Future Skills Needs: North

Derry City and Strabane

Causeway Coast and Glens

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Introduction and background

Introduction and background

Ulster University Economic Policy Centre (UUEPC) were commissioned by Invest Northern Ireland to report on the future skills needs of the North of NI.

The North area is defined by two Local Government Districts (LGDs); Derry City and Strabane; and Causeway Coast and Glens. The empirical approach is based directly upon UUEPC's forecasting methodology employed in the Northern Ireland (NI) Skills Barometer.

The NI Skills Barometer was commissioned by the Department for the Economy (DfE) and involved the development of an economic model to forecast future skills needs and skills gaps by qualification level, subject area and sector. The project was originally commissioned in 2015 and is updated every 18 months.

The quantitative findings of the research have benefitted a wide range of stakeholders including; careers advisors, young people and parents; teachers and schools; business groups; DfE; and wider government.

This report provides contextual analysis which underpins skills forecasts, outputs from the assessment of future skills demand, a review of supply side indicators relating to North and overall skill balances.

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Acronyms and skills classification

Acronyms

| Acronym	Full title
UUEPC	Ulster University Economic Policy Centre
NI	Northern Ireland
NQF	National Qualifications Framework
SIC	Standard Industrial Classification
SOC	Standard Occupational Classification
DfE	Department For Economy
JACS	Joint Academic Coding System
SSA	Sector Subject Area
HE	Higher Education
FE	Further Education
LGD	Local Government District
MCS	Millennium Cohort Study
PfG	Programme for Government
FDI	Foreign Direct Investment
FSME	Free School Meal Entitlement
StS	Steps to Success
TfS	Training for Success
STEM	Science, technology, engineering and mathematics
DEA	District Electoral Area
SOA	Super Output Area

NQF scale

NQF level	Description
Level 8	PhD (or equivalent)
Level 7	Masters (or equivalent)
Level 6	Undergraduate degree (or equivalent)
Level 4-5	Foundation degree/HND/HNC (or equivalent)
Level 3	A-level (or equivalent)
Level 2	5 GCSEs A*-C (or equivalent)
Level 1	5 GCSEs D-G (or equivalent)
Level 0	No qualification

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How is 'North' geographical area defined?

Workplace labour market structure

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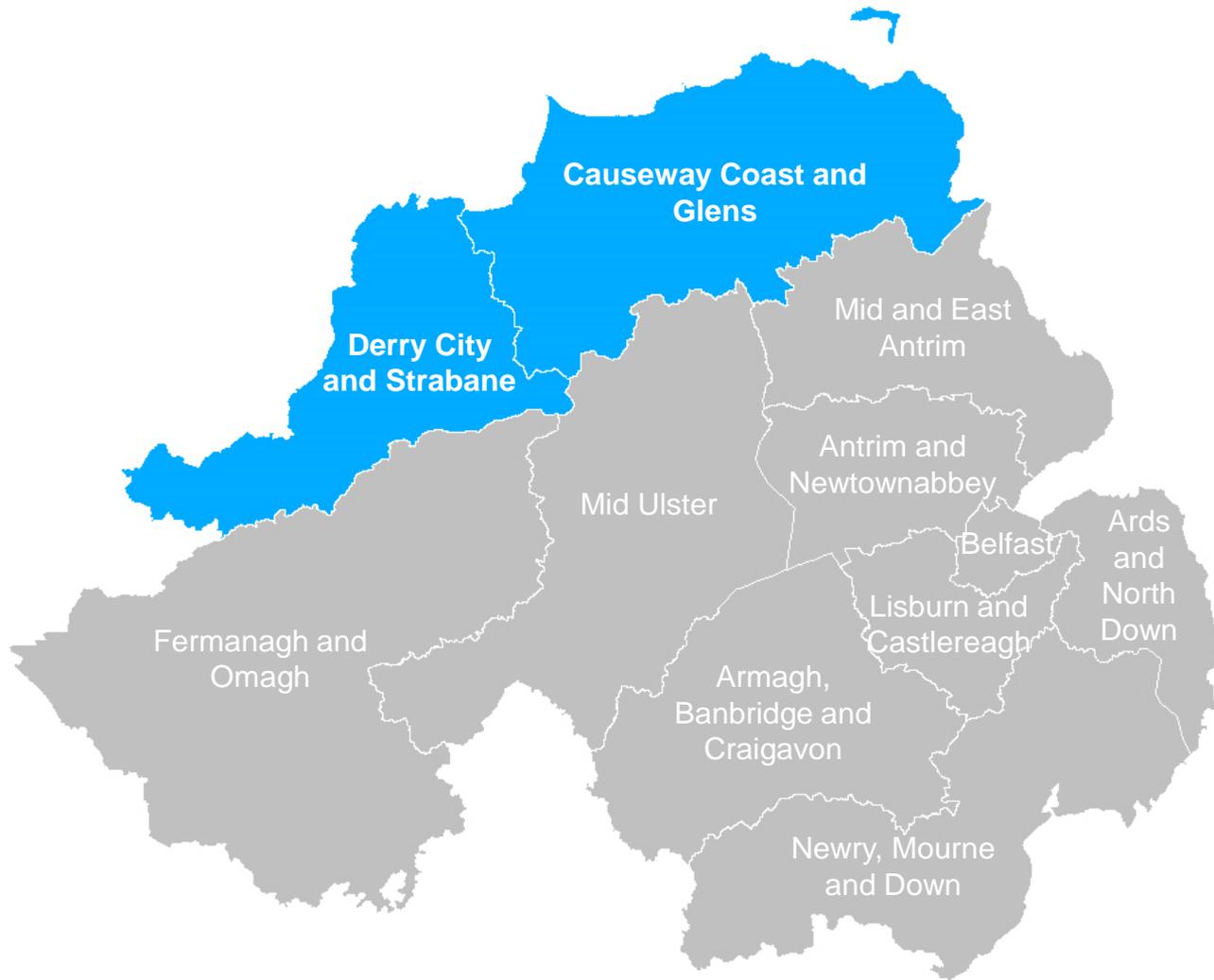
Introduction to workplace labour market structure

Workplace labour market structure

It is important to outline North's workplace labour market structure e.g. sectoral mix, demography and skills characteristics in order to fully understand and contextualise forecasted skill requirements.

The workplace refers to jobs located within North, not the jobs held by North's residents. Therefore, jobs held by residents which are located outside North are not included in the analysis which follows.

Data caveats

If analysis refers to the year 2017 or after the data has been estimated using information from UUEPC's economic model. In all other cases figures relate to the most recently published official data.

Although a number of figures in the analysis to follow use data from the 2011 Census, the stock of skills changes very slowly over time. Therefore, the 2011 Census is still considered to be a data source which reflects current skills patterns across NI.

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Health and retail sectors are the largest employers in North

Workforce jobs by sector (1-digit), North (2017)

Workforce jobs
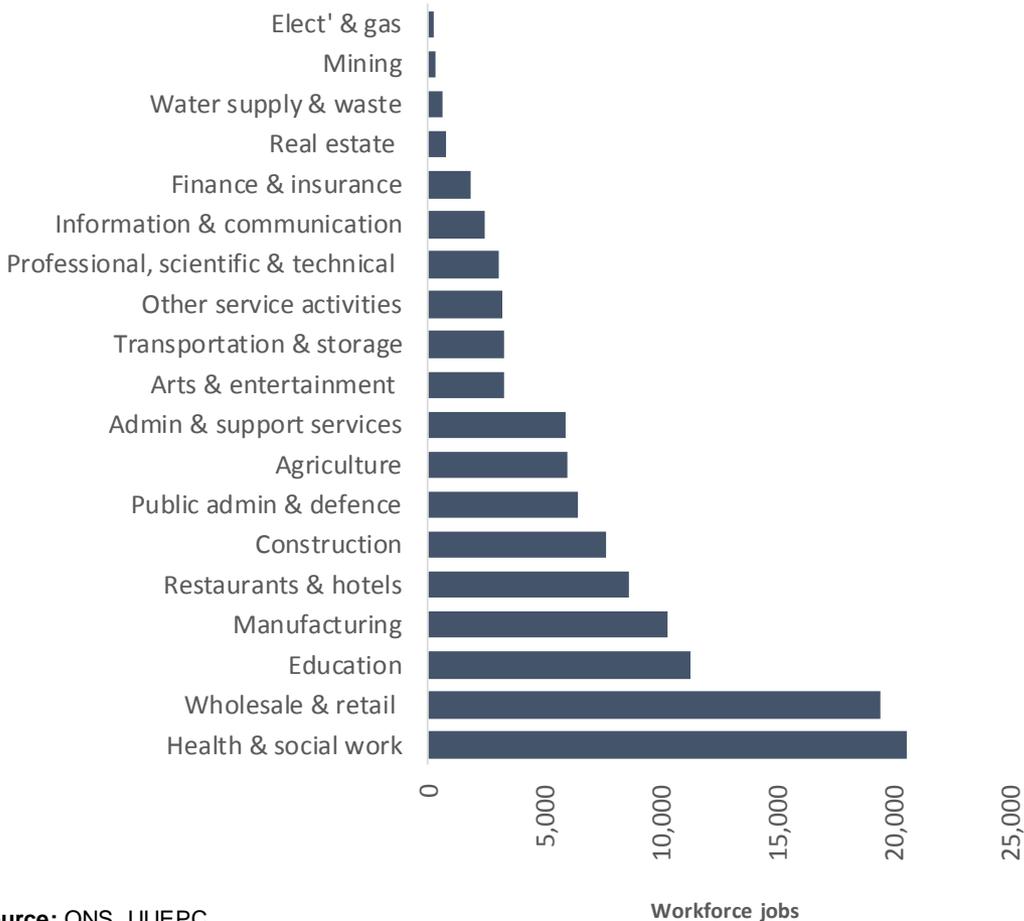
The largest employment sector in North is health and social work employing 20,600 workers. This accounts for 18% of total North workplace jobs and 16% of all jobs in this sector in NI.

The second largest employment sector in North is wholesale and retail employing 19,500 workers. This translates to 17% of total North workplace jobs and 14% of all jobs in this sector in NI.

Other large employment sectors include education (11,300 workers, 10% of North's total), manufacturing (10,300 workers, 9% of North's total) and restaurants and hotels (8,600 workers, 7% of North's total).

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Higher job concentration in sectors associated with lower productivity

Workforce jobs by sector (1-digit), North versus NI (2017)

Percentage point difference in share of workforce jobs by sector (1-digit), North versus NI (2017)

Sector	Percentage point difference (North minus NI)
Health & social work	(positive, ~3%)
Agriculture	
Education	
Restaurants & hotels	
Wholesale & retail	
Arts & entertainment	
Construction	
Mining	
Real estate	
Elect' & gas	
Water supply & waste	
Other service activities	
Information & communication	
Public admin & defence	
Finance & insurance	
Transportation & storage	
Manufacturing	
Admin & support services	
Professional, scientific & technical	(negative)

Less dependent than NI average ← → More dependent than NI average

x-axis: -3%, -1%, 1%, 3%
Percentage point difference (North minus NI)

Source: ONS, UUEPC

North workforce jobs as proportion of NI total by sector (1-digit) (2017)

Sector	% of NI sector total
Agriculture	~18%
Arts & entertainment	~16%
Mining	~16%
Restaurants & hotels	~15%
Health & social work	~15%
Education	~15%
Wholesale & retail	~14%
Construction	~13%
Real estate	~12%
Public admin & defence	~12%
Other service activities	~11%
Information & communication	~11%
Manufacturing	~11%
Water supply & waste	~10%
Transportation & storage	~10%
Admin & support services	~10%
Elect' & gas	~10%
Finance & insurance	~9%
Professional, scientific & technical	~8%

x-axis: 0%, 5%, 10%, 15%, 20%
**% of NI sector total**

Source: ONS, UUEPC

Relative to the NI average, North has a higher concentration of jobs in a number of sectors including health and social work, agriculture, education and restaurants and hotels. High growth sectors such as professional and scientific or IT are less concentrated in North, relative to the NI average.

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Retail trade and public sectors dominate North's sub-sector employment

Workforce jobs by sector (top 15 2-digit), North (2017)

Source: UUEPC
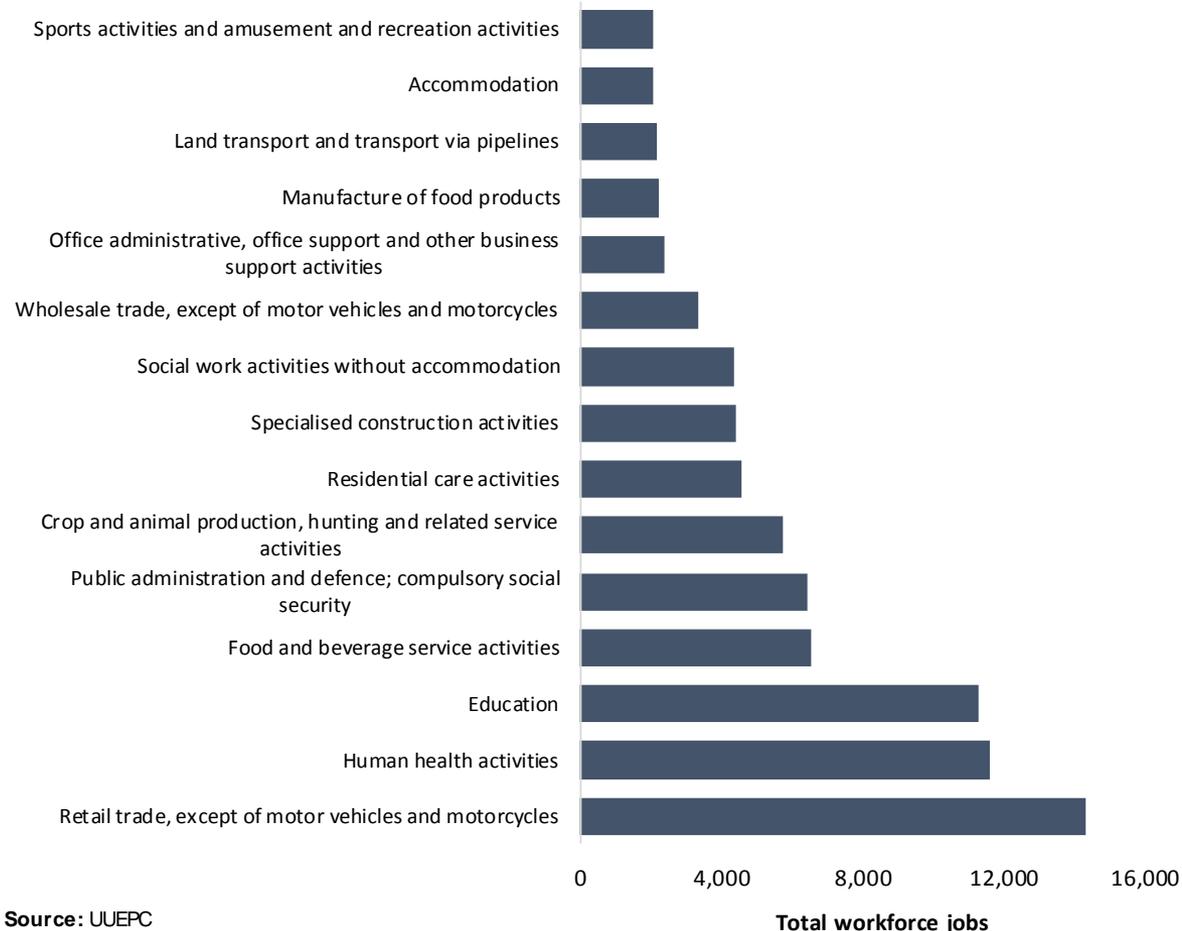
Three of the top five largest employment sub-sectors in North are in the public sector: human health activities (11,600 jobs); education (11,300 jobs); and public administration and defence (6,500 jobs). However, the largest workplace sub-sector in North is retail trade (14,400 jobs). Food and beverage service activities (6,600 jobs) also fall within the top 5 employment sub-sectors.

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8,840 jobs created in North over the 2012-2017 period

The number of jobs in North increased by 8,840 over the 5 year period 2012-2017. This accounted for 13% of total workforce job growth in NI.

In absolute terms the strongest sectoral growth over the period was in health and social work (2,590), manufacturing (1,850) and restaurants and hotels (1,760). The largest job losses occurred in public admin' and defence (-770), agriculture (-390) and real estate (-290).

Overall job growth in North was marginally below the NI average, 8% and 9% respectively over the 2012-2017 period.

Workforce jobs growth by sector (1-digit), North versus NI (2012-2017)

Sector	North		Northern Ireland
	Job growth 2012-2017	% change	% change
Agriculture	-390	-6%	-6%
Mining	70	30%	-11%
Manufacturing	1,850	22%	20%
Elect' & gas	190	387%	100%
Water supply & waste	60	11%	14%
Construction	440	6%	8%
Wholesale & retail	180	1%	1%
Transportation & storage	130	4%	8%
Restaurants & hotels	1,760	26%	22%
Information & communication	190	8%	17%
Finance & insurance	-150	-8%	-6%
Real estate	-290	-28%	-19%
Professional, scientific & technical	240	8%	20%
Admin & support services	920	18%	33%
Public admin & defence	-770	-11%	-9%
Education	-50	0%	3%
Health & social work	2,590	14%	5%
Arts & entertainment	750	29%	14%
Other service activities	1,120	54%	45%
Total	**8,840**	**8%**	**9%**

Source: ONS, UUEPC
Note: Figures may not sum due to rounding

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High growth in small to medium sized sectors

**Workforce jobs growth by sector (1-digit) and number of jobs (workplace based), North (2012-2017)**

Source: UUEPC
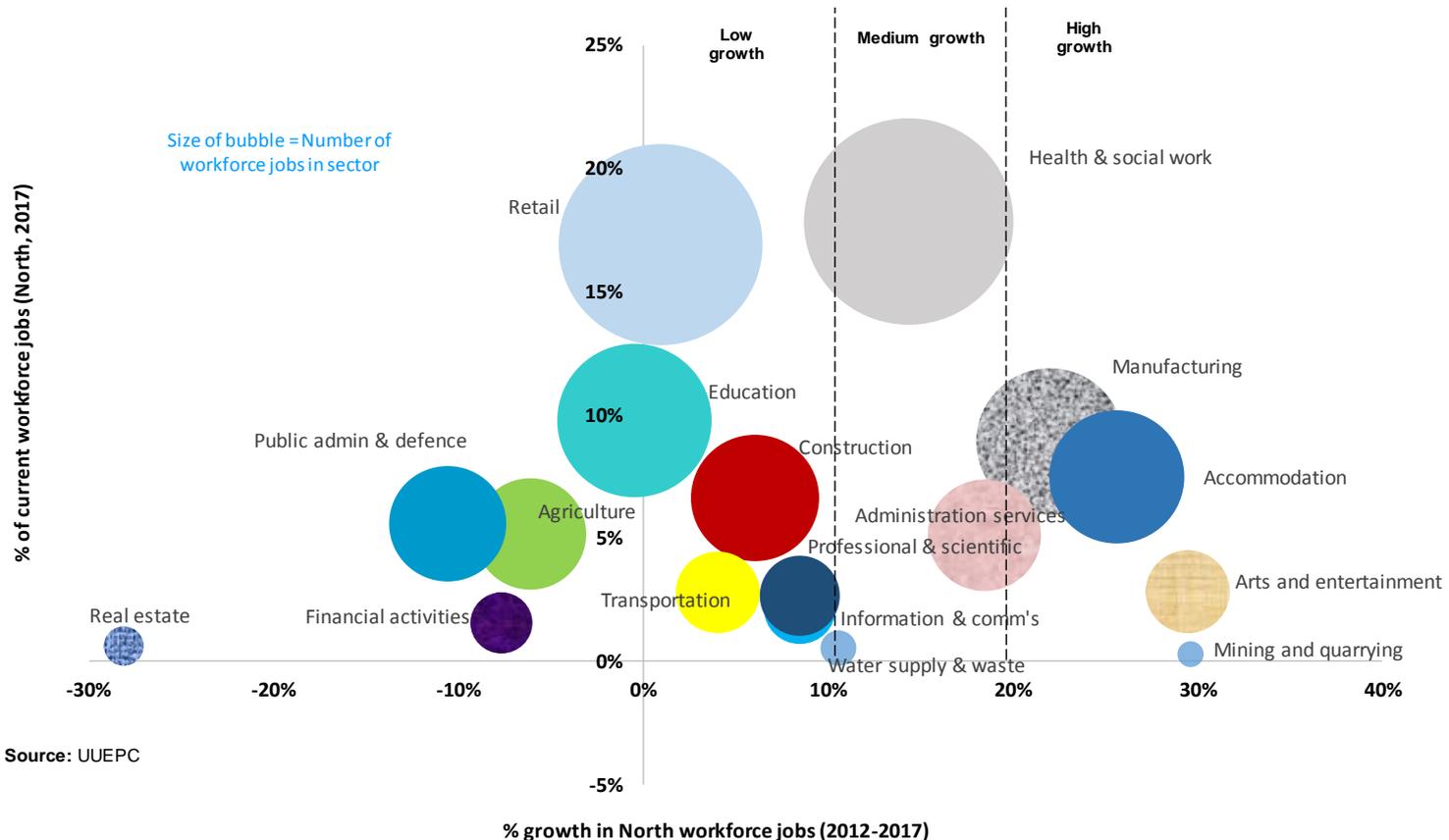
It is important to contextualise job growth figures with the size of a sector. For instance, some sectors may have experienced strong growth but remain relatively small in size (e.g. mining and quarrying). Whereas, other sectors may have experienced medium growth but as they are larger sectors have contributed a significant number of absolute jobs (e.g. health and social).

