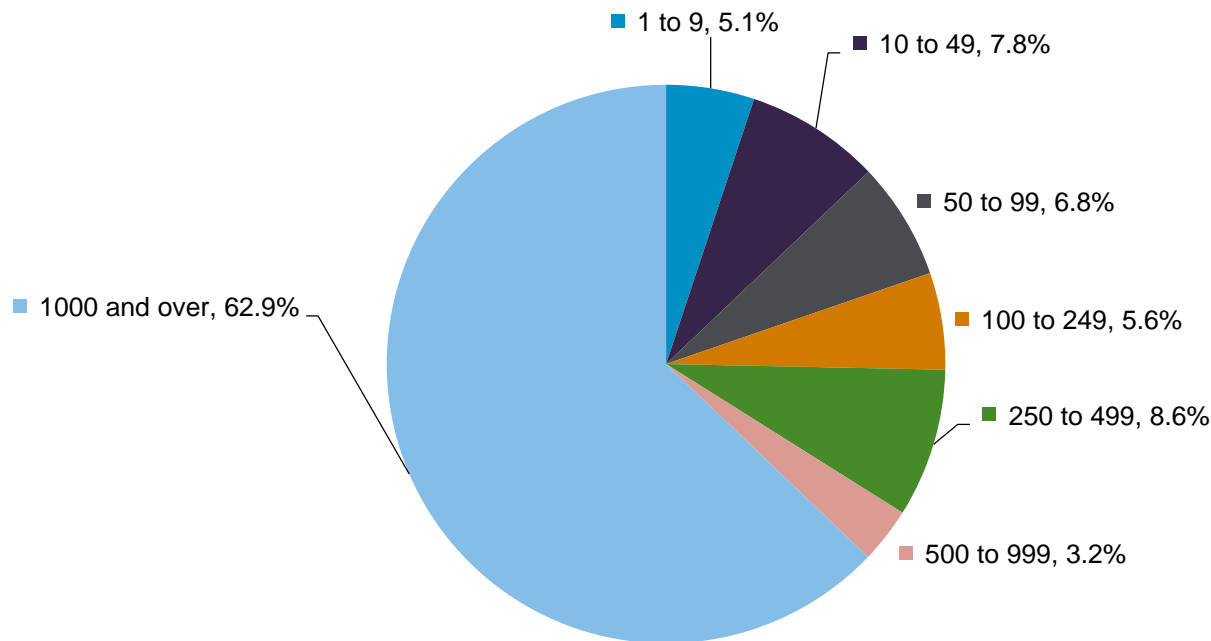
Industry	North East					All graduates
	Hull	East Riding	Lincs	North Lincs	Humber	
Manufacturing	11.2%	13.8%	5.4%	14.9%	11.5%	6.2%
Construct, eng, R&D	4.6%	4.7%	2.9%	2.2%	4.0%	7.0%
Retail	12.3%	17.7%	10.0%	14.9%	13.5%	12.8%
Logistics	0.7%	0.8%	0.8%	0.4%	0.7%	1.2%
Hospitality & tourism	5.6%	6.3%	5.0%	2.2%	5.2%	5.8%
Media & publishing	0.8%	0.5%	0.4%	0.4%	0.6%	2.6%
IT and telecoms	2.3%	3.1%	0.8%	1.3%	2.2%	4.4%
Legal and accountancy	2.3%	1.3%	2.1%	0.4%	1.8%	3.5%
Management consultancy	0.2%	0.3%	0.0%	0.4%	0.2%	0.8%
Other business and finance	5.7%	2.1%	0.4%	2.2%	3.7%	9.4%
Marketing & PR	0.7%	2.1%	0.0%	0.0%	0.8%	1.8%
Education	14.6%	15.4%	19.9%	15.4%	15.6%	11.6%
Health	26.3%	16.4%	37.8%	31.6%	26.4%	18.9%
Social care	3.5%	2.3%	3.3%	3.1%	3.2%	3.6%
Local and central govt	4.1%	8.3%	10.0%	6.6%	6.2%	4.3%
Arts, sports and leisure	3.3%	3.9%	1.2%	3.5%	3.2%	4.7%
Other industries	1.3%	1.0%	0.0%	0.4%	0.9%	1.3%

Workforce

Business size – *Graduates in SMEs*

25.3% of graduates starting work in professional level employment in the region in 2016/17 were in SMEs – somewhat lower than the national average of 29.5%. Graduates in SMEs were often found in education support roles, in IT and in marketing and PR roles, and the relatively small local IT and marketing sectors may be an explanation for the comparatively low proportion of graduates entering local SMEs. 43% of graduates in SMEs in the region were working in Hull.