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Residential care activities created the greatest quantum of jobs in North since 2012

Workforce jobs growth by sector (top 15 2-digit), North (2012-2017)
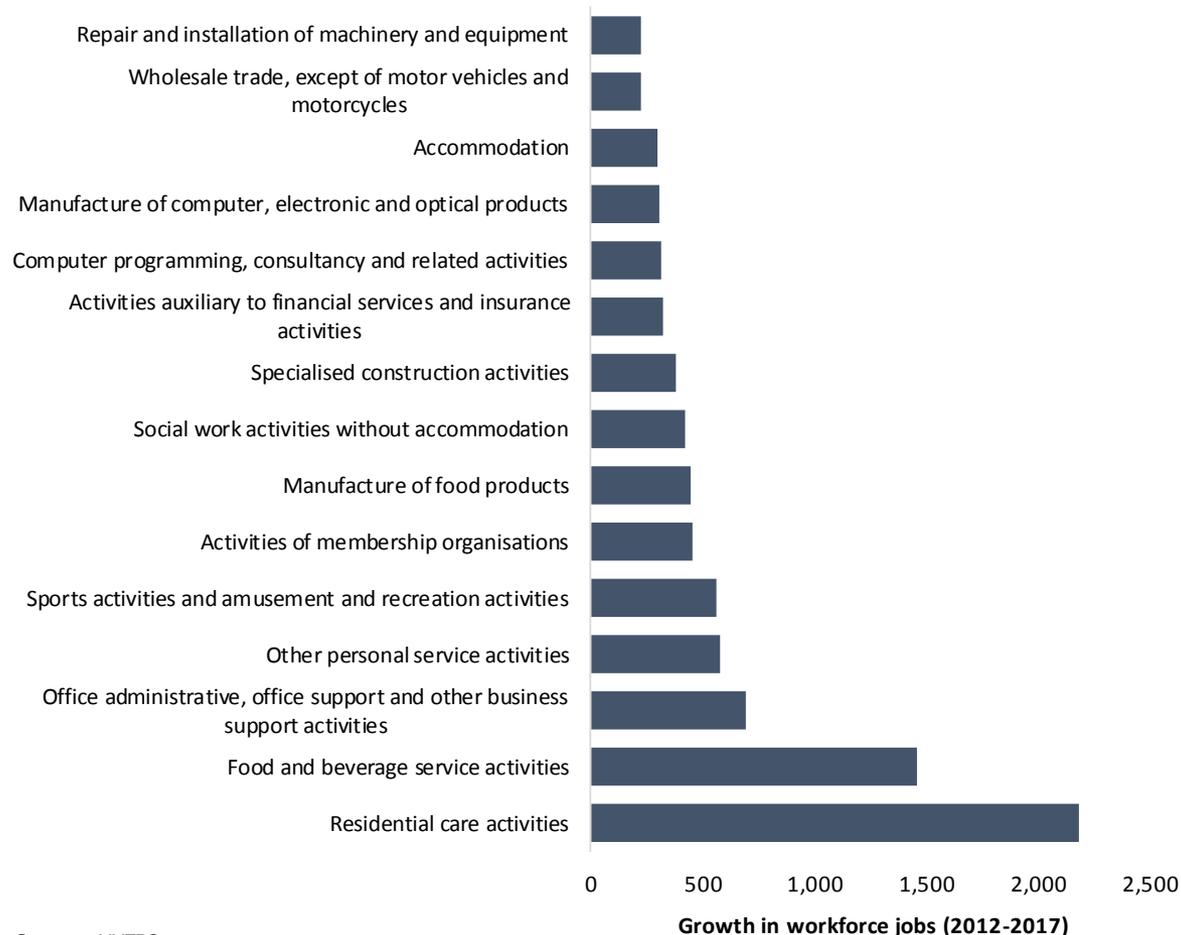

Source: UUEPC

The largest quantum of sub-sectoral job growth was recorded in residential care activities creating 2,200 jobs over the period 2012-2017. This was followed by food and beverage service activities (1,500 jobs) and office administration and office support activities (700 jobs).

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Higher concentration of health professionals and skilled agriculture trades in North, relative to NI

Workplace jobs by occupation (2-digit), North versus NI (2017)

Workplace structure by occupation (2-digit), North (people based) (2017)

Total workplace employment (people based)

Source: UUEPC

Workplace based structure by occupation (2-digit), North versus NI (people based) (2017)

Lower concentration of employment than NI

Higher concentration of employment than NI

Difference in share of employment (people based)

Source: UUEPC
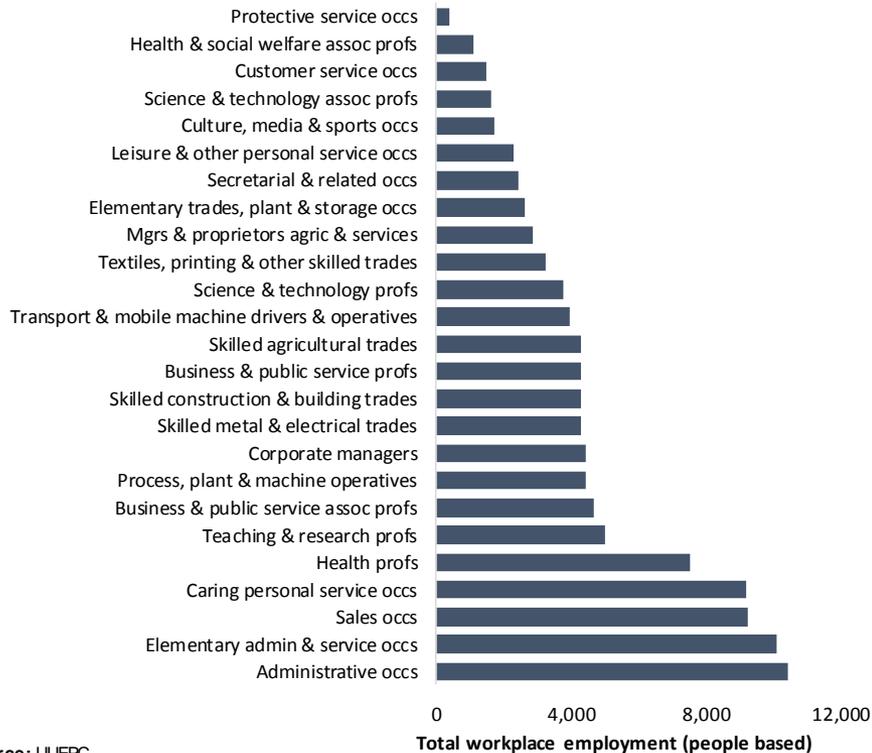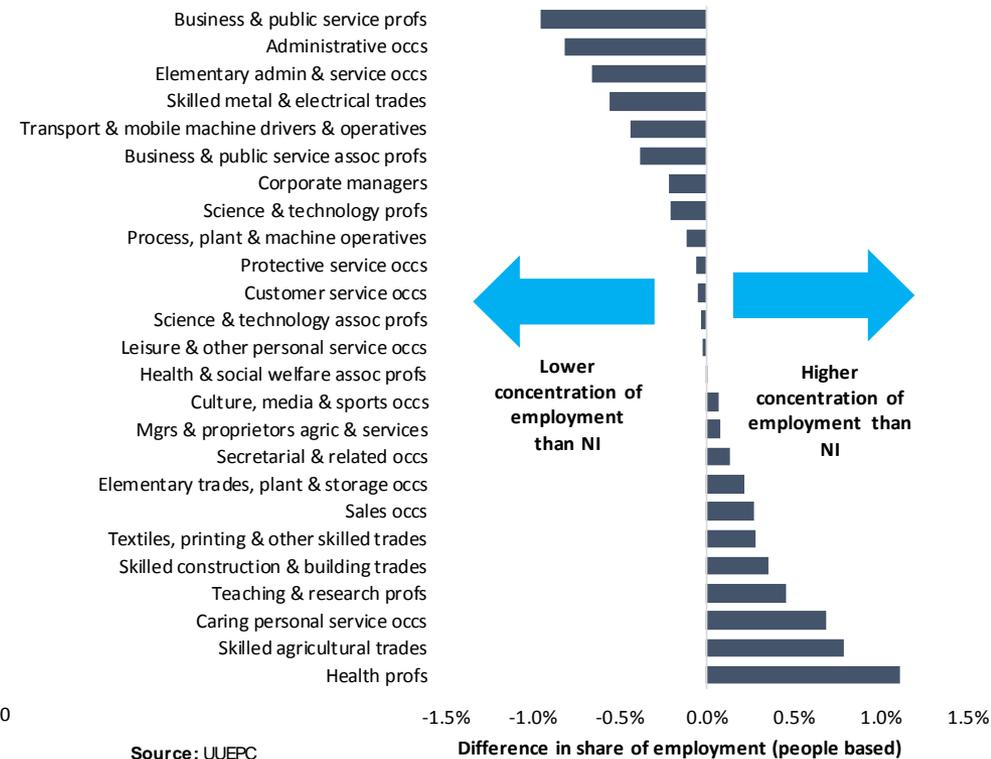
North's occupational structure is different to NI's, as it is driven by a different sectoral structure. There is a higher concentration of health professionals (7% in North compared to 6% in NI as a whole) and a relatively lower concentration of business and public service professionals and administrative occupations, albeit marginal.

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Sales assistants and retail cashiers is the largest detailed occupation

Workplace based employment by occupation (top15 3-digit), North versus NI (2017)

Workplace structure by occupation (3-digit), North (people based) (2017)

Total workplace employment (people based)

Health Professionals'
Secretarial and Related Occupations'
Food Preparation and Hospitality Trades'
Elementary Cleaning Occupations'
Administrative Occupations: Gvrnmnt and Related Orgs'
Road Transport Drivers'
Childcare and Related Personal Services'
Construction and Building Trades'
Other Administrative Occupations'
Agricultural and Related Trades'
Other Elementary Services Occupations'
Nursing and Midwifery Professionals'
Teaching and Educational Professionals'
Caring Personal Services'
Sales Assistants and Retail Cashiers'

Source: UUEPC

Workplace based structure by occupation (3-digit), North versus NI (people based) (2017)

Difference in share of employment (people based)

Managers and Proprietors in Hsptlty and Leisure Srvcs'
Cleaning and Housekeeping Managers and Supervisors'
Public Services and Other Associate Professionals'
Secretarial and Related Occupations'
Sports and Fitness Occupations'
Elementary Agricultural Occupations'
Food Preparation and Hospitality Trades'
Sales Assistants and Retail Cashiers'
Health Professionals'
Construction and Building Trades'
Teaching and Educational Professionals'
Other Elementary Services Occupations'
Caring Personal Services'
Nursing and Midwifery Professionals'
Agricultural and Related Trades'

Higher concentration of employment than NI

Source: UUEPC

At a more granular level the largest detailed (3-digit) occupations are sales assistants and retail cashiers (8,100 employed), caring and personal services (5,700 employed) and teaching and educational professionals (5,000 employed).

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Protective service occupations have experienced a considerable decline since 2012

Workplace based growth by occupation (2-digit), North (people based) (2012-2017)

Workplace based jobs by occupation (2-digit) structure, North versus NI, (2012-2017)

Protective service occs
Health & social welfare assoc profs
Skilled agricultural trades
Secretarial & related occs
Corporate managers
Mgrs & proprietors agric & services
Teaching & research profs
Sales occs
Administrative occs
Transport & mobile machine drivers & operatives
Science & technology assoc profs
Elementary trades, plant & storage occs
Elementary admin & service occs
Health profs
Business & public service assoc profs
Textiles, printing & other skilled trades
Skilled construction & building trades
Business & public service profs
Leisure & other personal service occs
Caring personal service occs
Science & technology profs
Customer service occs
Process, plant & machine operatives
Culture, media & sports occs
Skilled metal & electrical trades

Decreased employment ← → **Increased employment**

-60% -40% -20% 0% 20% 40% 60%

Change in workplace employment (people based) (2012-2017)

Source: UUEPC

Workplace based jobs growth by occupation (top 15 3-digit), North (workplace based) (2012-2017)

Public Services and Other Associate Professionals'
Childcare and Related Personal Services'
Architects, Town Planners and Surveyors'
Elementary Process Plant Occupations'
Hairdressers and Related Services'
Metal Forming, Welding and Related Trades'
Customer Service Occupations'
Metal Machining, Fitting and Instrument Making Trades'
Assemblers and Routine Operatives'
Construction and Building Trades'
Process Operatives'
Nursing and Midwifery Professionals'
IT and Telecommunications Professionals'
Other Elementary Services Occupations'
Caring Personal Services'

0 200 400 600 800 1,000

Growth in workplace employment (people based) (2012-2017)

Source: UUEPC

The occupation with the largest quantum of growth within North over the past five years is caring and personal services (1,000 jobs) followed by other elementary service occupations (900), IT and telecommunications professionals (500) and nursing and midwifery professionals (500).

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Summary of workplace labour market structure

Sectoral structure - North's largest sectoral employers are health and social work (18% of total jobs), wholesale and retail (17% of total jobs) and education (10% of total jobs). Relative to the NI average North has a higher concentration of workforce jobs in sectors including health and social work, agriculture and education.

Scale of workforce - North accounts for almost one fifth (18%) of NI agriculture employment, followed by arts and entertainment (16% of the NI total) and mining (16% of the NI total).

Sectoral growth - The largest quantum of job growth was in health and social work (2,590 jobs) over the 2012-2017 period, followed by manufacturing (1,850 jobs) and restaurants and hotels (1,760 jobs). Overall job growth in North was marginally below the NI average, 8% and 9% respectively.

Occupation structure - North has a marginally different occupation structure to NI as a whole. North's largest occupation is administrative occupations (10% of total), followed by elementary administrative and service occupations (9% of total) and sales occupations (8% of total).

However at a more granular level, relative to the NI average North has a marginally higher concentration in health professionals, agricultural trades and caring and personal service occupations. Likewise North has a lower concentration of business and public service professionals and administrative occupations.

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Summary of workplace labour market structure (continued)

Occupation growth - The fastest growing occupation within North over the period 2012-2017 was skilled metal and electrical trades (24%). This was followed by culture, media and sport occupations and process plant and machine operatives, 23% and 22% respectively. At a more granular level and in absolute terms caring and personal services increased by the largest quantum (1,000) followed by other elementary occupations (900).

Occupation decline - A number of occupations have also declined over the past five years for example, protective services and health and social welfare associate professionals. These declines can typically be linked to either a change in the occupational composition within sectors or an overall decline in sectors where specific occupations are highly concentrated. For example, a decline in corporate managers can be linked to the decline of the finance sector, as there is a high concentration of branch managers of banks etc.

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Workplace demographic factors

Causeway Coast and Glens is driving a higher replacement demand in North

Workplace based employment by age, North (2011)

Workplace employment (excluding students) by age, North (2011)

Aged 65+
2%

Aged 16-24
10%

Aged 50-64
24%

Aged 25-49
64%
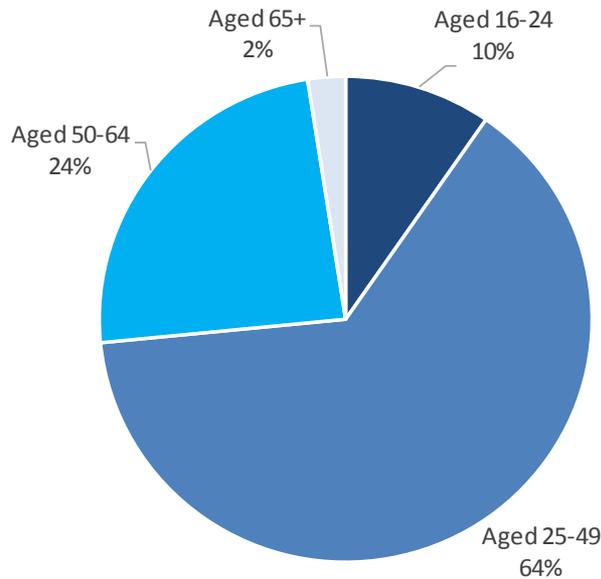
Source: NI Census, 2011

Note: Based on those aged 16-74 in employment, excluding students

Proportion of workplace employment (excluding students) aged over 50, LGDs (2011)

% workplace employment aged 50+

Ards and North Down · Causeway Coast and Glens · Mid and East Antrim · Fermanagh and Omagh · Lisburn and Castlereagh · North · Antrim and Newtownabbey · Newry, Mourne and Down · Armagh City, Banbridge and Craigavon · Northern Ireland · Mid Ulster · Derry City and Strabane · Belfast
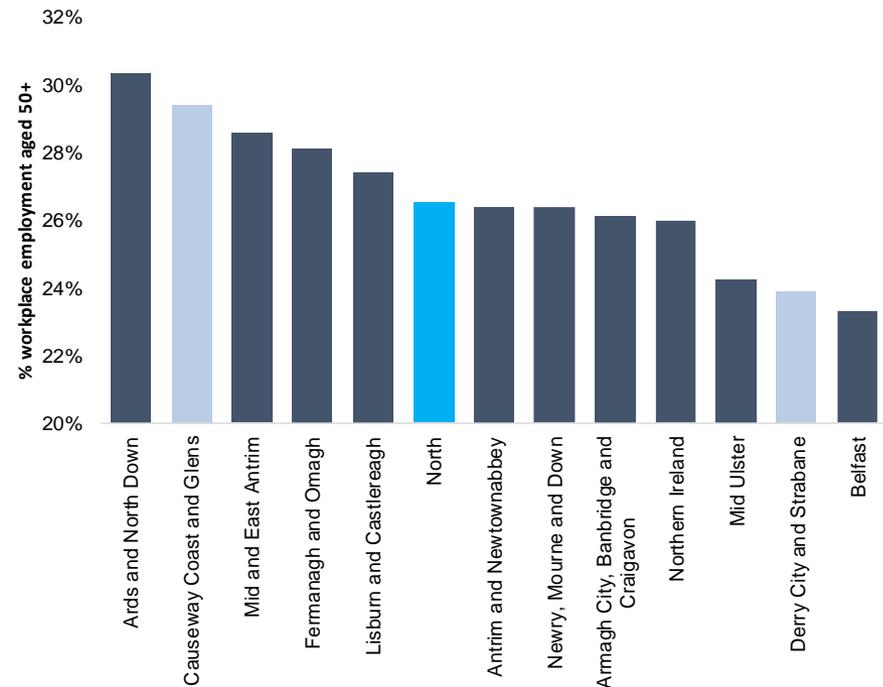
Source: NI Census, 2011

The higher the proportion of older workers the higher the level of replacement demand. That is, as older workers move into retirement vacancies become available within the labour market which must be replaced. The proportion of workplace employment aged over 50 varies in North from 29% in Causeway Coast and Glens to 24% in Derry City and Strabane. This suggests retiring workers will have to be replaced at a higher rate than the NI average.

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Agriculture, mining & utilities sectors have highest proportion of older workers

Workplace based employment by age and sector (1-digit), North (2011)
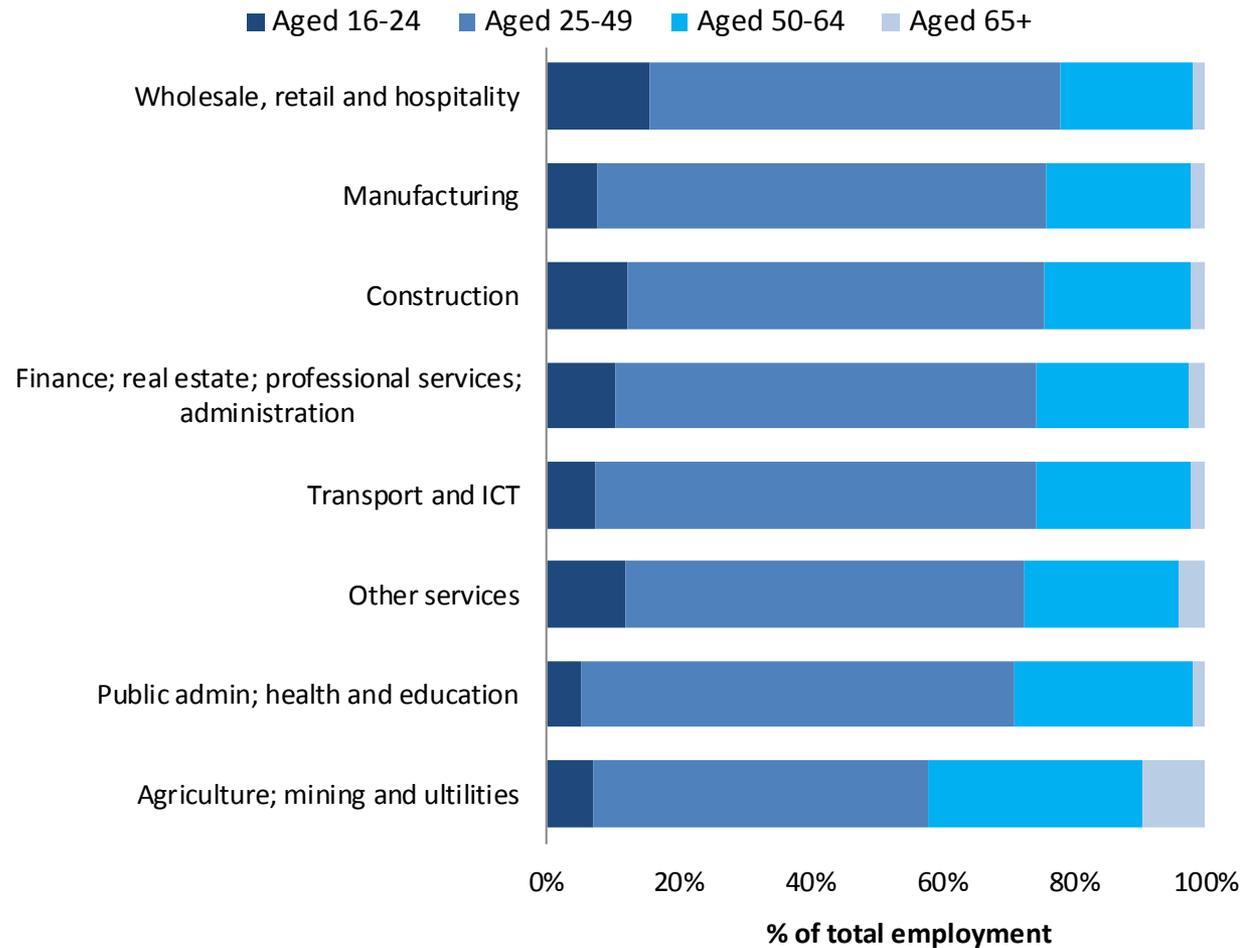
Legend: ■ Aged 16-24 ■ Aged 25-49 ■ Aged 50-64 ■ Aged 65+

Categories (top to bottom):
- Wholesale, retail and hospitality
- Manufacturing
- Construction
- Finance; real estate; professional services; administration
- Transport and ICT
- Other services
- Public admin; health and education
- Agriculture; mining and ultilities

X-axis: % of total employment (0% to 100%)

Source: NI Census, 2011
Note: Based on those aged 16-74 in employment, excluding students

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Sales assistants and customer service occupations have the highest proportion of workers aged under 25

Workplace based employment by age and occupation (1-digit), North (2011)

Legend: ■ Aged 16-24 ■ Aged 25-49 ■ Aged 50-64 ■ Aged 65+

Categories (top to bottom):
- Sales and customer service occupations
- Associate professional and technical occupations
- Caring, leisure and other service occupations
- Administrative and secretarial occupations
- Professional occupations
- Process, plant and machine operatives
- Elementary occupations
- Skilled trades occupations
- Managers, directors and senior officials

X-axis: 0% 10% 20% 30% 40% 50% 60% 70% 80% 90% 100%
% of total employment

Source: NI Census, 2011

Note: Based on those aged 16-74 in employment, excluding students

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Almost half of skilled agricultural and related trade workers are aged 50 or above

Workplace based employment by top 10 occupations (2-digit) with workers aged over 50, North (2011)

■ Aged 16-24 ■ Aged 25-49 ■ Aged 50-64 ■ Aged 65+
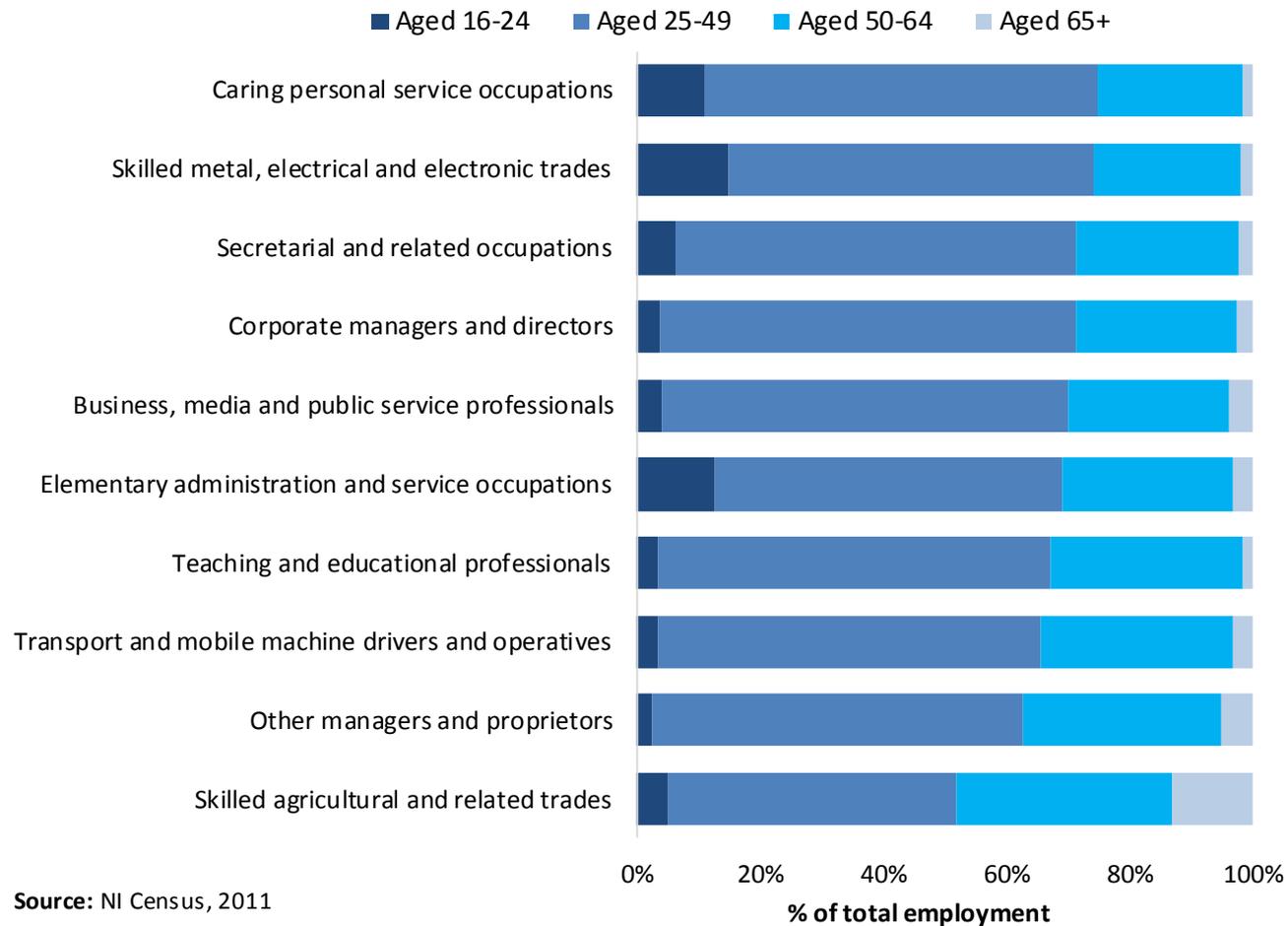
Source: NI Census, 2011

Note: Based on those aged 16-74 in employment, excluding students

Summary of workplace demography

Workplace age - The age distribution of North's workplace is similar to the NI average:

- 10% of North workforce aged 16-24 (equal to NI average);
- 64% of North workforce aged 25-49 (equal to NI average); and
- 26% of North workers aged 50+ (equal to NI average).

The rate of workers aged over 50 varies amongst LGDs which constitute North, ranging from 24% of workers in Derry City and Strabane to 29% of workers in Causeway Coast and Glens.

A higher rate of workers aged over 50 in North compared to NI indicates the North labour market will have to replace retiring workers at a rate higher to the NI average.

Workplace age and sector - Agriculture, mining and utilities has the highest concentration of workers aged 50+ (42%) followed by public sectors (29%). Therefore, these sectors will require a higher level of demand to replace workers, relative to other sectors.

Contrastingly wholesale, retail and hospitability employs the largest proportion of workers aged below 25 (16%).

Workplace occupation and age - The sales and customer service occupations have the largest proportion of workers aged 16-24 (25%) and managers, directors and senior officials constitute the highest proportion of workers aged 50 and above (33%).

At a more granular level skilled agricultural and related trades have the largest proportion of workers aged over 50 (48%) followed by other managers and proprietors (37%).

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Workplace skills structure

Workplace qualifications lower than the NI average

Workplace based qualification structure (NQF), North versus NI (2011)

Percentage point difference in workplace qualification profile (NQF), North versus NI (2011)

Lower concentration in North

Higher concentration in North

Percentage point difference in qualification structure (North minus NI structure)

Source: NI Census 2011
Note: Based on those aged 16-74 in employment, excluding students
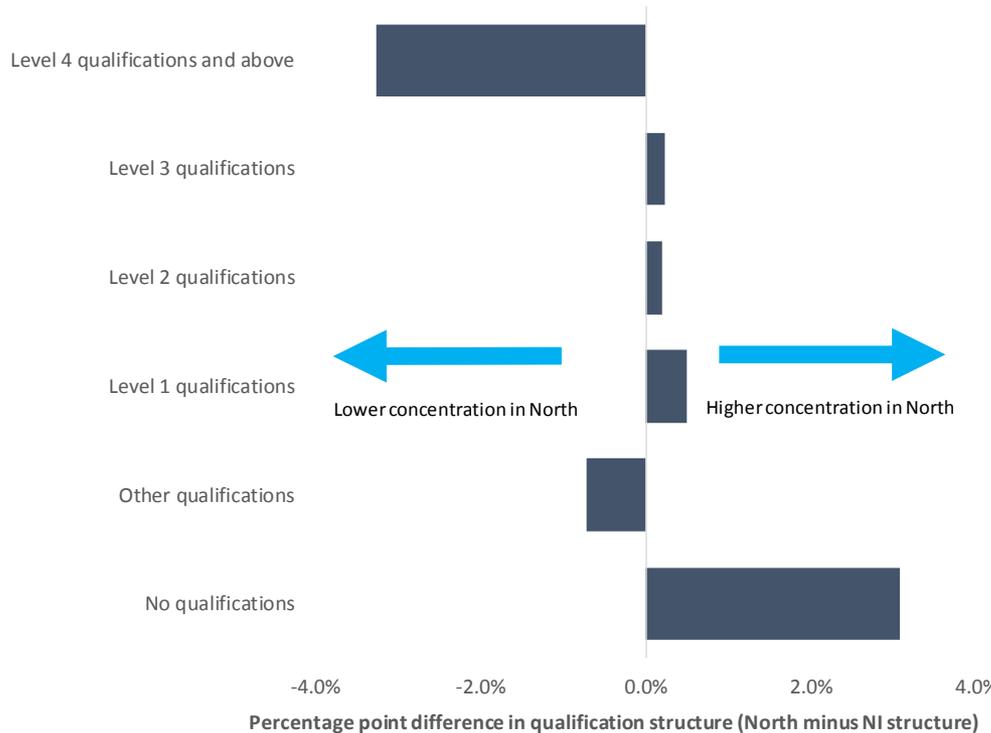
Workplace qualification profile (NQF), North versus NI (2011)
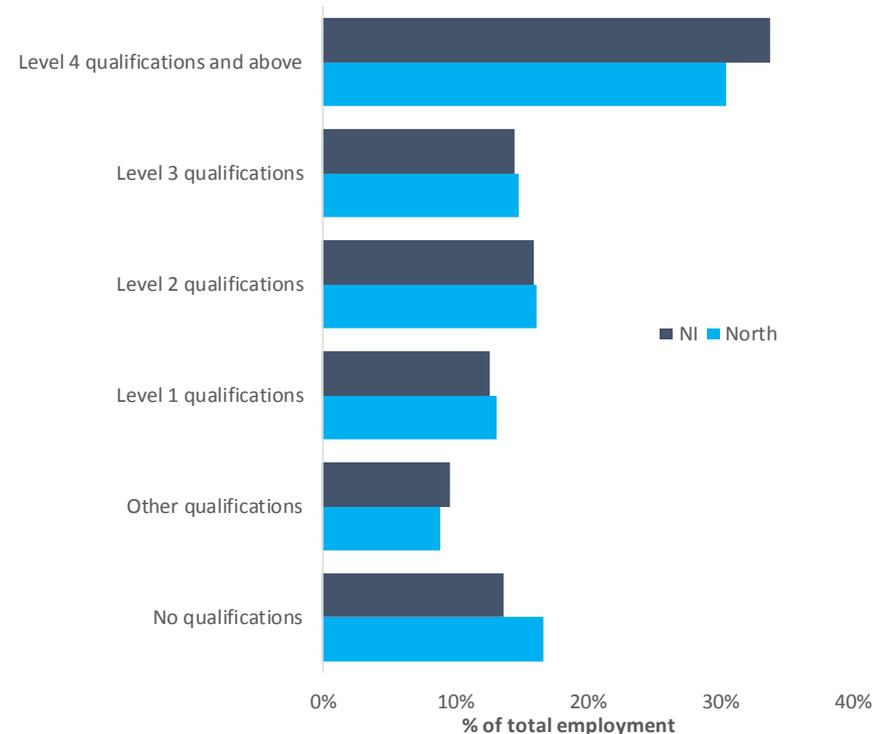
Source: NI Census 2011
Note: Based on those aged 16-74 in employment, excluding students

North has a higher proportion of workers with no qualifications (17%) compared to NI (14%). This may be influenced by the higher proportion of older age workers in North, who are typically associated with lower levels of formal qualifications. At the other end of the qualification spectrum, 30% of North's workplace has tertiary level qualifications (NQF level 4+) compared to 34% in NI.

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As older workers with lower qualifications retire the stock of qualifications will trend upwards

Workplace qualification structure (NQF) by age, North (2011)

Percentage point difference in employed skill profile (NQF), under 50's versus over 50's, North (2011)

Lower concentration amongst under 50's

Higher concentration amongst under 50's

Percentage point difference in qualification (under 50 minus over 50)
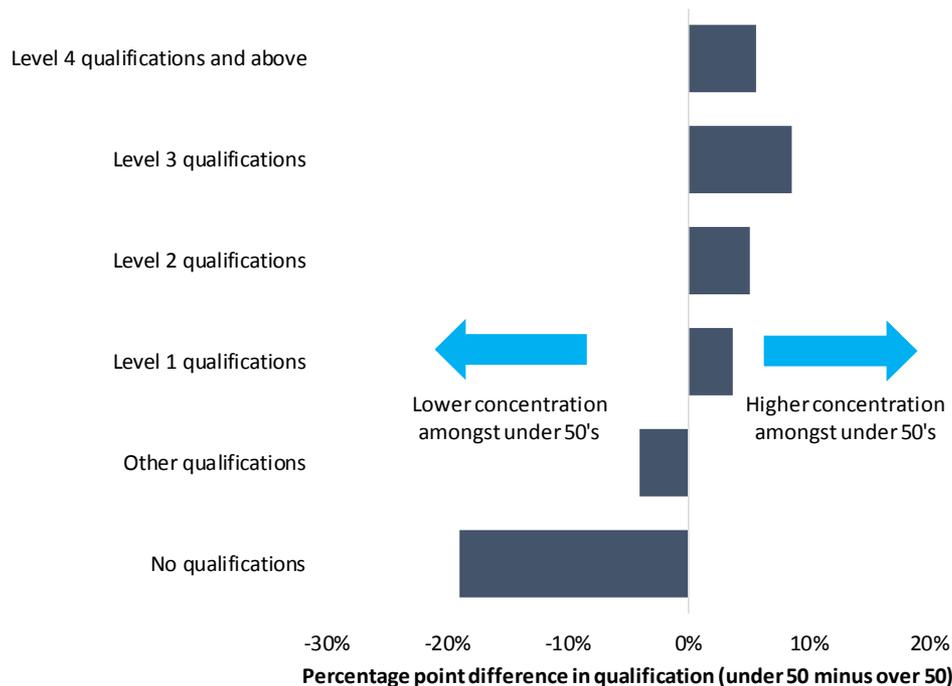
Source: NI Census, 2011
Note: Based on those aged 16-74 in employment, excluding students

Age profile by qualification (NQF), North (2011)

■ Aged 16-24 ■ Aged 25-49 ■ Aged 50-64 ■ Aged 65+

% of total employment
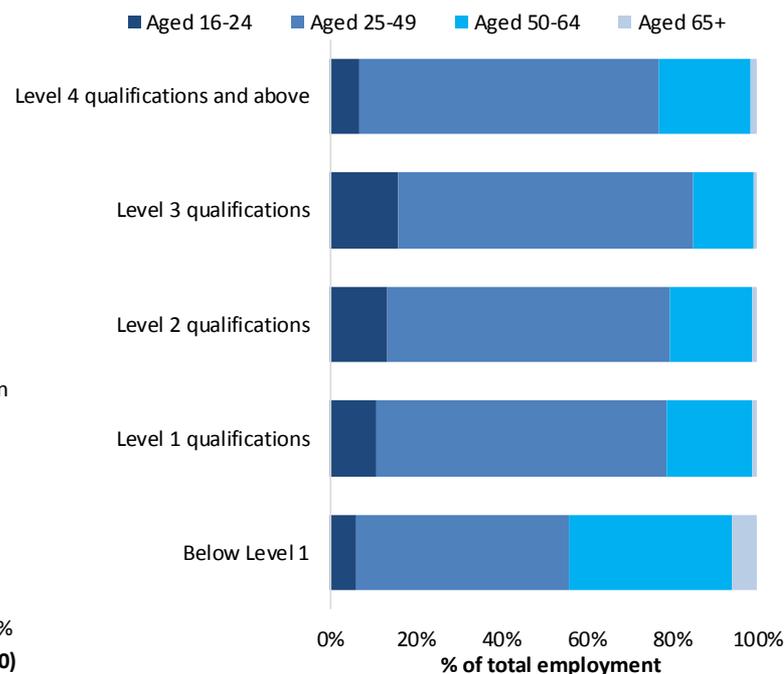
Source: NI Census, 2011
Note: Based on those aged 16-74 in employment, excluding students

Older workers tend to be associated with lower levels of formal qualifications relative to younger workers. This aligns to the upwards trend in education participation and employer attitudes towards the requirement of formal qualifications. In North, 35% of the workplace aged 50 or over have achieved NQF level 3+ qualifications, compared to 49% of those aged under 50.

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Older workers may have lower qualification levels, but not necessarily lower skilled

Qualification profile of employed residents, North (2017 LGD and 1991 NI)

Qualification profile of employed residents, NI (1991)

National BTEC/TEC/BEC, ONC, OND, 3%

Higher BTEC/BEC/TEC, ONC, OND, 3%

CSE (other than Grade 1), 8%

GCE 'A' Level, 8%

Degree level +, 10%

No formal qualifications, 39%

GCSE, GCE 'O' Level, Senior Certificate, General BTEC/BEC, 29%
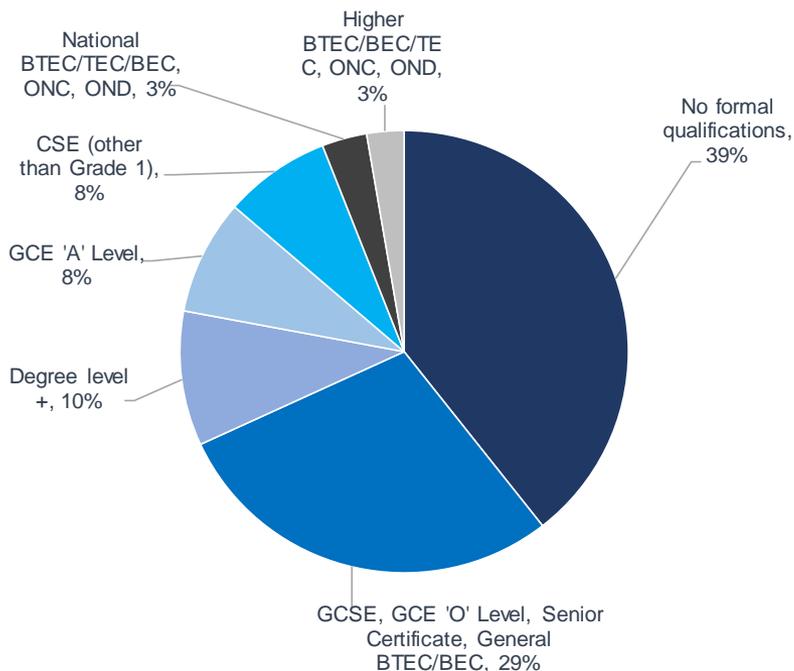
Source: Census 1991

Qualification profile of economically active, North (2017)

No formal qualifications, 12%

Level 1 qualifications, 12%

Level 2 qualifications, 19%

Level 4 + qualfiications, 35%

Level 3 qualifications 23%
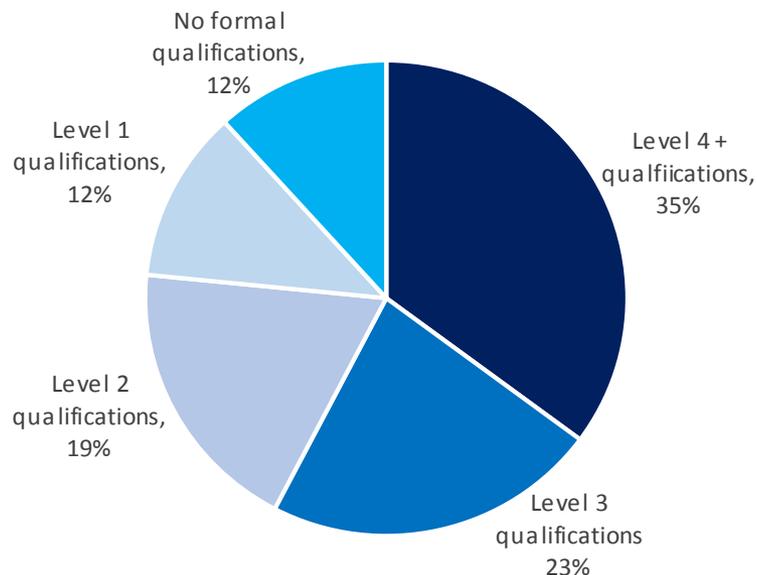
Source: Labour Force Survey

There has been a remarkable change in the qualification profile of the population across a generation. However, it is important to note a 16 year old entering the labour market with low qualifications in 1991 (when almost 40% of the employed had no qualifications) could still be in todays labour market aged 43 with similar qualification levels but almost three decades of work experience, therefore they are not unskilled.

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Resident qualification levels below workplace qualification levels in North

Resident versus workplace qualifications (NQF), North (2011)

Percentage point difference in qualification structure (NQF), resident versus workplace, North (2011)

Level 4 qualifications and above

Level 3 qualifications

Level 2 qualifications

Level 1 qualifications

Lower concentration amongst North residents

Higher concentration amongst North residents

Other qualifications

No qualifications

-12%   -7%   -2%   3%   8%

Percentage point difference in skill (residents minus workplace structure)

Source: NI Census, 2011
Note: Based on those aged 16-64, excluding students

Qualification structure (NQF), resident versus workplace, North (2011)

Level 4 qualifications and above

Level 3 qualifications

Level 2 qualifications

Level 1 qualifications

Other qualifications

No qualifications

■ Workplace

■ 16-64 Residents

-5%   5%   15%   25%   35%

% of total employment
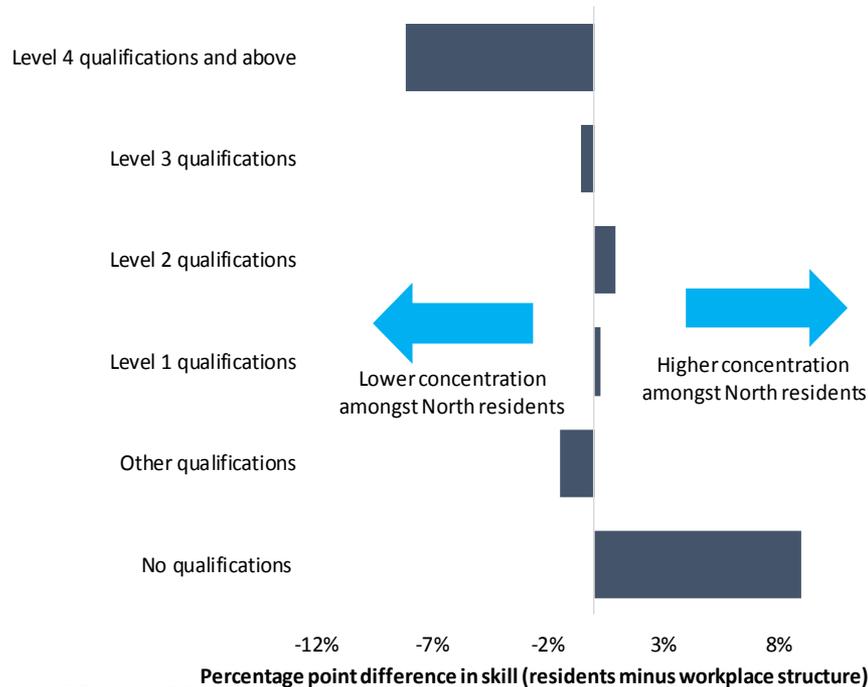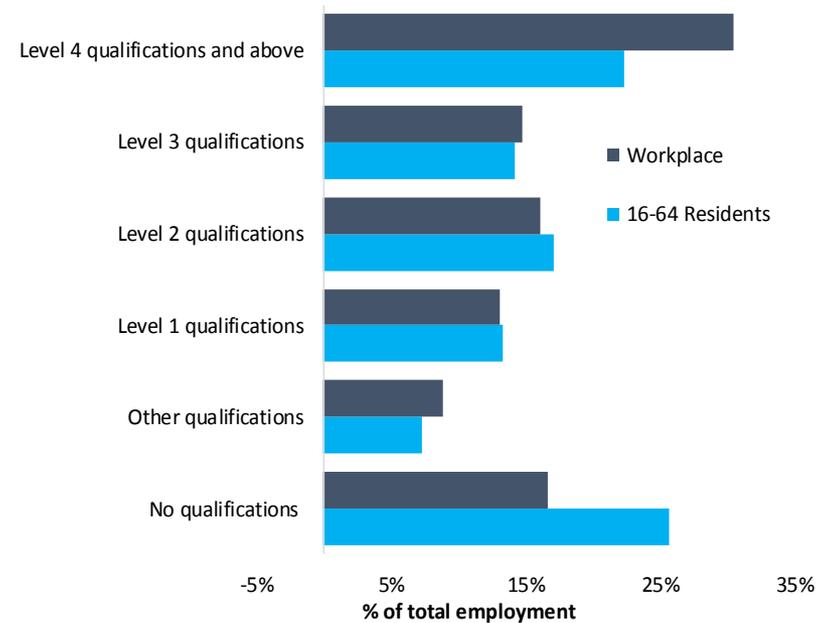
Source: NI Census, 2011
Note: Based on those aged 16-64, excluding students

A mismatch between resident and workplace skill structure can generate labour market barriers, particularly for those at the bottom of the skills spectrum. In North, 30% of the workplace have tertiary level education (NQF level 4+) compared to 22% of North's resident population. This suggests North must either import skills from other LGDs at the higher end of the skills spectrum or raise the qualification profile of the resident population to fill the deficit.