Size of employers in the Humber employing first degree graduates from 2016/17



Source: HESA Destination of Leavers of Higher Education Survey data 2016/17

+ Migration into and out of the region

Migration within the UK

Different groups of graduates behave differently in the labour market, give rise to different issues of supply and demand, and have different support needs. One useful lens to examine this is through the use of 4 different migration groups based on original domicile and location of study. For the Humber, these groups are as follows:

1. Loyals – domiciled and studied in same region (in this case, domiciled in the Humber and studied at Hull) and now work in the Humber. 45% of 2016/17 graduates overall, and 37% of graduates working in the Humber.
2. Stayers – moved to another region to study and stayed there to work. In this case they are graduates from outside the Humber who went to Hull and stayed in the Humber to work. 13% of 2016/17 graduates, and 10% of graduates working in the Humber.
3. Returners – moved to another region to study and then returned home to work. In this case, they are graduates originally from the Humber, who did not go to Hull, but who returned home to work. 24% of 2016/17 graduates and 35% of those working in the Humber.
4. Incomers – work in a region they were neither domiciled nor studied in. In this case, these are graduates who are working in the Humber, but who were neither from the Humber nor attended Hull University. 18% of 2016/17 graduates and 19% of those working in the Humber.

Migration within the UK

Employment - *What does each group of graduates do?*

Differences between each group are quite evident. Incomers to the region tend to take up high prestige, high salary roles in medicine, engineering and the finance industry and in total 84% of Humber Incomers were in professional level employment. By contrast the Returners, who had gone away to study and returned on graduation, had less favourable outcomes and 65% were in professional employment. Those who had experienced success had often not travelled far, such as the cohort entering educational roles. Humber Loyals, who had not left the region, were particularly prominent in public sector positions, whilst the Stayers, who had come from outside the region to study at Hull, were the most important groups of graduates in science, IT and business services jobs – 71% were in professional level employment. This pattern is reasonably typical of many smaller urban areas with one medium sized HE institution in the UK.

Type of work	Humber Loyals	Humber Stayers	Humber Returners	Humber Incomers
Managers	1.3%	2.5%	4.4%	2.9%
Health	28.9%	19.9%	14.5%	35.9%
Education	5.5%	1.9%	10.8%	6.1%
Legal, social and welfare	13.0%	7.5%	7.5%	3.2%
Science	1.8%	7.5%	1.5%	1.6%
Engineering and building	1.8%	1.2%	3.8%	8.1%
IT	4.4%	5.6%	1.9%	2.9%
Business and finance	4.1%	5.0%	3.9%	4.5%
Marketing and sales	2.4%	9.9%	5.6%	6.1%
Arts, design, media	1.3%	1.2%	4.8%	4.5%
Other professionals	4.9%	9.3%	6.1%	7.8%
Education and health support	7.3%	0.6%	6.7%	4.2%
Clerical, secretarial	5.0%	3.7%	6.8%	3.2%
Retail and service	9.1%	13.7%	14.7%	6.5%
Other occupations	9.3%	10.6%	7.0%	2.3%

Source: HESA Destination of Leavers of Higher Education Survey data 2016/17

Migration within the UK

Employment – Which industry does each group of graduates work for?