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Low resident qualifications do not match workplace qualification structure in inner city Derry

Qualification profile (NQF), workplace versus resident, North SOA's (2011)

Resident population aged 25-64 (%) with low or no qualifications, North SOA's, 2011

Inner Derry City

% of population aged 25-64
With no or low qualifications
- Above 45%
- Above 35% but below 45%
- Above 25% but below 35%
- Below 25%
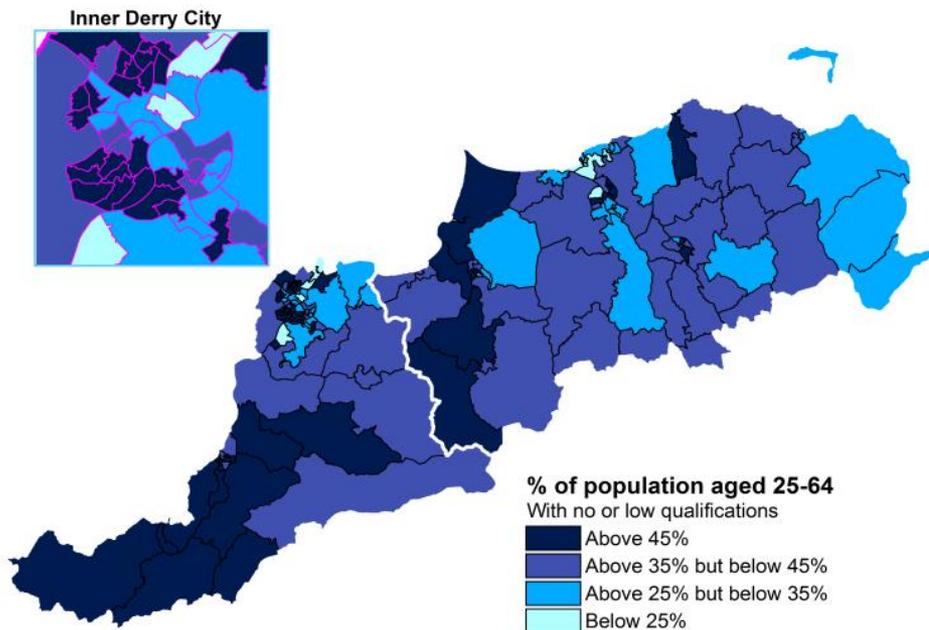
Source: NISRA, NI Multiple Deprivation Survey

Workplace population aged 16-74 (%) with highest qualification below NQF level 2, North SOA's, 2011

Inner Derry City

% of workplace population aged 16-74
With highest qualification below NQF level 2
- Above 45%
- Above 35% but below 45%
- Above 25% but below 35%
- Below 25%

Source: NISRA, Census 2011

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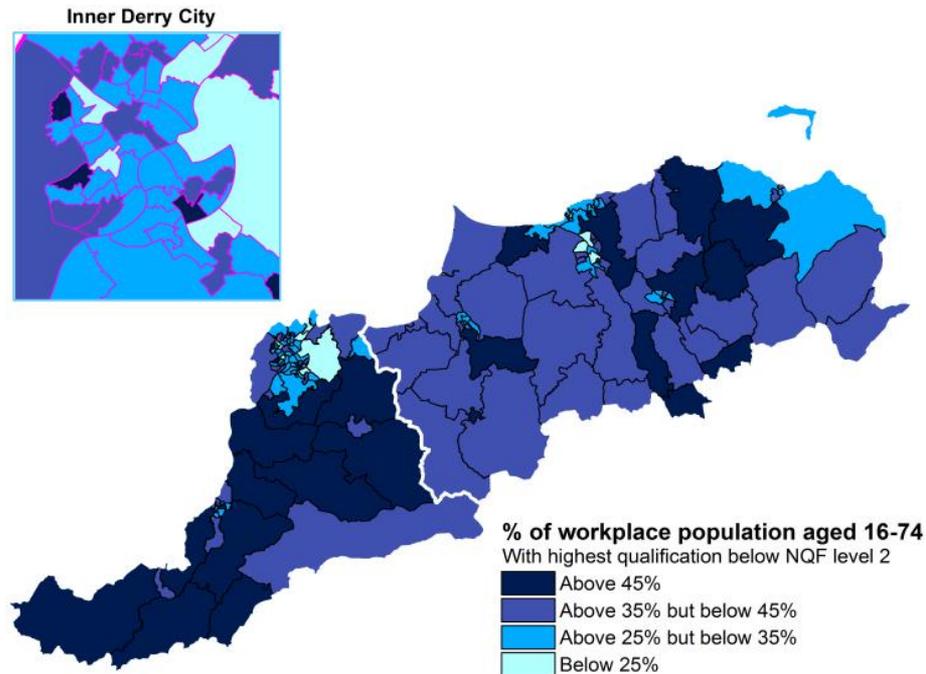
Significant qualification differences between employed and non-employed residents

Resident qualification profile (NQF), employed versus non-employed, North (2016)

Qualification structure (NQF) of non-employed residents, North (2016)

- No qualifications, 30%
- NQF level 4+, 13%
- NQF level 3, 18%
- NQF level 1-2, 40%
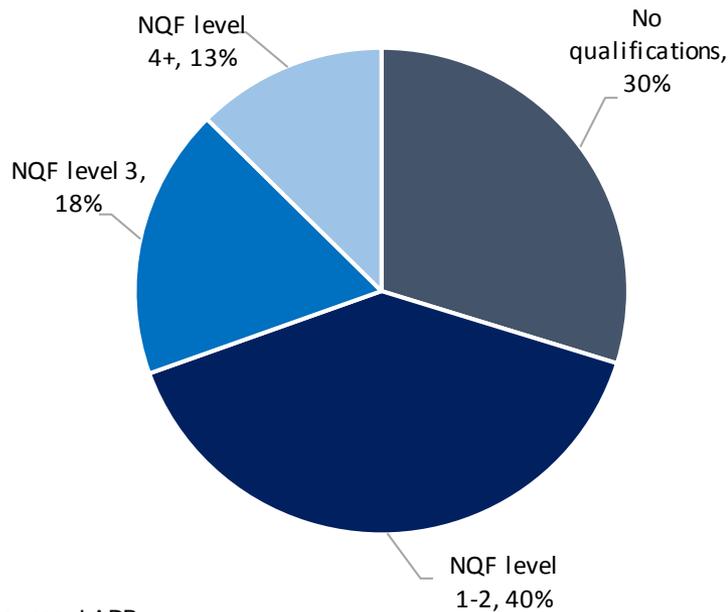
Source: LADB

Percentage point difference in employed versus non-employed resident qualifications (NQF), North (2016)

- NQF level 4+
- NQF level 3
- NQF level 1-2
- No qualifications

Higher concentration in non-employed

Higher concentration in employed

-20% -10% 0% 10% 20%

Percentage point difference non-employed minus employed
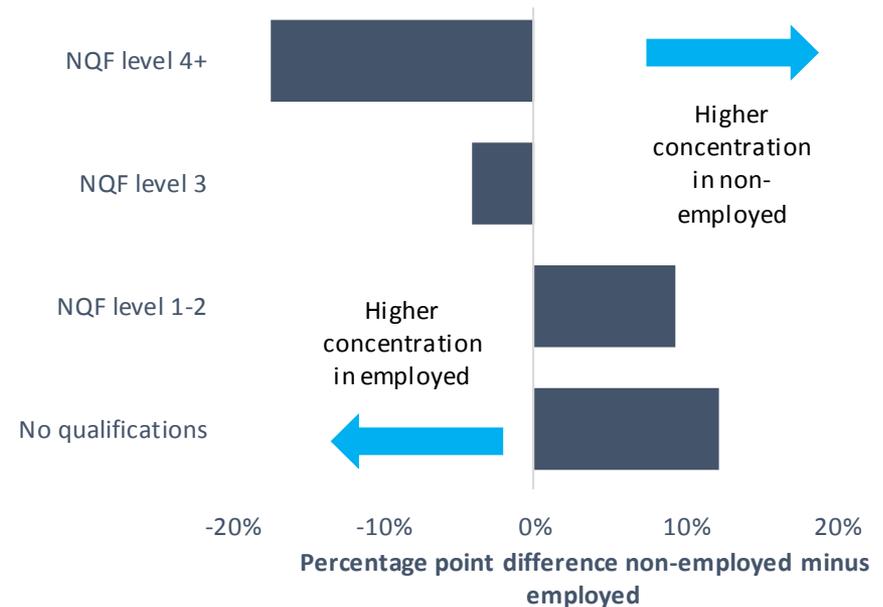
Source: LADB

Note: Non-employed refers to the sum of unemployed and economically inactive

The difference in qualification structure between employed and non-employed emphasises the relationship between skills and employability. For example, 70% of non-employed residents have a qualification level of NQF level 2 or below compared to 48% of employed residents.

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Summary of workplace skills structure

Workplace qualification structure versus NI - The workplace qualification structure in North is below the NI average. Workers with low qualifications (NQF level 1 or below) represent 39% of workplace employment, compared to 36% in NI. Contrastingly 34% of people employed in NI have tertiary level qualifications, compared to 30% in North.

It is important to note the skill structure of North is driven by a higher concentration of low skills in Causeway Coast and Glens workplace - 41% of workers have low qualifications (NQF level 1 or below).

Age profile and qualification structure - The qualification profile of North's workplace varies significantly across age brackets. That is, younger workers tend to have higher levels of qualifications relative to older people aligning to the upward trend in education participation. Amongst the over 50s employed in North's workplace, 53% have low qualifications (NQF level 1 or below), compared to only 31% of those aged 16-24.

As older workers with relatively lower levels of qualifications move into retirement and higher qualified younger workers enter the labour market North's workplace skills profile will naturally improve.

Qualification levels over time - There has been significant improvement in workplace qualification levels over a generation. However, it is important to note that low qualification levels do not always directly translate to an unskilled individual. An individual may have low level qualifications but have significant experience in the labour and so are highly skilled.

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Summary of workplace skills structure (continued)

Resident qualifications versus workplace qualifications - There are significant differences between the level of resident qualifications and workplace qualifications. In North, 22% of residents have achieved a tertiary level qualification (NQF level 4+) compared to 30% employed in North workplace . Contrastingly, 26% of residents have no qualifications compared to 17% employed in North's workplace.

These trends should be considered in the context of employability challenges as a mismatch between residents skills/qualifications and required workplace skills/qualifications can reduce employment opportunities, specifically for those at the bottom of the skills spectrum.

Employed qualifications versus non-employed qualifications - The profile of qualifications amongst the employed relative to the non-employed highlights the relationship between skills and employability.

In North, over two thirds (70%) of non-employed residents have NQF level 2 or below qualifications, compared to 48% of the employed. Contrastingly, 13% of individuals out of work have achieved NQF level 4+ qualifications compared to 30% of the employed.

Therefore policy ambitions to reduce the number of out of work individuals through reintegration to the labour market should consider the need for upskilling.

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Commuting flows

North commuting analysis suggests few commute to and from the region

Commuting incidence by Local Government District (2011)

Resident employment within council as a proportion of total workplace employment (excluding students), LGDs (2011)
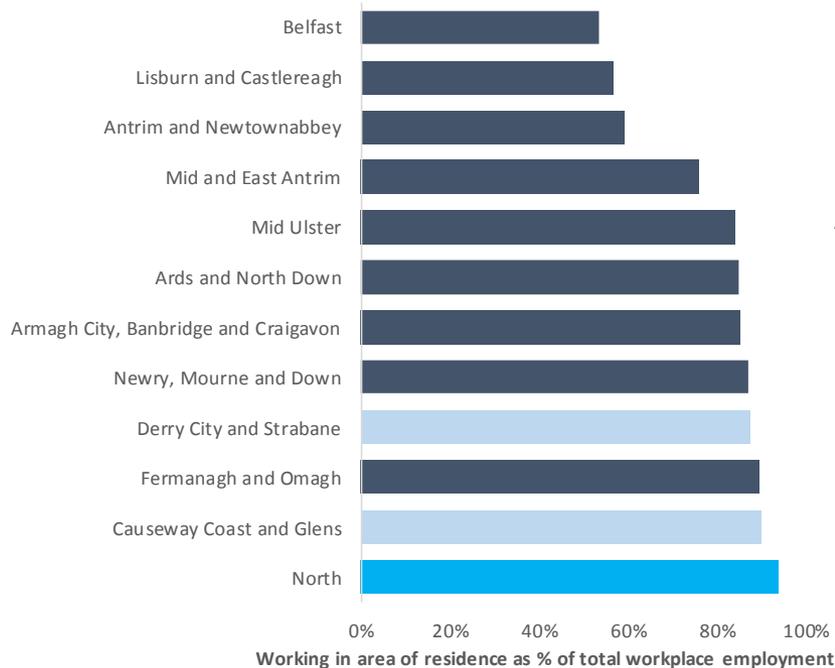
Belfast
Lisburn and Castlereagh
Antrim and Newtownabbey
Mid and East Antrim
Mid Ulster
Ards and North Down
Armagh City, Banbridge and Craigavon
Newry, Mourne and Down
Derry City and Strabane
Fermanagh and Omagh
Causeway Coast and Glens
North

0% 20% 40% 60% 80% 100%

Working in area of residence as % of total workplace employment

Source: NI Census, 2011
Note: Based on those aged 16-74 in employment, excluding students

Resident employment within council as a proportion of total resident employment (excluding students), LGDs (2011)
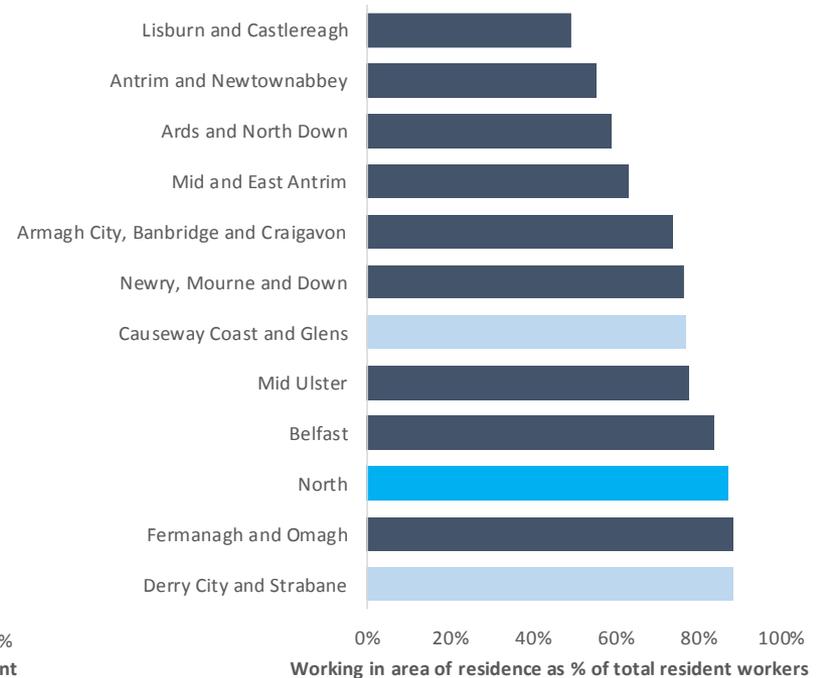
Lisburn and Castlereagh
Antrim and Newtownabbey
Ards and North Down
Mid and East Antrim
Armagh City, Banbridge and Craigavon
Newry, Mourne and Down
Causeway Coast and Glens
Mid Ulster
Belfast
North
Fermanagh and Omagh
Derry City and Strabane

0% 20% 40% 60% 80% 100%

Working in area of residence as % of total resident workers

Source: NI Census, 2011
Note: Based on those aged 16-74 in employment, excluding students

Residents in North account for 94% of the total workplace employment, indicating there are relatively few in-commuters to the region. However, given the proximity to the border there is likely to be some degree of in-commuting not captured within this data. On the other hand North's residents that work within North account for 87% of total resident employment, suggesting 13% of residents commute elsewhere.

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North has a net commuting outflow

Commuting patterns in North (2011)

Commuter outflow (excluding students) by sector (1-digit), North (2011)

Number of out-commuters
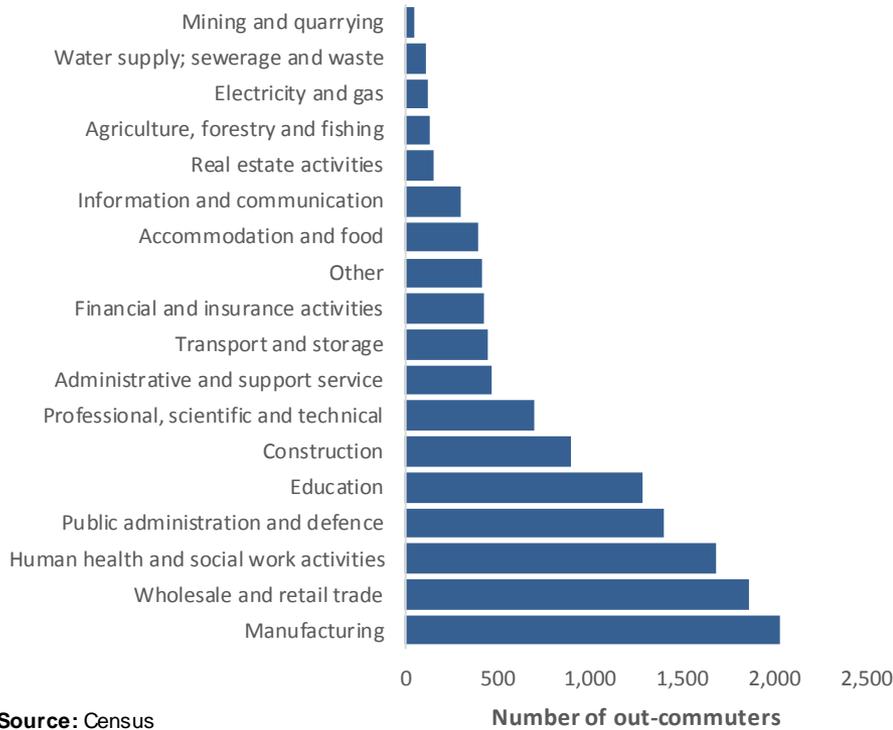
Net commuting flow (excluding students), North versus LGDs (2011)

Net flow of commuters

Source: Census

Source: Census 2011
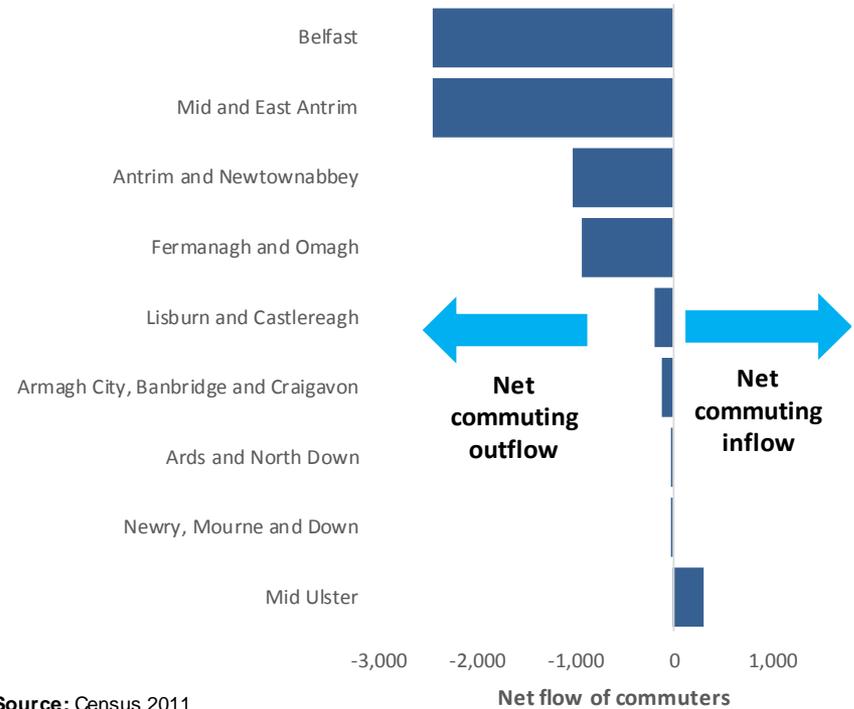
North has a net commuting outflow with eight of the nine LGD's. That is, overall more workers leave North for employment than enter North to work from other LGD's. The largest net outflow is to Belfast followed by Mid and East Antrim. Workers typically commute out of North for jobs manufacturing (2,000), wholesale and retail (1,870) and health and social work (1,690).