The manufacturing sector is important to the graduate labour market in the region and this is particularly interesting as this data suggests that many of the graduates who work in it are effectively being imported from outside as it is one of the crucial industries for Incomers. There is a split in the health industry; doctors tend to be Incomers, nurses Loyals. Meanwhile important industries for graduates from outside who opt to stay after studying at Hull include the business services sector, social care, IT and the arts. There is also an interesting split in the workforce who don't get professional level employment – Stayers tend to continue in their term-time jobs in the hospitality industry whilst Loyals and, especially, Returners tend to go into retail.

Industry	Humber Loyals	Humber Stayers	Humber Returners	Humber Incomers
Manufacturing	7.0%	14.9%	10.6%	20.4%
Construct, eng, R&D	3.4%	1.9%	5.3%	4.2%
Retail	11.2%	9.9%	18.4%	11.7%
Logistics	0.6%	1.2%	0.7%	0.6%
Hospitality & tourism	3.6%	11.2%	6.8%	2.9%
Media & publishing	0.5%	0.0%	1.0%	0.3%
IT and telecoms	1.9%	3.1%	1.9%	2.3%
Legal and accountancy	1.6%	1.9%	2.6%	1.0%
Management consultancy	0.0%	0.0%	0.5%	0.3%
Other business and finance	4.4%	5.0%	3.1%	2.6%
Marketing & PR	0.3%	1.2%	1.2%	1.0%
Education	17.2%	12.4%	18.1%	10.7%
Health	31.8%	21.1%	17.2%	33.0%
Social care	4.1%	4.3%	3.1%	1.3%
Local and central govt	8.4%	6.2%	5.5%	3.6%
Arts, sports and leisure	2.4%	3.7%	3.6%	3.6%
Other industries	1.3%	1.2%	0.2%	0.6%

Migration within the UK

Employment – *Graduates from the Humber who stayed and who left*

This analysis looks at graduates who were originally from the Humber and splits those who left the region to work from those who stayed in the region. 1200 graduates from the Humber remained in the region to work; 1085 left the region.

The majority of graduates who went to work in the public sector remained in the region to work, but the majority of graduates entering engineering, business services, marketing and the arts left the region, giving weight to the proposition that the Humber has fewer opportunities in these areas than other regions.

Type of work	Stayed in		Stayed in	
	Humber	Left Humber	Humber	Left Humber
Managers	35	50	2.8%	4.8%
Health	265	155	21.9%	14.5%
Education	95	50	8.1%	4.5%
Legal, social and welfare	125	75	10.3%	6.9%
Science	20	15	1.7%	1.3%
Engineering and building	35	65	2.7%	6.0%
IT	40	45	3.2%	4.3%
Business and finance	50	135	4.0%	12.6%
Marketing and sales	50	105	4.0%	9.8%
Arts, design, media	35	95	3.0%	8.8%
Other professionals	65	50	5.5%	4.6%
Education and health support	85	45	7.0%	4.0%
Clerical, secretarial	70	30	5.9%	2.9%
Retail and service	140	110	11.8%	10.0%
Other occupations	100	55	8.2%	4.9%

Migration within the UK

Employment – *Graduates from the Humber who stayed and who left*

This analysis looks at graduates who were originally from the Humber and splits those who left the region to work from those who stayed in the region. 1200 graduates from the Humber remained in the region to work; 1085 left the region. The majority of Humber graduates who went into the public sector and into manufacturing stayed in the region, but the majority of those entering business services, legal, media and arts roles left the region to do so. This further reinforces the messages from the previous analysis on occupations.

Industry	Stayed in Humber	Left Humber	Stayed in Humber	Left Humber
Manufacturing	105	80	8.7%	7.2%
Construct, eng, R&D	50	80	4.3%	7.5%
Retail	175	115	14.7%	10.6%
Logistics	10	15	0.7%	1.2%
Hospitality & tourism	60	70	5.2%	6.6%
Media & publishing	10	40	0.7%	3.7%
IT and telecoms	25	50	1.9%	4.4%
Legal and accountancy	25	60	2.1%	5.3%
Management consultancy	5	10	0.2%	0.7%
Other business and finance	45	100	3.7%	9.0%
Marketing & PR	10	25	0.7%	2.2%
Education	210	115	17.6%	10.8%
Health	295	180	24.7%	16.4%
Social care	45	35	3.6%	3.2%
Local and central govt	85	45	7.0%	4.3%
Arts, sports and leisure	35	50	3.0%	4.7%
Other industries	10	20	0.7%	1.8%

Migration within the UK

Employment – *Graduates working in the Humber – who came in from outside?*

This analysis looks at graduates who were originally from the Humber and went to work there and compares them with graduates who came from outside the Humber to work there. Overall 1200 graduates working locally were originally from the Humber and 505 had come from outside the region to work there and so the main job groups all saw a majority of new entrants coming from the Humber. But within that there were some roles where the majority of entrants had come from outside the Humber. Top of the list was medical professionals, but other roles where the majority of new Humber employees had come from outside the region included pharmacists, opticians, design and development engineers, chemists, clinical psychologists, vets and sales and accounts managers.

Type of work	From outside		From outside	
	From Humber	Humber	From Humber	Humber
Managers	35	15	2.8%	2.6%
Health	265	165	21.9%	32.3%
Education	95	20	8.1%	4.3%
Legal, social and welfare	125	20	10.3%	4.3%
Science	20	15	1.7%	3.4%
Engineering and building	35	30	2.7%	5.7%
IT	40	25	3.2%	4.5%
Business and finance	50	25	4.0%	4.9%
Marketing and sales	50	35	4.0%	7.3%
Arts, design, media	35	15	3.0%	3.4%
Other professionals	65	40	5.5%	7.9%
Education and health support	85	15	7.0%	2.8%
Clerical, secretarial	70	15	5.9%	3.4%
Retail and service	140	45	11.8%	8.5%
Other occupations	100	25	8.2%	4.7%

Migration within the UK

Employment – *Graduates working in the Humber– who came in from outside?*

This analysis looks at graduates who were originally from the Humber and went to work there and compares them with graduates who came from outside the Humber to work there. Overall 1200 graduates working locally were originally from the Humber and 505 had come from outside the region to work there and so the main industries all saw a majority of new entrants coming from the Humber. Indeed even at lower levels the majority of entrants to nearly all industries locally were originally from the Humber. The main exceptions were the food manufacturing industry, the oil and gas industry and the paper industry, all primary or manufacturing industries.

Industry	From Humber		From outside Humber	
	Count	Percentage	Count	Percentage
Manufacturing	105	8.7%	90	17.9%
Construct, eng, R&D	50	4.3%	15	3.4%
Retail	175	14.7%	55	10.7%
Logistics	10	0.7%	5	0.8%
Hospitality & tourism	60	5.2%	25	5.3%
Media & publishing	10	0.7%	0	0.4%
IT and telecoms	25	1.9%	15	2.8%
Legal and accountancy	25	2.1%	5	1.2%
Management consultancy	5	0.2%	0	0.2%
Other business and finance	45	3.7%	20	3.6%
Marketing & PR	10	0.7%	5	1.0%
Education	210	17.6%	55	10.8%
Health	295	24.7%	155	30.4%
Social care	45	3.6%	10	2.2%
Local and central govt	85	7.0%	20	4.3%
Arts, sports and leisure	35	3.0%	20	3.6%
Other industries	10	0.7%	5	1.4%

Migration within the UK

Employment – *Graduates working in the Humber – Hull vs other institutions?*

This analysis examines graduates who were working in the Humber by the institution they attended. 790 graduates working in the LEP attended Hull and 915 another institution. Because most graduates had studied outside the region, there are many areas where Hull graduates were in a minority. But roles where Hull supplied a good majority of graduates include nursing, social work and software developers, whilst roles where the large majority attended other institutions included medicine (a number of institutions supplying), primary teaching (York St. John and Bishop Grosseteste; the majority educated outside Hull were from the Humber originally), secondary teaching, pharmacists, physiotherapists (from York St John and Sheffield Hallam, but like primary teaching the majority studying at another institution had travelled there from the Humber), radiographers (from Sheffield Hallam, mainly Humber-domiciled) and occupational therapists (from York St John, again mainly for Humber natives).