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Over two-fifths of out-commuters have degree level or above qualifications

Skill differences between residents and commuters working outside North (2011)

Highest level of qualification of North residents (excluding students) working elsewhere (out-commuters) (2011)

- Level 4 qualifications and above, 44%
- No qualifications, 10%
- Other qualifications, 4%
- Level 1 qualifications, 10%
- Level 2 qualifications, 14%
- Apprenticeship, 4%
- Level 3 qualifications, 15%
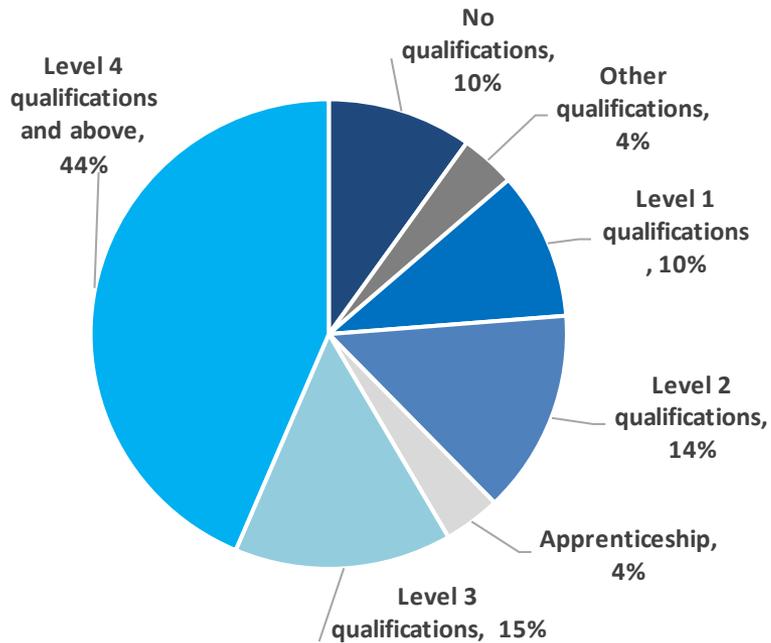
Source: Census 2011

Highest level of qualification of North residents working in North (2011)

- Level 4 qualifications and above, 30%
- No qualifications, 17%
- Other qualifications, 9%
- Level 1 qualifications, 13%
- Level 2 qualifications, 16%
- Level 3 qualifications, 15%
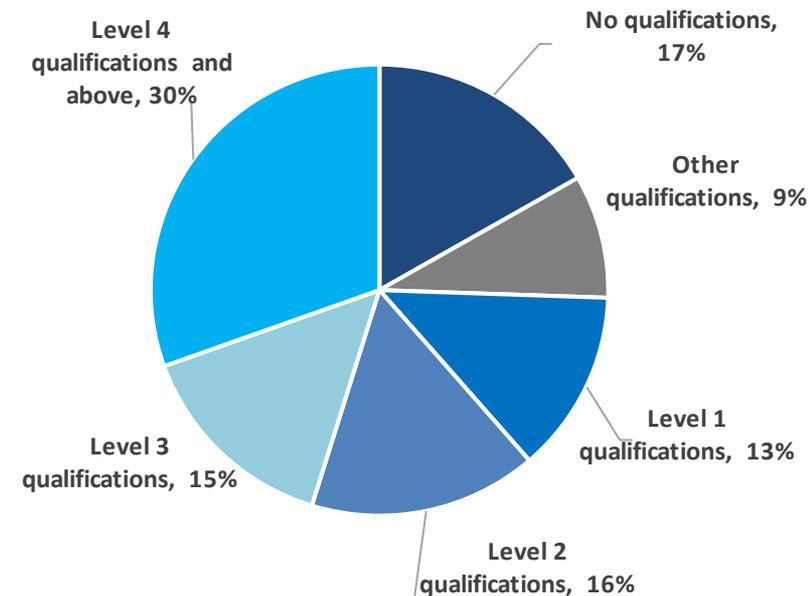
Source: Census 2011

Over two fifths (44%) of out-commuters from North have tertiary level qualifications (NQF level 4+), compared to 30% of employed residents. Likewise, only 24% of out-commuters have NQF level 2 and below qualifications compared to 39% of employed residents. This highlights North exports higher proportion of highly qualified individuals, relative individuals to lower qualified.

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Summary of commuting flows

Commuters - The vast majority (94%) of North's workforce reside within the North region. Approximately only 6% of workers with jobs based in North live in other council areas. The high concentration of residents employed within the region is indicative of the inclusion of Derry City and Strabane LGD, which includes NI's second largest city, providing a significant volume of employment opportunities for residents.

However, the lack of in-commuting to this area from other LGD's may be a concern. The largest net out-flow of workers is to Belfast. As Northern Irelands employment hub Belfast hosts a wide range of employment opportunities across both the private and public sectors, which may not be available in North. It should be noted, given the regions proximity to the border there is likely to be some degree of in-commuting, not captured within this data.

Out-commuters by sector - Commuters are most likely to commute out of North to work in manufacturing (2,030), wholesale and retail (1,870) and health and social work (1,670).

Out-commuters by skill - On average workers commuting out of North have higher levels of qualifications than North residents working in the region. For example, over two-fifths (44%) of North out-commuters have tertiary level qualifications (NQF level 4+), compared to 30% of employed residents. Likewise, only 24% of out-commuters have below NQF level 2 qualifications compared to 39% of employed residents.

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High growth scenario

UUEPC's high growth scenario predicts 12.2k extra jobs – 7.2k above the baseline by 2027

Workforce jobs, high growth versus baseline scenarios, North (2001-2027)
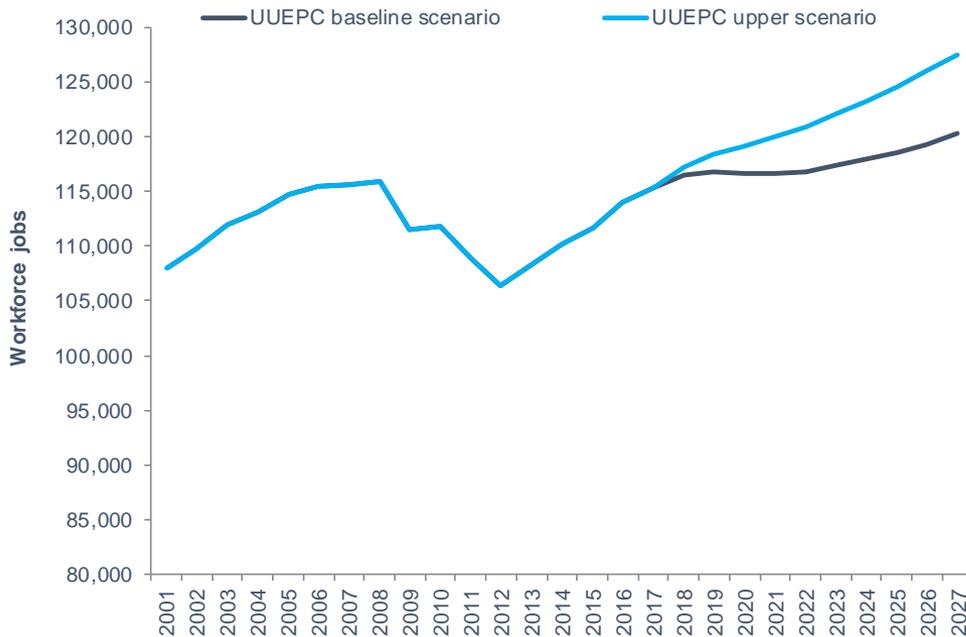
Source: UUEPC

UUEPC's high growth scenario outputs are aligned to NI achieving future policy success aligning to targets set within the Programme for Government (PfG).

At a sub-regional level the high growth scenario outputs are consistent with LGDs general economic ambitions, but not directly linked to specific LGD targets.

The model accounts for three scenarios; baseline; central; and high growth. This report will focus on outputs from the high growth scenario.

UUEPC estimates that under a high growth scenario employment in North has the potential to grow from 115,300 in 2017 to 127,500 in 2027.

Planning for skills in an aspirational nature

It is prudent to plan for skill needs in an aspirational nature based on economic ambitions of an economy. If such ambitions are not met there is a cost to individuals achieving such skills however research suggests this cost is lower than the cost of undersupplying skills.

For example, if businesses are unable to meet their demand for skilled labour the competitiveness of an economy will fall, productive capacity decrease ultimately dampening future job growth.

Likewise, it is important to have in place measures to offset any potential individual costs if policy ambitions are not met leading to an oversupply of skills.

For example, a contingency plan may include conversion courses for redundant workers or training rights for young people unable to secure employment after graduation.

Note: The results for a lower growth baseline scenario are provided in Annex A.

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Professional services and IT jobs forecast to grow most rapidly over the coming decade

Baseline scenario and high growth scenario job growth by sector (1-digit), North (2017-2027)

Industry	Total jobs 2017 baseline	Job growth (absolute terms) 2017-2027		Job growth (compund annual growth rate)	
		Baseline	High growth scenario	High growth scenario 2017-2027	Actual 2012-2017
Agriculture	5,970	-350	-140	-0.2%	-1.3%
Mining	320	+0	+0	0.0%	5.3%
Manufacturing	10,290	+400	+700	0.7%	4.1%
Electricity & gas	240	+50	+80	2.8%	37.2%
Water supply & waste	610	+40	+70	1.0%	2.0%
Construction	7,670	+520	+1,020	1.3%	1.2%
Wholesale & retail	19,500	+560	+750	0.4%	0.2%
Transport & storage	3,240	+270	+400	1.2%	0.8%
Restaurants and hotels	8,640	+1,130	+1,880	2.0%	4.7%
Information & communication	2,470	+480	+1,450	4.7%	1.6%
Finance & insurance	1,810	+30	+500	2.5%	-1.6%
Real estate	750	+40	+100	1.2%	-6.4%
Professional scientific & technical	3,070	+470	+1,540	4.2%	1.6%
Administrative & support services	5,900	+990	+1,340	2.1%	3.4%
Public admin & defence	6,450	-320	+130	0.2%	-2.2%
Education	11,290	-20	+230	0.2%	-0.1%
Health & social work	20,600	+440	+1,460	0.7%	2.7%
Arts & entertainment	3,290	+240	+570	1.6%	5.3%
Other service activities	3,190	+20	+170	0.5%	9.1%
Total	**115,290**	**+5,000**	**+12,250**	**1.0%**	**1.6%**

Source: UUEPC

Note: Figures may not sum to total due to rounding

Relative to the baseline, the additional 7,250 jobs are primarily generated within the following sectors; professional scientific and technical (1,070 jobs above baseline); health and social work (1,020 jobs above baseline); and information and communication (970 jobs above baseline).

The sectors expected to contribute the largest increase in jobs in absolute terms over the period 2017-2027 are: restaurants and hotels (1,880); professional scientific and technical (1,540); and health and social work (1,460).

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Large employment sectors expected to grow moderately in coming decade

Workforce job growth by sector (1-digit) and number of jobs (workplace based), North (2017-2027)
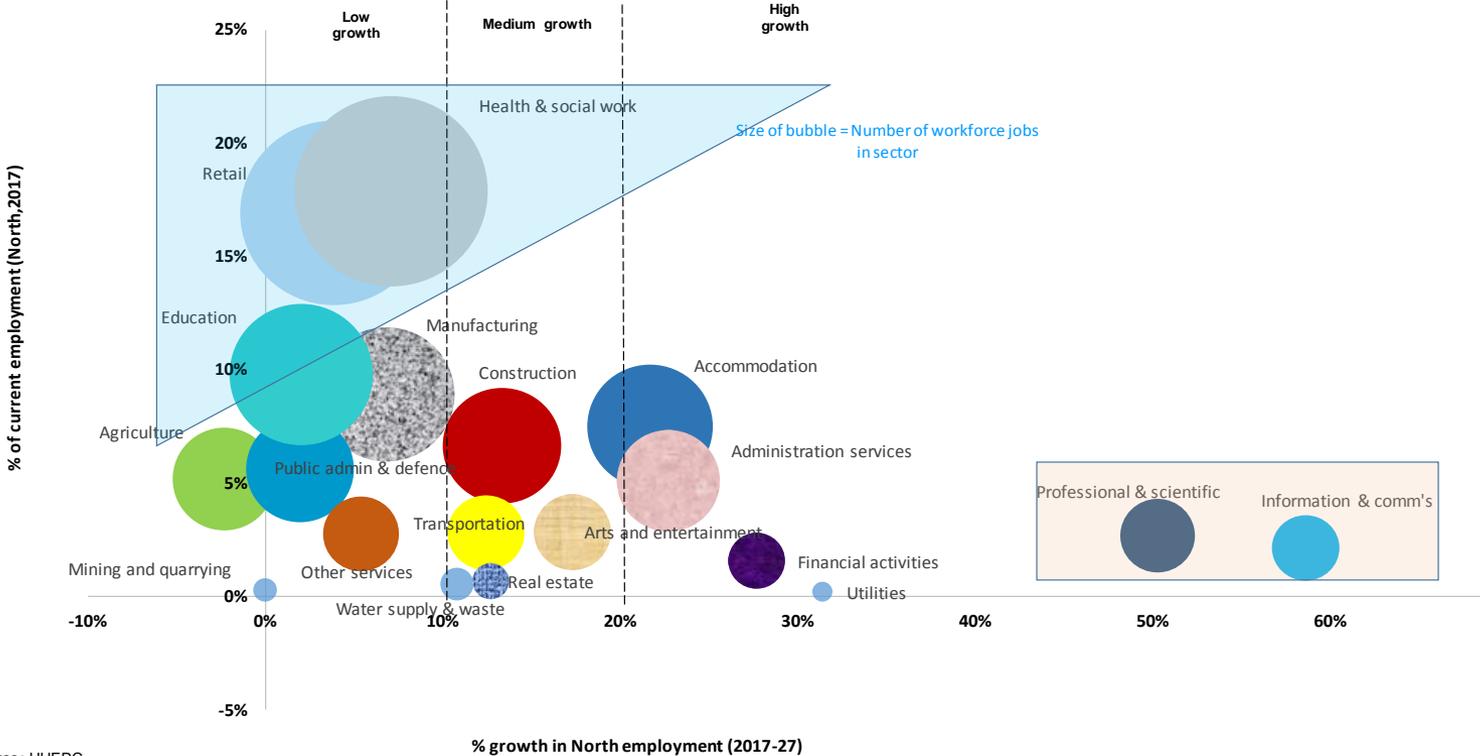
Source: UUEPC

Note: Triangle highlights largest sectors. Square highlights fastest growing sectors in NI high growth scenario

Large employment sectors due to have low growth over coming decade; wholesale and retail (4%) and health and social work (7%). However, given the large scale of such sectors slow growth rates will still constitute significant job numbers, 750 and 1,460 respectively.

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The largest growth is forecast in scientific and technological professionals

Employment growth (people based) by occupation (2 digit), North (2017-2027)
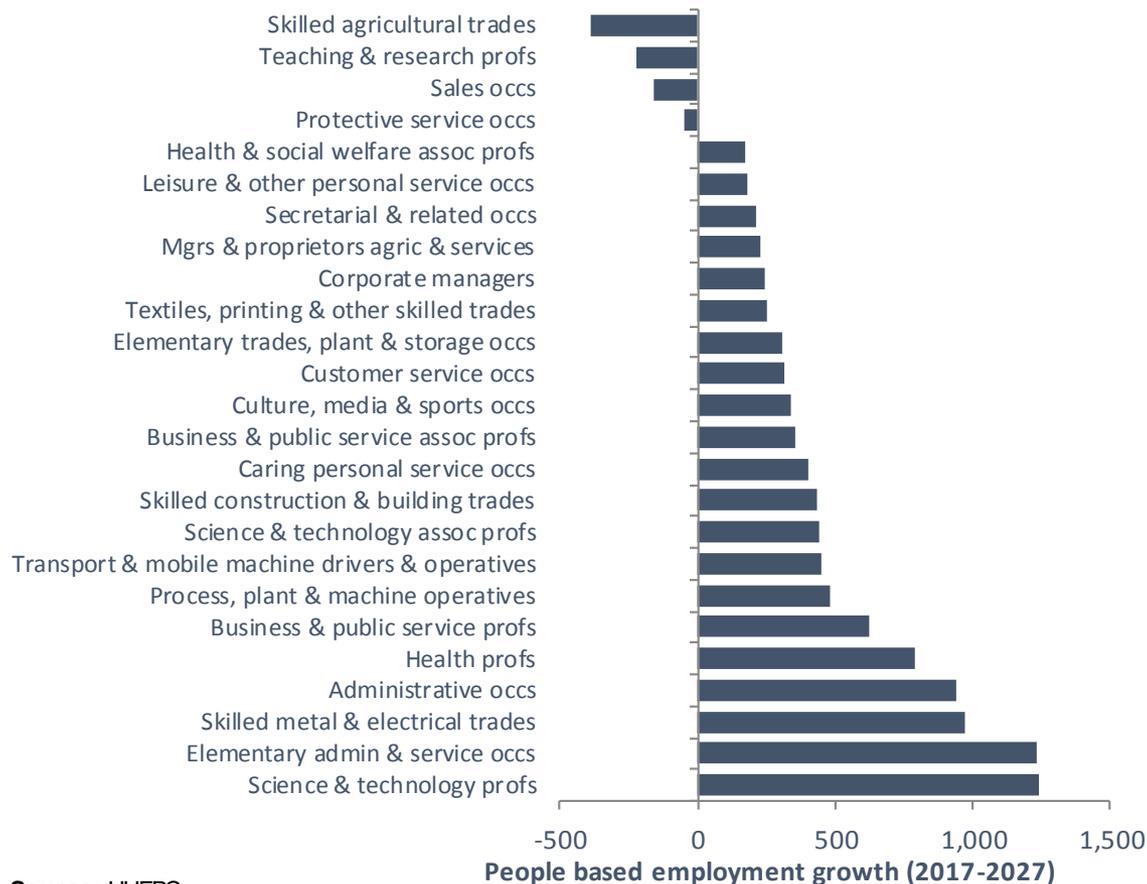
Source: UUEPC

Occupations accounting for the largest absolute growth over the coming decade are science and technology professionals (1,200) elementary administration and service occupations (1,200) and skilled metal and electrical trades (1,000).

IT and telecommunications professionals set to be the largest contributor to job growth

Employment growth (people based) by occupation (3 digit), North (2017-2027)

Source: UUEPC

A granular analysis of occupation growth highlights specific areas of expected growth. At a detailed level IT and telecommunications professionals are expected to see the highest amount of absolute growth (1,000) over the coming decade, followed by other elementary service occupations (800) and nursing and midwifery professionals (500).

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Summary of UUEPC's high growth scenario

High growth scenario - UUEPC's high growth scenario is aligned (but not directly linked) to the general economic ambitions of LGDs, forecasting 12,200 additional jobs over the period 2017-2027. That is, 2.4 times as many jobs forecast in the baseline scenario.

Sector growth over coming decade - The fastest growing sectors are expected to be IT (4.7%) and professional services (4.2%) over the period 2017-2027.

In absolute terms the largest growth is expected to be in restaurants and hotels (1,880) and professional scientific and technical (1,540).

Large employment sectors in absolute terms such as health and social and wholesale and retail are set to grow slowly over coming decade, but will contribute significant job numbers due to their scale.

Occupation growth over coming decade - The occupation forecast to account for the largest absolute growth over the period 2017-2027 is science and technology professionals (1,200) followed by elementary administration and service occupations (1,200) and skilled metal and electrical trades (1,000).

At a more granular level the occupations (3-digit) expected to grow most rapidly in absolute terms are IT and telecommunications professionals (1,000), other elementary services occupations (800) and nursing and midwifery professionals (500). Occupation growth is linked to the forecast sectoral structure of North.

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Demand side – Sectors and occupations

Demand side concepts

Expansion demand is the additional jobs created due to growth in a sector.

Replacement demand refers to the number of positions which become available as a result of staff leaving employment (typically due to retirement, family reasons, ill health or to move to another sector).

Net replacement demand is the difference between all leavers from employment – to retirement, inactivity, unemployment, other occupations and out migration - and joiners to employment – from unemployment, inactivity (excluding education leavers) and other occupations.

Net requirement from education and migration indicates the number of vacancies that can not be filled from within the existing labour market and therefore must be met from those leaving education and/ or from migration. The annual average net requirement does not include the positions to be filled by labour market participants from other sectors, from unemployment or from economic inactivity.

Annual average gross demand in simple terms, refers to all vacancies to be filled in a year. It is the total expansion and replacement demand for staff per annum and the jobs are filled by those currently working in the labour market, those currently out of work and also those from education and migration.

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Net requirement from education and migration

The figure of most interest is the **net requirement from education and migration** (net replacement demand plus expansion demand). This measures the quantum of vacancies for education leavers and migrants.

It takes account of 'churn' in the labour market. Skills demand associated with replacement demand is dependent largely on the existing stock and skill needs of current jobs. It can be compared directly to education outputs and the level of migrant inflows and is therefore useful for skills and wider workforce planning.

The focus on vacancies for education leavers and migrants should not be interpreted to mean that job opportunities for those out of work are ignored. Rather it is the case that joiners from unemployment and inactivity are already factored into replacement demand assumptions, and will essentially compete with education leavers and migrants for total arising vacancies.

The expansion demand (net change in the stock of jobs) is often more widely understood as a driver of future demand, it remains the case that, future skills and employability demand will still be significantly determined by net replacement demand.

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# Health and social work forecast to remain the largest employment sector

Employment (people based) by sector (1-digit), North (2017-2027)

Employment (people based) by sector (1-digit), North (2017 versus 2027)

■ 2027 ■ 2017

People employed by households
Mining
Elect' & gas
Water supply & waste
Real estate
Finance & insurance
Other service activities
Arts & entertainment
Transport & storage
Information & communication
Professional scientific & technical
Agriculture
Public admin & defence
Admin' & support services
Construction
Restaurants and hotels
Education
Manufacturing
Wholesale & retail
Health & social work

People based employment

Source: UUEPC

Employment (people based) growth by sector (1-digit), North (2017-2027)

Agriculture
Education
Mining
People employed by households
Water supply & waste
Elect' & gas
Real estate
Public admin & defence
Other service activities
Wholesale & retail
Transport & storage
Arts & entertainment
Finance & insurance
Manufacturing
Health & social work
Construction
Admin' & support services
Information & communication
Professional scientific & technical
Restaurants and hotels

People based employment growth (2017-2027)

Source: UUEPC

Labour market flows determine skills demand

Components of net requirement from education and migration, North (2017-2027)

| Leavers to death 310 | Leavers to retirement 1,390 | Leavers to migration 1,610 | Leavers to unemployment/ training schemes 2,110 | Leavers to inactivity (excl. retirement) 1,300 | Leavers to other occupations 2,540 |

Total leavers 9,250

Joiners from unemployment/ training schemes 2,490

Expansion demand 790 → Net requirement from education and migration 3,240 ← Total joiners 6,800

Joiners from inactivity (excl. students 1,870

Joiners from other occupations 2,450

Source: UUEPC
Note: Figures may not sum due to rounding

Expansion demand and replacement demand, North (2017-2027)

Demand category	2012-2017 (annual)	2017-2027 (annual)
(A) Gross demand	9,500	10,040
(B) Expansion demand	390	790
(C) Replacement demand	9,110	9,250
(D) Filled from within the existing labour market	6,790	6,800
(E) Net replacement demand	2,320	2,450
(F) Net requirement from education and migration	**2,710**	**3,240**

Source: UUEPC
Relationship between rows: A=B+C, E=C-D, F=E+B

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A High proportion of job opportunities filled from within the existing labour market across sectors

Average annual gross demand by sector (1-digit), North (2017-2027)

Legend:
- ■ Net requirement
- ■ Filled within the existing labour market

Y-axis (sectors, top to bottom): Elect' & gas, Mining, Water supply & waste, Real estate, Finance & insurance, Transport & storage, Other service activities, Arts & entertainment, Information & communication, Public admin & defence, Agriculture, Professional scientific & technical, Construction, Education, Admin' & support services, Manufacturing, Restaurants and hotels, Health & social work, Wholesale & retail

X-axis: Number of people demanded (0, 200, 400, 600, 800, 1,000, 1,200, 1,400, 1,600)

Gross demand highlights a significant number of total job opportunities are filled from recruitment within the existing labour market (i.e. employed or unemployed). For example, in education 78% of total job opportunities are expected to be filled by individuals already within the existing labour market and 22% filled by education leavers or migrants.

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Sectors do not have to be growing fast to create a plentiful supply of opportunities

Average annual net requirement from education and migration by sector (1-digit), North (2017-2027)
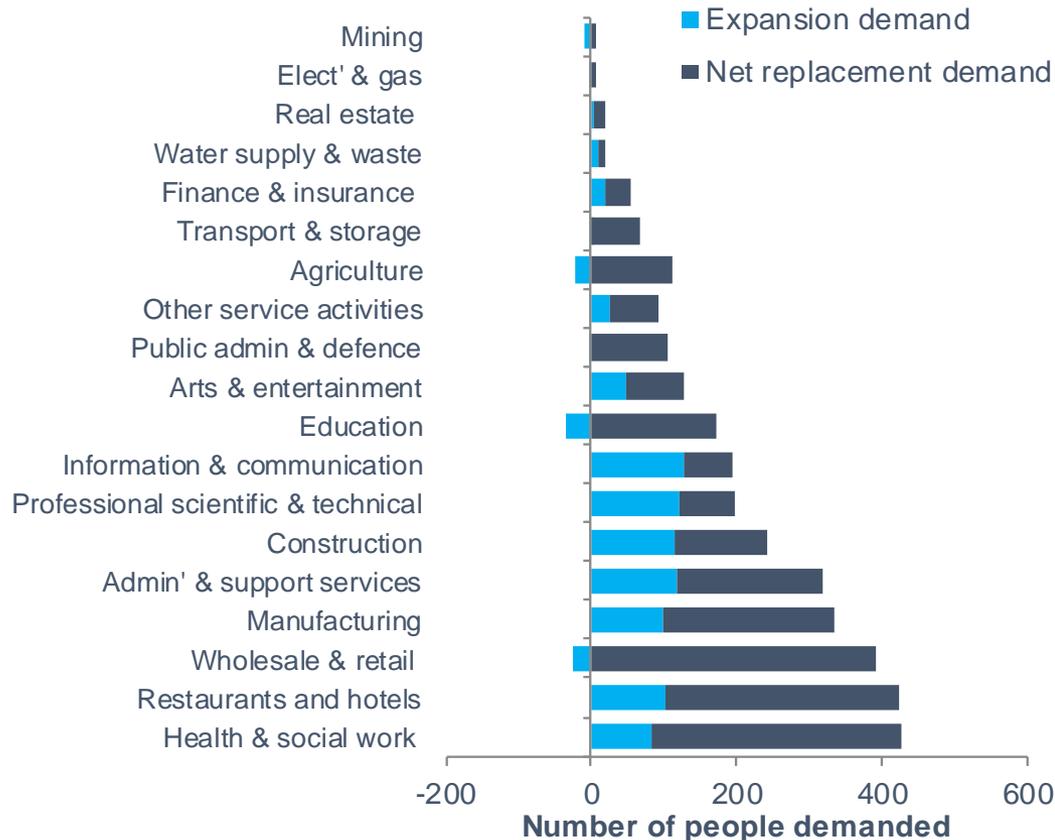
Source: UUEPC

The composition of expansion demand and replacement demand within a sector depends upon the sectoral nature. For example, expansion demand is likely to account for the majority of net requirement in a sector with projected high growth rates i.e. professional and scientific. Whereas replacement demand is likely to account for the majority of net requirement in a sector with high entry/exit rates.

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Food and beverage activities constitute highest labour demand

Average annual net requirement from education and migration by sector (top 15 2-digit), North (2017-2027)

Legend: ■ Expansion demand ■ Net replacement demand

X-axis: Number of people demanded (-100 to 300)

Sectors (top to bottom):
- Crop and animal production, hunting and related service activities
- Specialised construction activities
- Human health activities
- Travel agency, tour operator and other reservation service and related activities
- Manufacture of food products
- Publishing activities
- Wholesale trade, except of motor vehicles and motorcycles
- Information service activities
- Social work activities without accommodation
- Education
- Residential care activities
- Retail trade, except of motor vehicles and motorcycles
- Wholesale and retail trade and repair of motor vehicles and motorcycles
- Public administration and defence; compulsory social security
- Food and beverage service activities

Source: UUEPC

A more granular analysis of labour demand highlights the top 15 detailed sectors (2-digit) account for 72% of total net requirement. The largest net requirement is in food and beverage service activities (9% of total net requirement) followed by public administration and defence (7%).

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Occupation demand is a function of sector growth (expansion) and scale (replacement)

Average annual net requirement from education and migration by occupation (2-digit), North (2017-2027)

Source: UUEPC
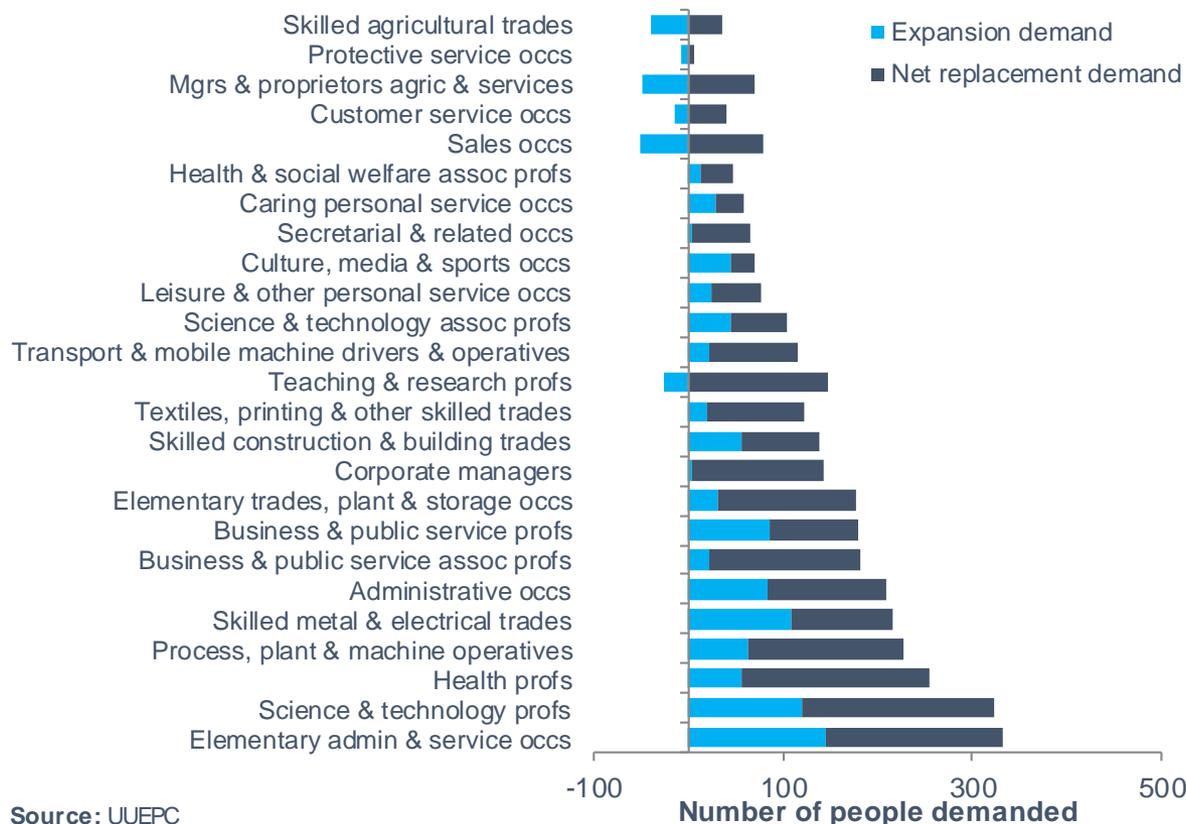
Occupations that are expected to provide the most job opportunities in the coming decade are elementary administration and service occupations (10% of total net requirement), science and technology professionals (10%) and health professionals (8%).

Other elementary services occupations expected to demand the largest net requirement

Average annual net requirement from education and migration by occupation (top 15 3-digit), North (2017-2027)

Source: UUEPC

At a more detailed level the occupations (3-digit) expected to be in 'high demand' over the coming decade are other elementary service occupations (7% of the net requirement), IT and telecommunications professionals (7%) and nursing and midwifery professionals (4%).

Summary of demand side sectors and occupations

Demand side concepts - It is important to fully understand each of the demand side concepts and recognise how they interact with one another.

Labour market flows and skills demand - The largest component of labour demand comes from replacing workers who have created a vacancy by leaving their position (for retirement, sickness, moving to another job etc.). However, most of these vacancies will be taken by people already within the labour market (e.g. job movers, individuals moving from unemployment to employment).

This replacement demand under a high growth scenario is expected to be 9,250 per annum over the next decade in North, compared to expansion demand of 790 per annum.

Vacancies not filled by labour market participants must be filled by either leavers from the education system or migrants. In North the average annual individuals required from education and migration is 3,240 over the 2017-2027 period.

Gross demand by sector - The sector expected to require the largest gross demand over the 2017-2027 period is wholesale and retail (15% of total gross demand) followed by health and social work (14%) and restaurants and hotels (13%).

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Summary of demand side sectors and occupations (continued)

Net requirement by sector - In high growth sectors expansion demand accounts for a more significant proportion of overall labour demand. For example, the IT and communication sector is relatively small in scale but is forecast to experience rapid growth. Therefore expansion demand accounts for 66% of net requirement and replacement demand the remaining 34%.

In other sectors a sizeable amount of labour demand is driven by replacement demand rather than expansion of the sector. For example, health and social work is relatively large in scale where over four fifths of labour demand comes from vacancies created by workers who leave their jobs and under one-fifth from expansion demand.

Net requirement by occupation - The occupations forecast to provide the most job opportunities for education leavers and migrants are elementary administration and service activities (10% of total net requirement), science and technology professionals (10%) and health professionals (8%).

At a more granular level the top 15 occupations (3-digit) account for 54% of the total net requirement. The largest net requirement in detailed occupations is expected in other elementary service occupations (7% of net requirement), IT and telecommunication professionals (7%) and nursing and midwifery professionals (4%).

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Demand side - Qualifications

Demand for graduates in North's marginally below the NI average

Average annual net requirement by qualification (NQF), North (2017-2027)

29% of the net requirement require degree level qualifications

Total = 3,230 p.a.

Only 11% of the net requirement will require qualifications below NQF level 2
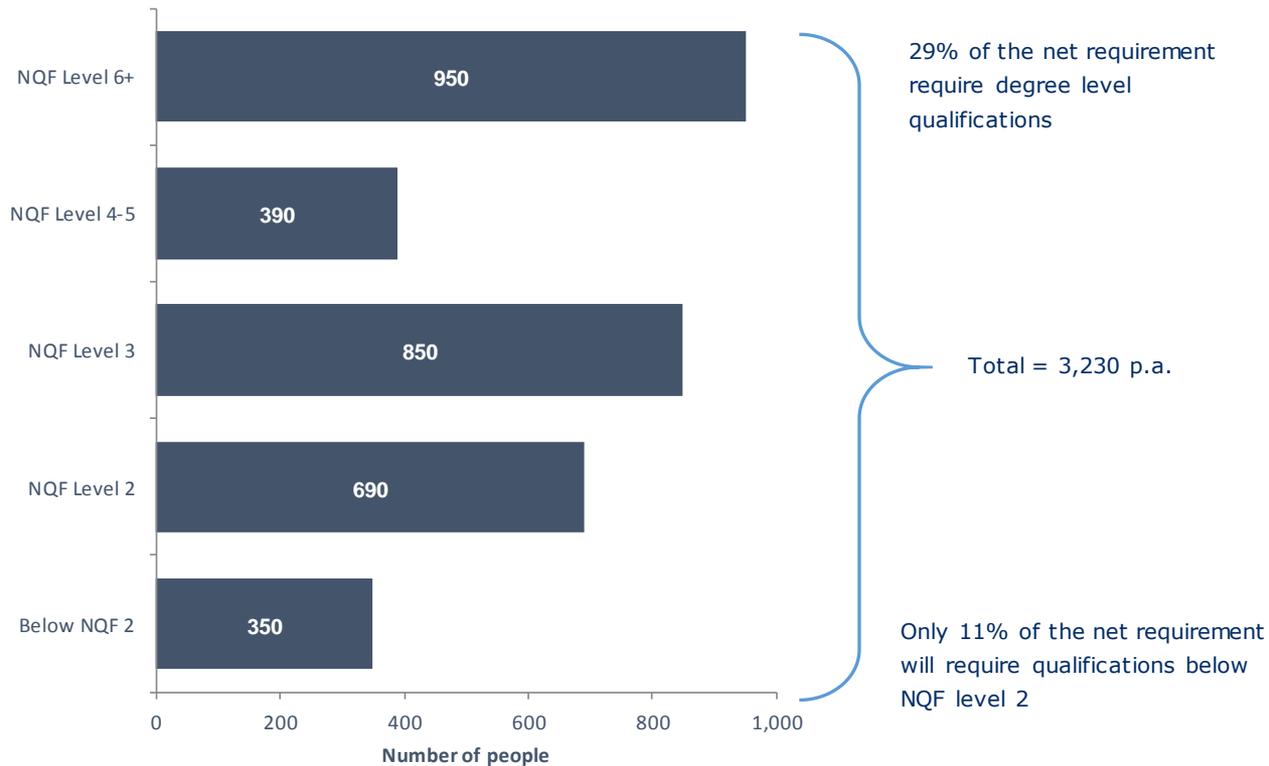
Source: UUEPC

UUEPC's skills model estimates the net requirement by highest NQF level. North is expected to require 950 graduates per annum over the next decade, accounting for 29% of the net requirement. However, it should be noted skills and qualifications are not the same. For example, labour may be highly skilled but have low levels of formal qualifications (particularly older workers) and vice versa.

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The profile of demand is more graduate intensive than the current stock of skills

Average annual net requirement by qualification (NQF) versus current workforce qualification (NQF) profile, North (2017-2027)

Average annual net requirement by qualification (NQF), North (2017-2027)

- Below NQF 2, 11%
- NQF Level 2, 21%
- NQF Level 3, 26%
- NQF Level 4-5, 12%
- NQF Level 6+, 29%
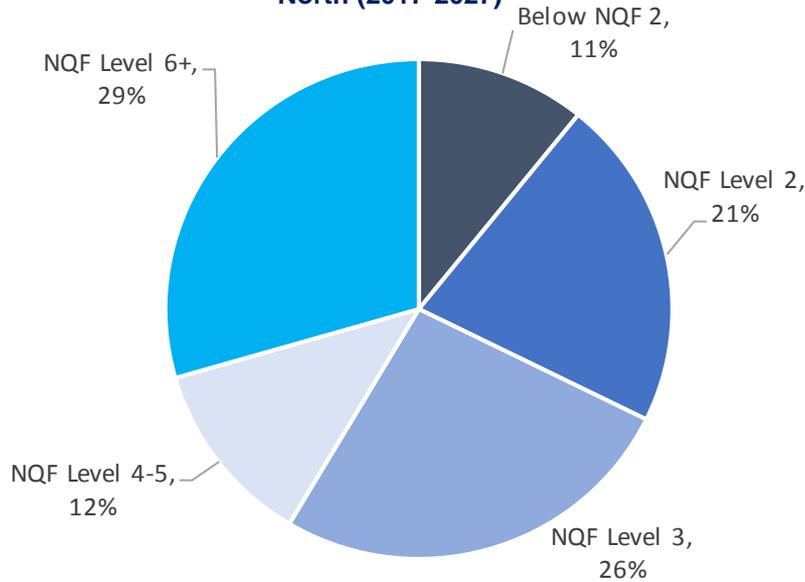
Source: UUEPC

Qualification profile of employed, North (2016)

- Below NQF 2, 25%
- NQF Level 2, 17%
- NQF Level 3, 23%
- NQF Level 4-5, 14%
- NQF Level 6+, 22%
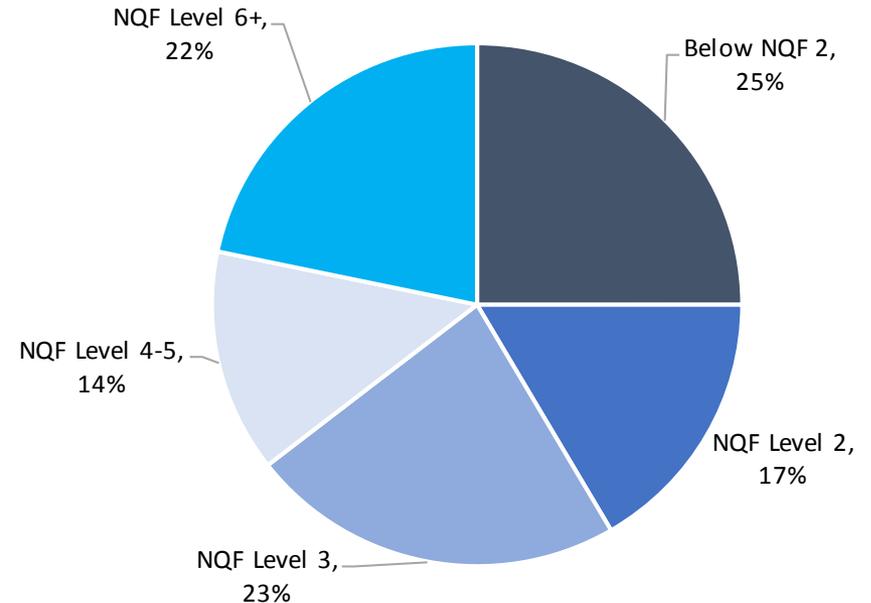
Source: UUEPC

Increasing HE participation levels and employers attitudes towards qualifications has influenced the higher weighting towards degree level qualifications in the workplace, squeezing out the lower qualified. For example, one quarter (25%) of the employed hold a qualification below NQF level 2, future demand is forecast to require only 11% of workers with qualifications below NQF level 2. This implies the current qualification profile of the employed does not match future skill needs.

Health and social work and ICT sectors account for almost one third of graduate demand

Average annual net requirement for NQF level 6+ by sector, North (2017-2027)

Average annual net requirement for NQF level 6+ by sector (1-digit), North (2017-2027)
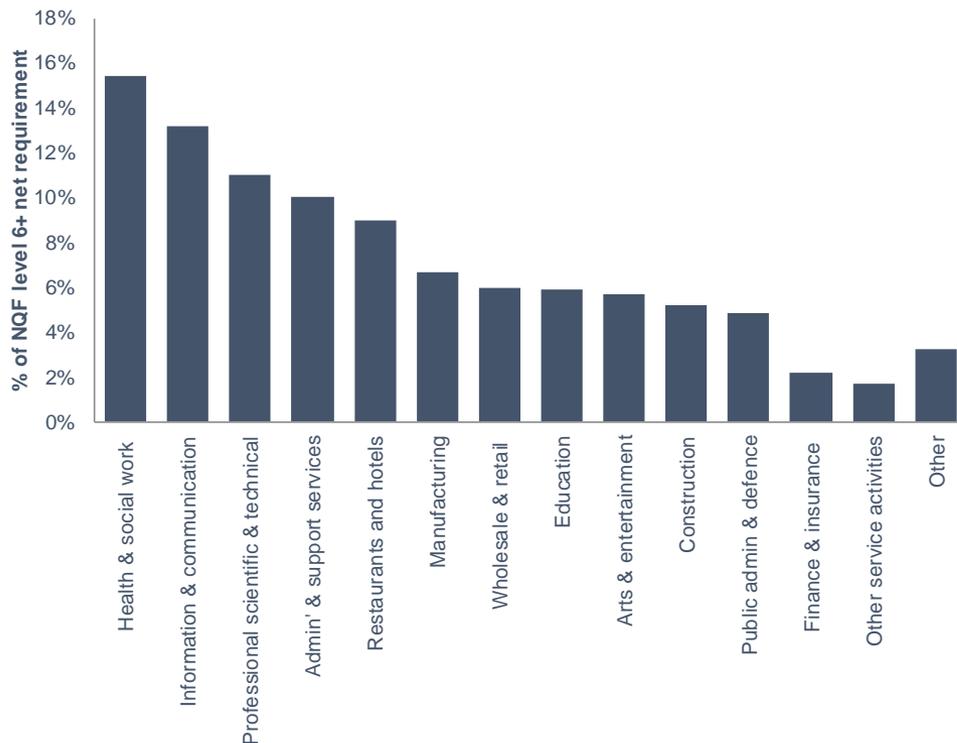
Source: UUEPC

Average annual net requirement for NQF level 6+ by sector (2-digit top 15), North (2017-2027)

2 digit SIC	% of NQF level 6+ net requirement
Computer programming, consultancy and related activities	8.6%
Human health activities	8.4%
Food and beverage service activities	7.3%
Residential care activities	7.1%
Education	6.0%
Office administrative, office support and other business support activities	5.7%
Public administration and defence; compulsory social security	4.9%
Wholesale trade, except of motor vehicles and motorcycles	4.3%
Civil engineering	3.5%
Architectural and engineering activities; technical testing and analysis	2.7%
Travel agency, tour operator and other reservation service and related activities	2.7%
Publishing activities	2.7%
Legal and accounting activities	2.5%
Creative, arts and entertainment activities	2.5%
Scientific research and development	2.5%

Source: UUEPC

The proportion of graduates required from education and migration varies across sectors. For example, in the ICT sector 64% of the net requirement is forecast to require at least an undergraduate level degree, compared to 34% in health and social work professionals.