Type of work	Attended Hull	Attended a different institution	Attended Hull	Attended a different institution
Managers	10	35	1.5%	3.8%
Health	215	215	27.0%	23.2%
Education	35	80	4.7%	8.9%
Legal, social and welfare	90	55	11.6%	5.9%
Science	25	15	2.9%	1.5%
Engineering and building	15	50	1.8%	5.2%
IT	40	20	5.2%	2.2%
Business and finance	35	40	4.4%	4.1%
Marketing and sales	30	55	4.0%	5.8%
Arts, design, media	10	45	1.3%	4.7%
Other professionals	45	60	5.8%	6.5%
Education and health support	45	50	5.8%	5.7%
Clerical, secretarial	35	50	4.7%	5.6%
Retail and service	80	105	10.0%	11.6%
Other occupations	75	50	9.3%	5.2%

Migration within the UK

Employment – *Graduates working in the – Hull vs other institutions*

This analysis examines graduates who were working in the Humber by the institution they attended. 790 graduates working in the LEP attended Hull and 915 another institution. Because most graduates had studied outside the region, there are many areas where Hull graduates were in a minority. However the majority of entrants to health, local Government and social care had attended Hull. A majority of graduates entering the business services industry had attended Hull and interestingly a majority of those graduates were originally from Hull itself. The majority of graduates entering retail roles had not attended Hull, but these were mainly Humber residents who had attended university elsewhere and had returned home and taken retail cashier jobs.

Industries importing a lot of graduates from other institutions included the steel industry (mainly graduates from NE and N Lincs attending Sheffield Hallam), education (Bishop Grosseteste for primary, a range of institutions for secondary) and graduate roles in the food industry (both technical and commercial jobs).

At present the Standard Industrial Classification system is not flexible enough to allow a look at the renewables industry.

Industry	Attended Hull	Attended a different institution	
		Attended Hull	Attended a different institution
Manufacturing	70	125	8.7% 13.8%
Construct, eng, R&D	25	45	3.2% 4.8%
Retail	85	145	10.7% 15.9%
Logistics	5	5	0.8% 0.7%
Hospitality & tourism	40	50	5.1% 5.3%
Media & publishing	5	10	0.4% 0.9%
IT and telecoms	20	20	2.4% 2.0%
Legal and accountancy	15	20	1.6% 2.0%
Management consultancy	0	5	0.0% 0.4%
Other business and finance	35	25	4.5% 2.9%
Marketing & PR	5	10	0.5% 1.1%
Education	130	140	16.2% 15.2%
Health	235	215	29.5% 23.7%
Social care	30	20	4.0% 2.4%
Local and central govt	60	45	7.8% 4.8%
Arts, sports and leisure	20	35	2.7% 3.6%
Other industries	15	5	1.6% 0.3%

Source: HESA Destination of Leavers of Higher Education Survey data 2016/17

+ SWOT (Strengths, Weaknesses, Opportunities, Threats)

Strengths

- + The region has a significant number of people (5,570) progressing through higher education in a wide range of disciplines and most fields of professional employment are catered for by institutions within or near to the region
- + 3,870 first degrees were awarded to Humber graduates in 2016/17
- + Outcomes for graduates from the Humber are favourable with higher rates of postgraduate study and lower rates of unemployment than graduates as a whole
- + The region is good at retaining graduates, both those who originated in the region and those who studied there. Most graduates originally from the Humber went to work in the Humber (52.6%) – this includes graduates who left the region to study and returned to work. 71.8% of first degree graduates working in the Humber after six months were originally domiciled there
- + The region has a relatively strong local manufacturing sector that contributes significantly to good quality graduate opportunities
- + The region is a strong local producer of nurses, one of the most in-demand graduate professions
- + An established local HE institution that supplied nearly half of the 2016/17 local graduate workforce