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Science and technology professionals comprise one fifth of graduate demand

Average annual net requirement for NQF level 6+ by occupation, North (2017-2027)

Average annual net requirement for NQF level 6+ by occupation (2-digit), North (2017-2027)
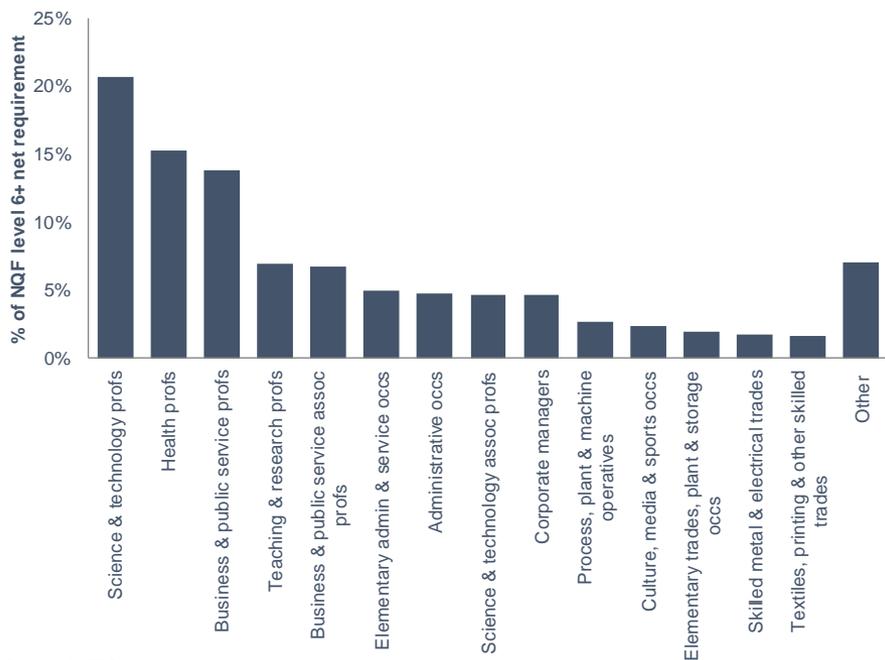
Source: UUEPC

Average annual net requirement for NQF level 6+ by occupation (top 15 3-digit), North (2017-2027)

3 digit SOC	% of NQF level 6+ net requirement
Information technology and telecommunications professionals	14.6%
Nursing and midwifery professionals	8.7%
Teaching and educational professionals	7.0%
Business, research and administrative professionals	5.7%
Health professionals	5.0%
Sales, marketing and related associate professionals	4.1%
Other elementary services occupations	3.5%
Natural and social science professionals	2.6%
Engineering professionals	2.6%
Architects, town planners and surveyors	2.5%
Information technology technicians	2.2%
Quality and regulatory professionals	2.1%
Managers and directors in retail and wholesale	2.0%
Science, engineering and production technicians	1.9%
Legal professionals	1.6%

Source: UUEPC

The occupation profile of the net requirement is driven by North's sectoral structure. The occupations which account for the highest proportion of NQF level 6+ net requirement are science and technology professionals (21% of net requirement), health professionals (15%) and business and public service professionals (14%).

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Health and social work sector requires one quarter of sub-degree qualifiers demanded

Average annual net requirement for NQF level 4-5 by sector, North (2017-2027)

Average annual net requirement for NQF level 4-5 by sector (1-digit), North (2017-2027)

Source: UUEPC
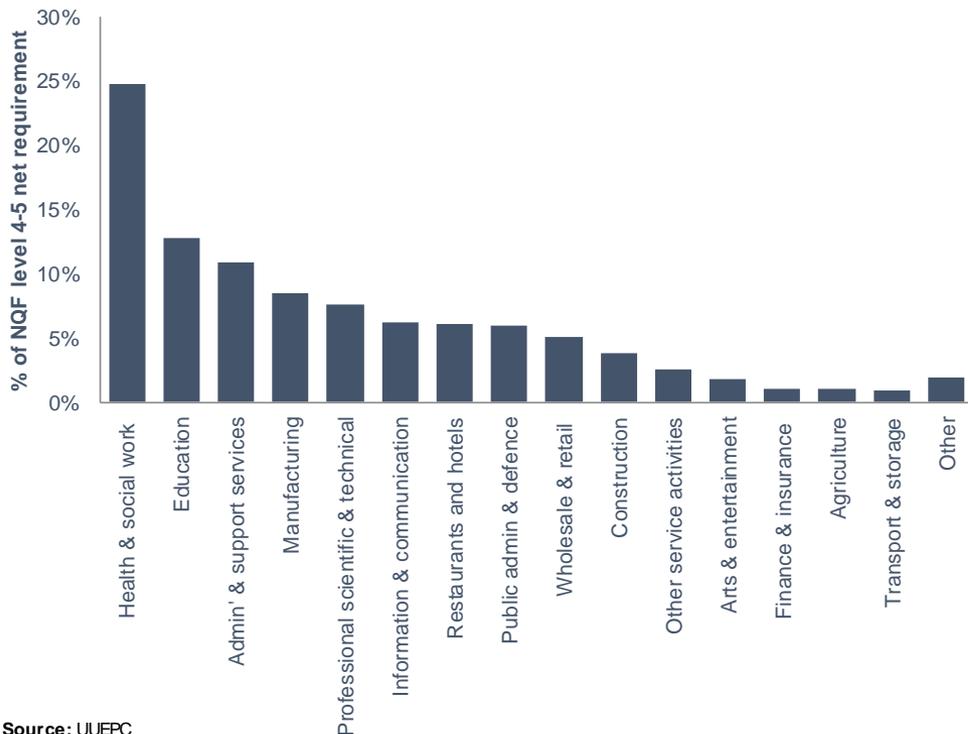
Average annual net requirement for NQF level 4-5 by sector (top 15 2-digit), North (2017-2027)

2 digit SIC	% of NQF level 4-5 net requirement
Human health activities	15.0%
Education	12.7%
Residential care activities	9.6%
Public administration and defence; compulsory social security	6.0%
Office administrative, office support and other business support activities	4.9%
Food and beverage service activities	4.1%
Wholesale trade, except of motor vehicles and motorcycles	3.8%
Legal and accounting activities	3.5%
Travel agency, tour operator and other reservation service and related activities	3.4%
Computer programming, consultancy and related activities	3.2%
Civil engineering	2.5%
Manufacture of food products	2.5%
Accommodation	1.9%
Publishing activities	1.9%
Manufacture of electrical equipment	1.8%

Source: UUEPC

The industry mix of NQF level 4-5 demand is similar to NQF level 6+. The sectors accounting for the largest proportion of NQF level 4-5 net requirement are health and social work (25%), education (13%) and administration and support services (11%).

Health professionals require the highest proportion of sub-degree qualifiers demanded

Average annual net requirement for NQF level 4-5 by occupation, North (2017-2027)

Average annual net requirement for NQF level 4-5 by occupation (2-digit), North (2017-2027)
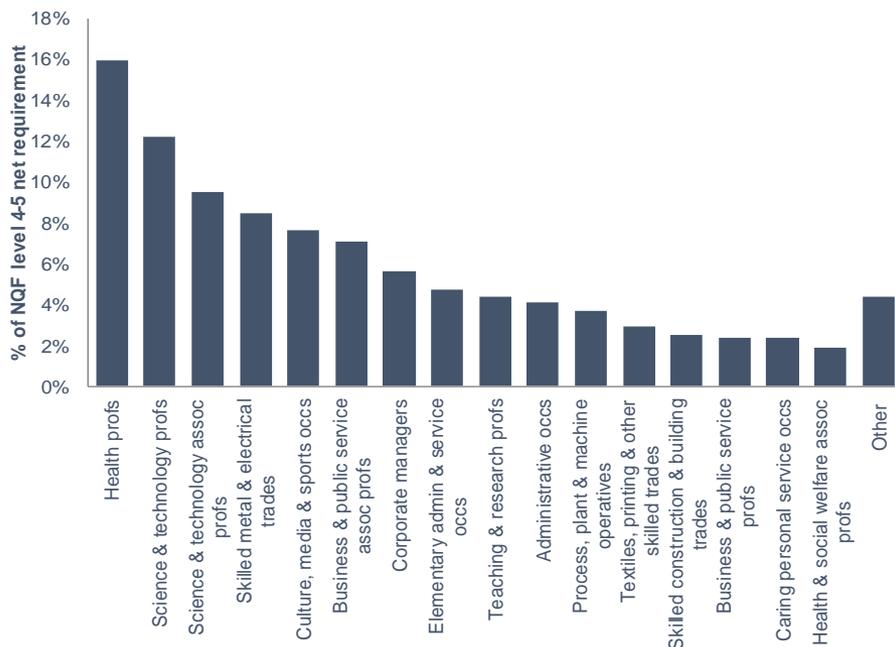
Source: UUEPC

Average annual net requirement for NQF level 4-5 by occupation (top 15 3-digit), North (2017-2027)

3 digit SOC	% of NQF level 4-5 net requirement
Nursing and midwifery professionals	9.1%
Information technology and telecommunications professionals	8.6%
Health professionals	5.2%
Information technology technicians	4.5%
Teaching and educational professionals	4.4%
Sales, marketing and related associate professionals	4.3%
Science, engineering and production technicians	3.9%
Artistic, literary and media occupations	3.6%
Other elementary services occupations	3.4%
Metal machining, fitting and instrument making trades	3.1%
Food preparation and hospitality trades	2.8%
Managers and directors in retail and wholesale	2.4%
Design occupations	2.1%
Construction and building trades	2.0%
Sports and fitness occupations	2.0%

Source: UUEPC

The occupations which account for the largest proportion of the future NQF level 4-5 net requirement are health professionals (16%), science and technology professionals (12%) and science and technology associate professionals (10%).

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Wholesale and retail demands the highest proportion of below NQF level 3 qualifiers

Average annual net requirement for below NQF level 3 by sector, North (2017-2027)

Average annual net requirement for below NQF level 3 by sector (1-digit), North (2017-2027)
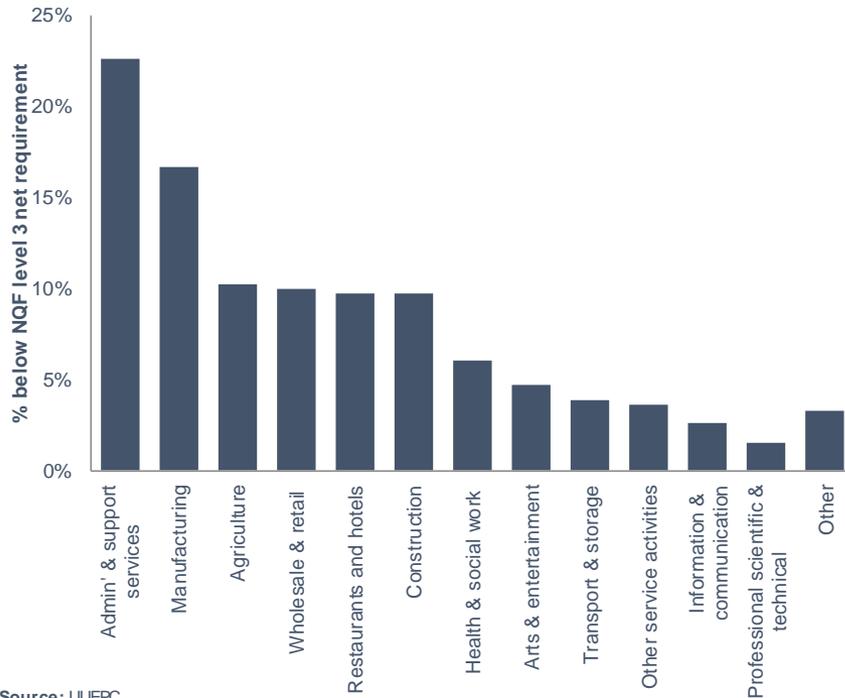
Source: UUEPC

Average annual net requirement for below NQF level 3 by sector (top 15 2-digit), North (2017-2027)

2 digit SIC	% below NQF level 3 net requirement
Office administrative, office support and other business support activities	11.7%
Food and beverage service activities	8.5%
Manufacture of food products	6.7%
Wholesale and retail trade and repair of motor vehicles and motorcycles	6.2%
Crop and animal production, hunting and related service activities	5.7%
Specialised construction activities	5.2%
Travel agency, tour operator and other reservation service and related activities	5.0%
Wholesale trade, except of motor vehicles and motorcycles	4.0%
Land transport and transport via pipelines	3.9%
Civil engineering	3.4%
Residential care activities	3.2%
Manufacture of electrical equipment	3.1%
Manufacture of computer, electronic and optical products	2.5%
Human health activities	2.1%
Sports activities and amusement and recreation activities	1.8%

Source: UUEPC

The industry profile of the net requirement at below NQF level 3 varies significantly relative to tertiary level qualifications. The largest proportion of the net requirement is within the administration and support industry (23%) followed by manufacturing (17%) and agriculture (10%). Due to graduate intensity within high growth sectors it is important that job opportunities are available across the skills spectrum.

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Elementary admin and service occupations account for the largest proportion of below NQF level 3 demand

Average annual net requirement for below NQF level 3 by occupation, North (2017-2027)

Average annual net requirement for below NQF level 3 by occupation (2-digit), North (2017-2027)
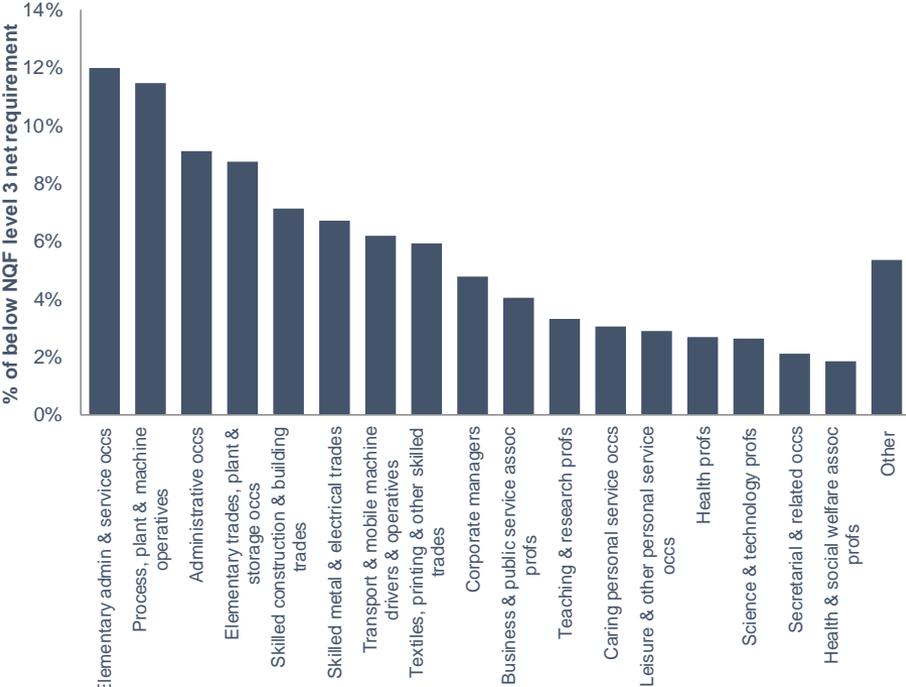
Source: UUEPC

Average annual net requirement for below NQF level 3 by occupation (top 15 3-digit), North (2017-2027)

3 digit SOC	% below NQF level 3 net requirement
Other elementary services occupations	8.5%
Food preparation and hospitality trades	5.8%
Construction and building trades	5.7%
Process operatives	5.7%
Elementary process plant occupations	5.2%
Road transport drivers	4.4%
Teaching and educational professionals	3.3%
Administrative occupations: Finance	2.6%
Administrative occupations: Records	2.6%
Caring personal services	2.5%
Assemblers and routine operatives	2.5%
Sales, marketing and related associate professionals	2.5%
Metal machining, fitting and instrument making trades	2.4%
Elementary construction occupations	2.4%
Secretarial and related occupations	2.1%

Source: UUEPC

The occupation profile follows those which are most prevalent within the high demand sectors for low level qualifications. The occupations which account for the highest proportion of the NQF level 3 and below net requirement are elementary administration and services (12%), process plant and machine operatives (11%) and administration (9%).

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Summary of demand side qualifications

Net requirement by NQF - It is forecast that 29% of total demand will require at least a degree level qualification, which is below the NI average. However, it is expected only 11% of job opportunities will be available to individuals with a qualification level below NQF level 2. Research at an NI level in 2009 highlighted this figure was as high as 22% and has since continued to fall. As qualifications hungry employers squeeze out lower qualified workers, it is expected this trend will continue.

The higher weighting of opportunities for those with degree level qualifications relative to low or no qualifications highlights the need to address educational underachievement in NI.

Workforce qualifications current versus future - Current workforce qualifications do not match expected future qualifications. For example, in North 22% of people employed have NQF level 6+ qualifications compared to 29% forecast for the coming decade.

At mid-level (NQF level 2, 3 and 4-5) qualifications are closely aligned between current and future qualification demands. There is a large gap between the employed with below NQF level 2 (25%) and the future net requirement (11%).

However, current workforce qualifications are skewed by a high proportion of older workers who hold less formal qualifications (relative to younger workers) but are not necessarily low skilled, and so drag down the qualification profile of the workforce.

Net requirement by NQF level 6+ by sector - The graduate intensity within the net requirement differs relatively across sectors. Around two thirds (64%) of the net requirement for the ICT sector require NQF level 6+ qualifications compared to only 34% in health and social. Although there is a large difference in the proportionate requirement, the size difference in sectors impacts the number of required graduates. For example, ICT is forecast to require 130 graduates per annum over the next decade compared to 150 in health and social work.

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Summary of demand side qualifications (continued)

Net requirement by NQF level 6+ by occupation - The occupation profile of the net requirement at graduate level is shaped by the sectoral structure. The occupations which account for the highest proportion of the NQF level 6+ net requirement are science and technology professionals (21%) and health professionals (15%).

Net requirement by NQF level 4-5 by sector - The industry mix for NQF level 4-5 demand is similar to NQF level 6+. The sectors accounting for the largest proportion of the NQF level 4-5 net requirement are health and social work (25%) and education (13%).

Net requirement by NQF level 4-5 by occupation - In the same vain the sectoral structure determines the occupations demanded. The occupation accounting for the largest proportion of net requirement is health professionals (16%) followed by science and technology professionals.

Net requirement by NQF level 3 and below by sector - The sectoral mix of net requirement at below NQF level 3 differs from tertiary level qualifications. The largest proportion of net requirement is within the administration and support (23%) followed by manufacturing (17%).

Due to graduate intensity many of the high growth sectors provide very few opportunities for individuals with non-tertiary level qualifications. It is important that job opportunities are provided across the skill spectrum. The sectors requiring low qualified individuals play a vital role in the local economy, specifically if it is to achieve inclusive growth.

Net requirement by NQF level 3 and below by occupation - The occupations which account for the highest proportion of below NQF level 3 net requirement are elementary administration and service occupations (12%) and process plant and machine operatives (11%).

Demand side - Subjects

Interpreting outputs relating to subject demand

The UUEPC's skills model estimates subject demand across occupations. The outputs should be interpreted as a rough proxy as at a sub-regional level the demand for skills can be significantly altered by a new large employer (e.g. large FDI firm) or a large employer closing or moving to another area.

In addition, estimates of future skills demands are based on historic patterns. Therefore it is possible demand in some sectors has the potential to evolve over time changing the required subject mix within sectors (e.g. growth in artificial intelligence or cyber-security).

This section will outline subject demand for:
- NQF level 6+ (undergraduate, masters and PhD); and
- NQF level 4-5 (sub-degree level qualifications).

Medical related subjects account for highest proportion of graduate demand

Average annual net requirement for NQF level 6+ by subject (JACS, 1-digit), North (2017-2027)
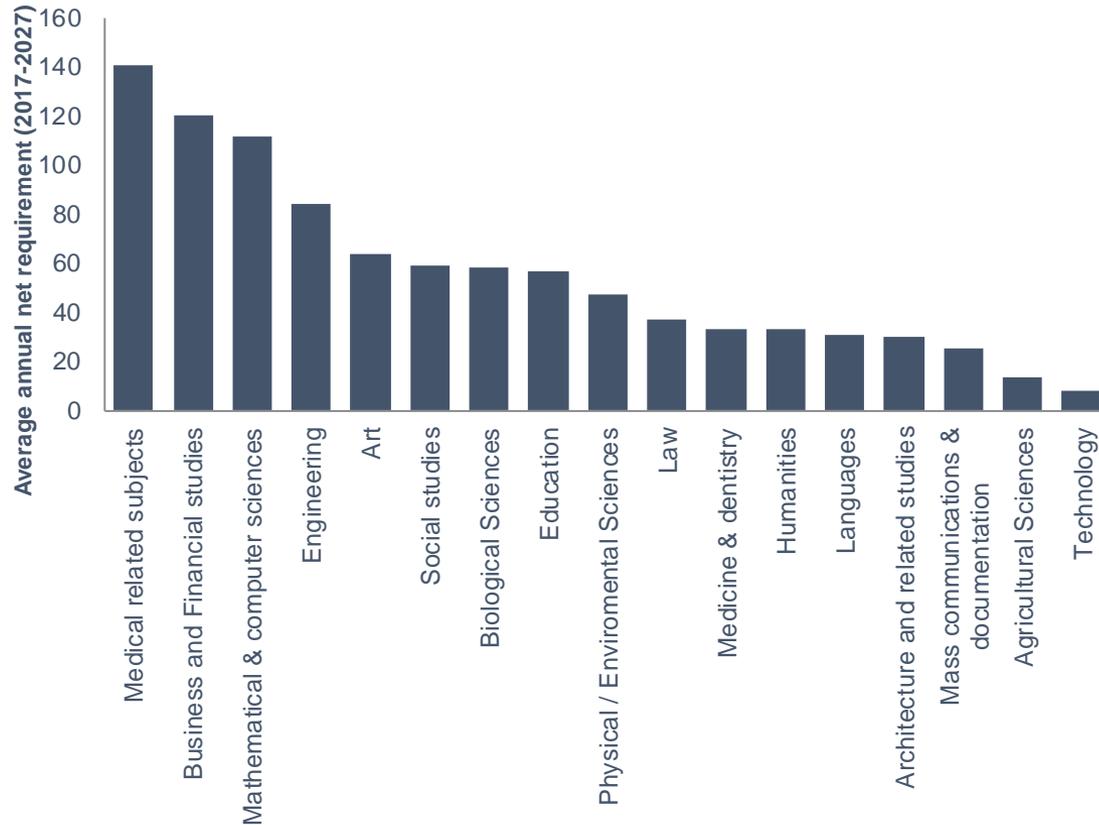

Source: UUEPC

Medical related subjects account for the largest proportion of the NQF level 6+ net requirement (15%), linked to the large health and social work sector in North. This is followed by business and financial studies (13%) and mathematical and computer sciences (12%), linked to strong expansion demand in the ICT sector.