Weaknesses

- + The region is on the periphery, has some very weak local labour markets and suffers from relatively difficult transport links to other significant urban population centres with strong skilled labour markets. This means it can seem remote and does not always appear an attractive location for graduates to pursue a career even when opportunities exist for them and leads to the labour market appearing quite closed to graduates from outside the area
- + The region does not have a very balanced graduate labour market, with a particularly small local business services sector for a region containing an important local urban labour market. This means important sources of graduate opportunities in roles in marketing and financial services are in shorter supply than in other regions of the country
- + As a consequence, the region is more dependent on public sector employment than many other regions
- + The subjects studied by students from the region don't always match well with local demand. In particular significantly more graduates study business and arts subjects than the local labour market currently seems able to support, which risks losing valuable talent
- + Perhaps linked to the first point, fewer local graduates go to work in SMEs than in other regions
- + The region does not produce enough graduates in some important disciplines, such as medicine, teaching and allied health professionals, to meet local demand and is reliant on training from outside – many of these roles are in shortage and that makes the region vulnerable to local labour supply issues

Opportunities

- + Ambitions to develop a local renewable industry will likely be aided by a relatively strong local manufacturing sector in graduate terms, with a workforce and local institution versed in serving the needs of these industries
- + There is potential to grow a stronger local business services sector – the sector is smaller than a city of Hull’s size and regional strength might ordinarily expect and there is a pool of underused local graduates in business and creative disciplines who might be able to adapt to the necessary roles without needing to bring talent in from outside the region to grow it
- + A likely post-pandemic demand for increased nursing numbers could be a boost to local opportunities and there may also be an opportunity to consider expanding provision for allied health professionals. Currently that small but significant group of local graduates interested in pursuing those careers leave the region to study – and then return on graduation
- + A local market exists for those courses, and some might be delivered as postgraduate conversions to further expand opportunities for retraining
- + There are institutions outside the region but with strong links (the Lincoln institutions particularly) who are likely to respond positively to efforts to boost the local economy
- + Local graduates have a higher level of postgraduate study than the national average which might support long-term local ambitions in tech and IT
- + A well-targeted effort to bring in more talent from outside the region could bring fresh approaches and perspectives and contribute to a healthier and more dynamic labour market

Threats

- + The region's graduate labour market is particularly vulnerable to changes in public spending priorities.
- + The region's graduate labour market is quite closed off and a lack of incoming talent from outside may stifle innovation
- + The region is very reliant on the University of Hull to supply the local workforce in many areas and any financial or other issues at the institution will impact on skills supply
- + The current pandemic is likely to disrupt the local graduate labour market and there is a danger that local talent may abandon the region for those seen as more prosperous if steps are not taken to assure them that opportunities exist
- + Where there is not local provision of crucial specialisms in medicine and teaching, the region is vulnerable to occupational shortage when these professions are in short supply – as is likely in the medium term
- + Local manufacturing strength is at least partially reliant on the globally-precarious steel industry
- + Local graduates do have options outside the region, particularly in growth areas in business services, and there is a danger of long-term talent flight if or when local students perceive a shortage of local opportunities
- + The small local SME sector is a barrier to growing the local graduate labour market

+ Recommendations

Recommendations

- + There is an immediate need to get a better view of local labour demand (particularly post-pandemic)
- + Local students, information, advice and guidance (IAG) professionals and educational providers should be aware of the data on the local labour market so that they can plan accordingly
- + There is currently a gap in the data on students studying with FE providers, which, if filled, will allow a much clearer picture of local skills supply and demand
- + A programme of promoting the region as a good place to live and work, along with concrete examples of the careers individuals can pursue may help boost both retention and propensity to relocate. In particular quality of life and cost of living advantages can be emphasised
- + It should be a priority to try to grow the local professional SME sector, particularly in business services. Currently the 'local' centre for these services is in Leeds and to an extent York. Focusing on marketing and creative organisations might make use of a pool of potential local talent and help local businesses who have to look quite far afield for their support
- + There are local graduates who do not perceive local opportunities in their subject of study, but who might be suited to important local roles. Consider how graduates in well-supplied subjects in media, arts and business subjects might be suited to other roles
- + Consider local provision of education, social care and health professions, and if it might be possible to help individuals to convert from other disciplines to specialisms such as ophthalmics, pharmacy or occupational therapy, that are locally in short supply