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At a more detailed level nursing accounts for the highest proportion of graduate demand

Average annual net requirement for NQF level 6+ by subject (JACs, 2-digit), North (2017-2027)
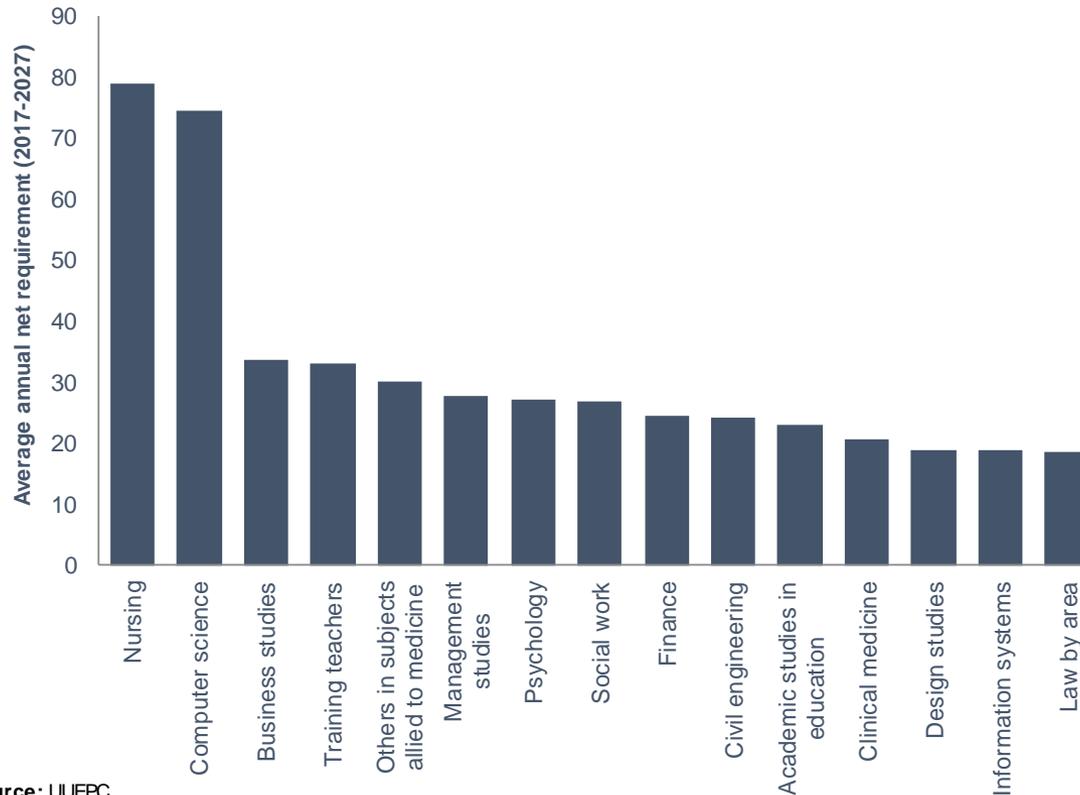

Source: UUEPC

A more detailed analysis highlights that nursing accounts for the highest annual NQF level 6+ net requirement (80), linked to the large health and social work sector. This is followed by computer science (75) (influenced by high expansion demand in the ICT sector) and business studies (35).

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Health, public services and care account for the largest sub-degree subject demand

Average annual net requirement for NQF level 4-5 by subject (SSA, 1-digit), North (2017-2027)
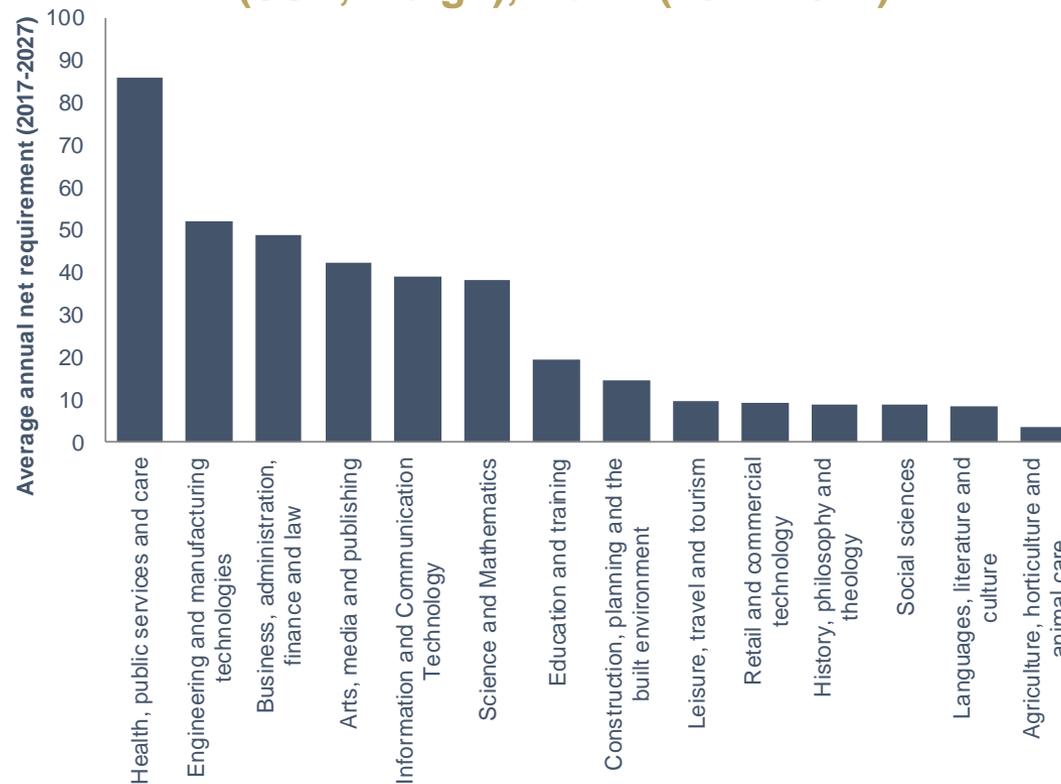
Source: UUEPC

At sub-degree level the largest proportion of the net requirement is accounted for by health, public service and care professionals (22%) followed by engineering and manufacturing technologies (13%) and business, administration, finance and law (13%).

Summary of demand side subjects

Interpreting subject demand - Subject outputs should be interpreted as a rough guide as at a sub-regional level many factors can have a significant influence on the net requirement. For example, a new large employer, the closure of a large employer or relocation of a large employer elsewhere.

North's subject demand is dominated by health related subjects (e.g. medical related subjects and nursing), driven by the large health and social work sector which requires a large replacement demand. However, a strong expansion demand in the ICT sector also drives a relatively high net requirement for subjects such as business studies and finance and mathematical and computer science.

Net requirement by NQF level 6+ subjects - The subject which accounts for the largest proportion of NQF level 6+ demand is medical related subjects (15%), directly influenced by high replacement demand in the health and social work sector over the coming decade. This is followed by business and financial studies (13%) and maths and computer science (12%).

Granular level analysis can provide detailed insight. For example, nursing accounts for the largest proportion of NQF level 6+ net requirement. The next largest subjects in demand at a detailed level are computer science and business studies.

Net requirement by NQF level 4-5 subjects - The largest subject in demand at a sub-degree level is health, public services and care (22% of the NQF level 4-5 net requirement). This reflects growth the high level of replacement demand based on the scale of the health sector within North.

The next largest sub-degree subjects in demand are engineering and manufacturing technologies (13% of NQF level 4-5 net requirement) and business, administration, finance and law (13%).

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Supply side – School leavers achievement

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School leaver performance similar to NI average at GCSE and A-level

GCSE and A-level attainment of school leavers, LGDs (2015/16)

Proportion (%) of school leavers achieving 5+ GCSEs A*-C including English and maths, LGDs (2015/16)

Source: NI school leavers survey
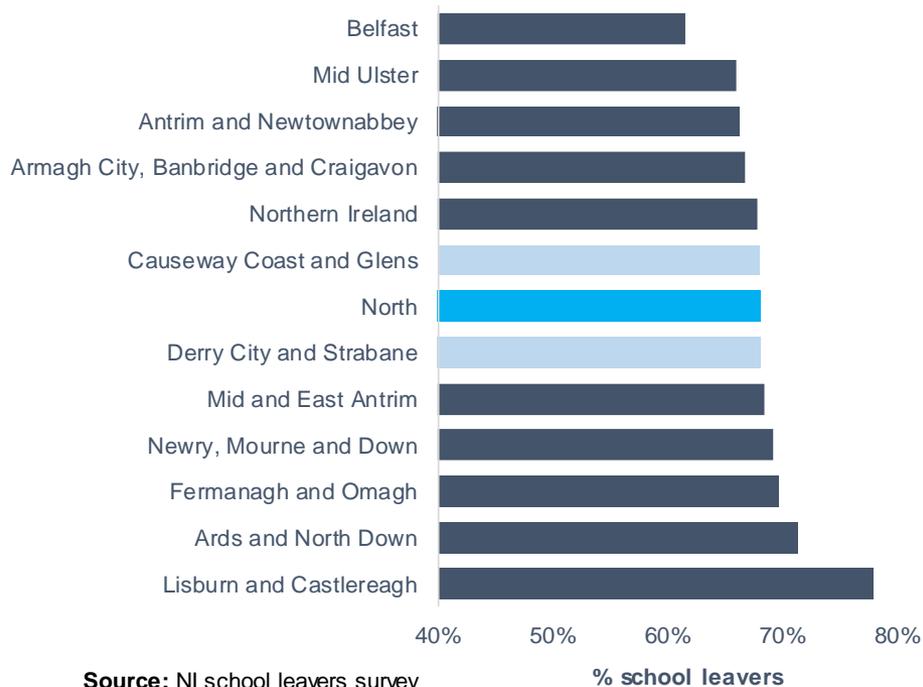
% school leavers

Proportion (%) of school leavers achieving 2+ A-levels A*-E, LGDs (2015/16)

Source: NI school leavers survey

% school leavers
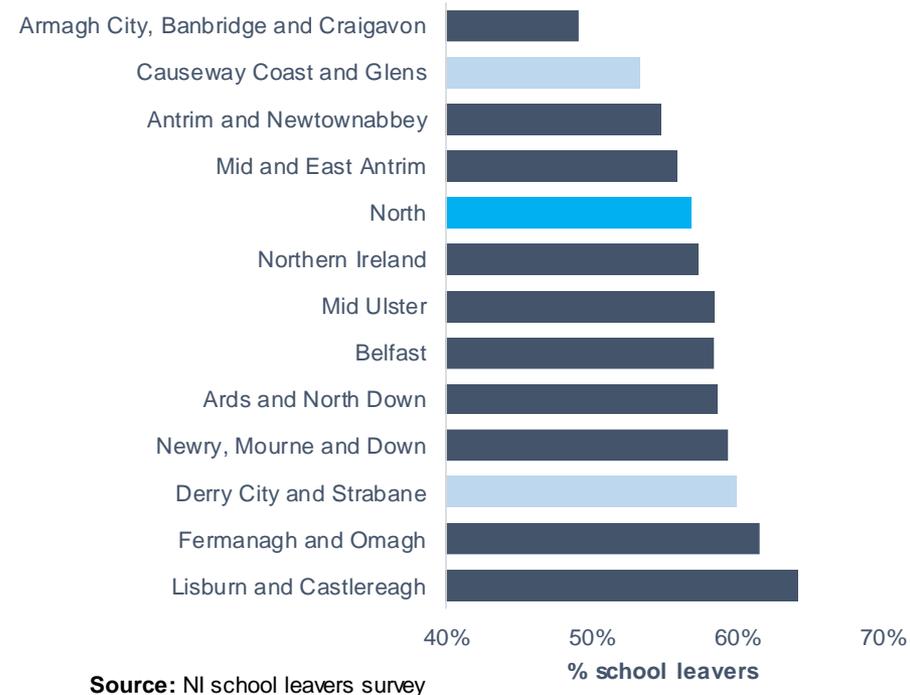
Although the proportion of North is similar to the NI average with regard to educational attainment at GCSE there is a significant difference in the A-level performance of the two LGDs which constitute North. In Derry City and Strabane 60% of school leavers achieve 2+ A-levels A*-E compared to 53% in Causeway Coast and Glens.

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Strong improvement in North school leavers GCSE performance

Skill structure of school leavers (2015/16) and change in performance (2007/08-2015/16)

Percentage point difference in qualifications of school leavers, North versus NI (2015/16)
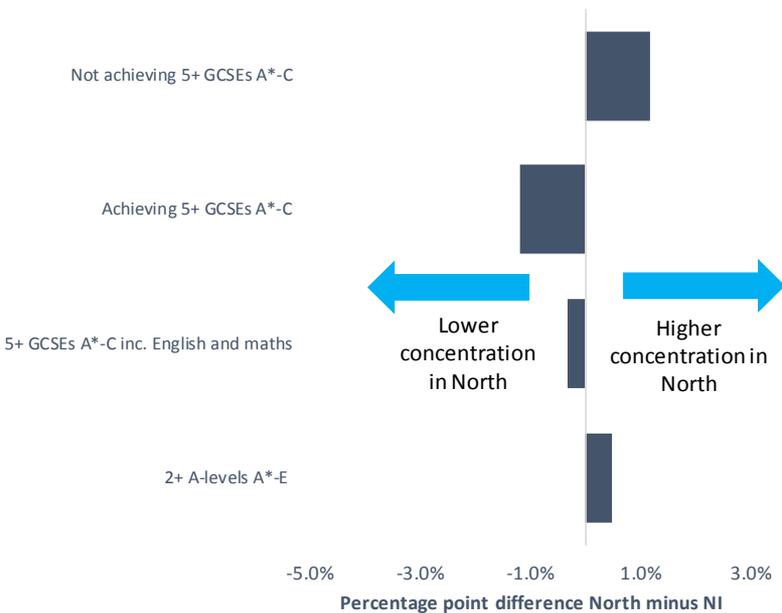
Not achieving 5+ GCSEs A*-C

Achieving 5+ GCSEs A*-C

5+ GCSEs A*-C inc. English and maths

← Lower concentration in North   Higher concentration in North →

2+ A-levels A*-E

-5.0%   -3.0%   -1.0%   1.0%   3.0%

Percentage point difference North minus NI

Percentage point difference in school leavers achieving 5+ GCSEs A*-C including English and maths, LGDs (2007/08-2015/16)
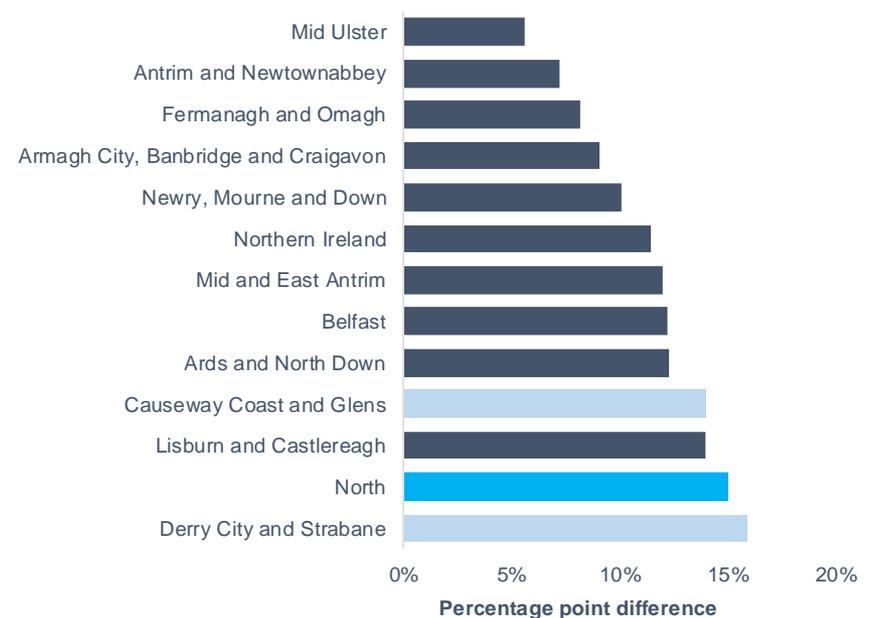
Mid Ulster
Antrim and Newtownabbey
Fermanagh and Omagh
Armagh City, Banbridge and Craigavon
Newry, Mourne and Down
Northern Ireland
Mid and East Antrim
Belfast
Ards and North Down
Causeway Coast and Glens
Lisburn and Castlereagh
North
Derry City and Strabane

0%   5%   10%   15%   20%

Percentage point difference

The rate of school leavers achieving 5+ GCSEs A*-C including English and maths in North has improved by 15 percentage points over the 8 year period 2007/08-2015/16. This is driven by a 16 percentage point improvement in Derry City and Strabane (highest across all LGDs).

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What lessons to be learned from schools in improving areas?

Percentage point difference in proportion (%) of school leavers achieving 2+ A-levels A*-E, North (2007-2010 versus 2013-2016)

Inner Derry City

Percentage point difference
In those achieving at least 2 A-levels, A*-E

- Above 10 p.p
- Above 5 p.p but below 10 p.p
- Above 0 p.p but below 5 p.p
- Below 0 p.p
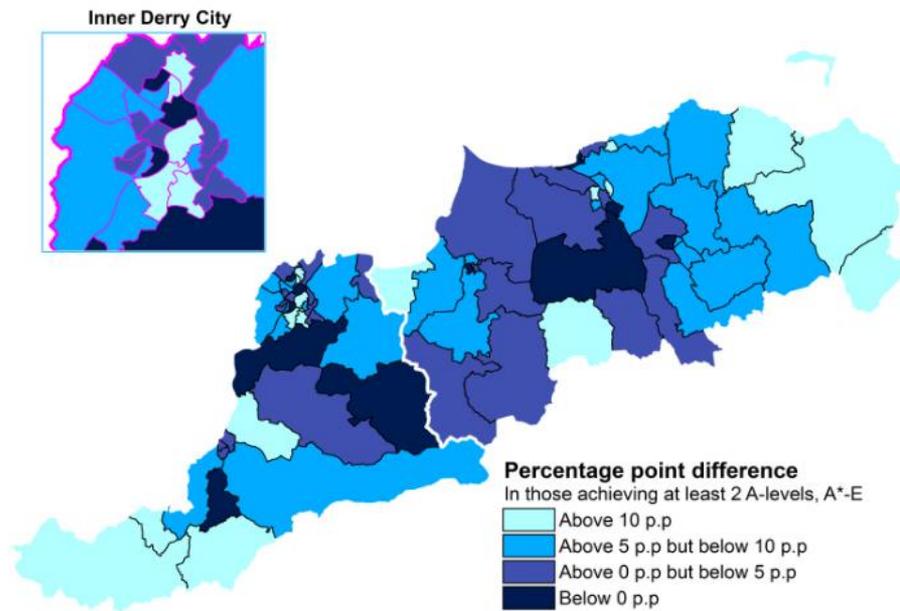
Source: NI School Leavers Survey

Most Improved Wards in North

|	Ward	LGD	p.p. change
1	Glenderg	Derry City and Strabane	21%
2	Victoria	Derry City and Strabane	19%
3	Hopefield	Causeway Coast and Glens	19%
4	Kinbane	Causeway Coast and Glens	17%
5	Ballycastle	Causeway Coast and Glens	17%
6	Torr Head and Rathlin	Causeway Coast and Glens	16%
7	Ebrington	Derry City and Strabane	15%
8	Waterside	Causeway Coast and Glens	15%
9	Quarry	Causeway Coast and Glens	14%
10	Lurigethan	Causeway Coast and Glens	14%
11	Shantallow	Derry City and Strabane	14%
12	Garvagh	Causeway Coast and Glens	13%
13	Artigarvan	Derry City and Strabane	13%
14	Shantallow East	Derry City and Strabane	12%
15	Newtownstewart	Derry City and Strabane	12%
16	Castlederg	Derry City and Strabane	12%
17	Greysteel	Causeway Coast and Glens	11%
18	Clondermot	Derry City and Strabane	10%
19	Loughguile and Stranocum	Causeway Coast and Glens	10%
20	Dundooan	Causeway Coast and Glens	10%

To improve school achievement it is important to look at good practice in order to understand what works in which contexts. Analysis of school leaver A-level achievements in North at a granular level highlights a 21 percentage point improvement in Glenderg over the period 2007/08-2015/16. That is the 11th strongest improvement across all 462 wards.

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15% of NQF level 2 school leavers not achieving a pass grade in core subjects English and maths

School leavers achieving any 5 GCSEs A*-C and those that include English and maths, LGDs (2015/16)

Proportion (%) of school leavers achieving 5+ GCSEs and those including and excluding English and maths, LGDs (2015/16)

■ p.p. difference in achieving any 5+ GCSEs A*-C and those including English and maths
■ Achieving 5+ GCSEs A*-C including English and maths
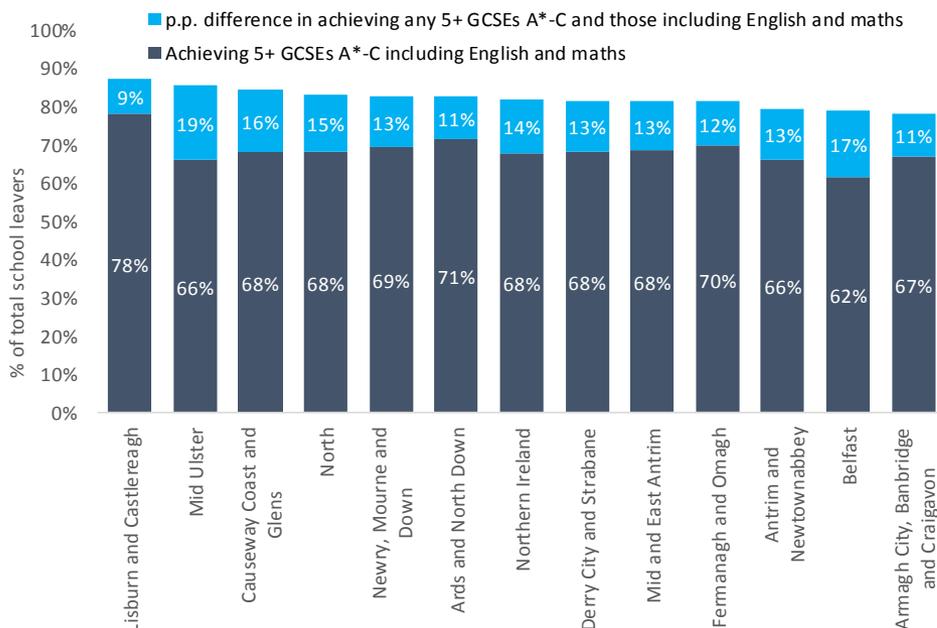
Source: NI school leavers survey

P.p. difference in school leavers achieving 5+ GCSEs A*-C, including English and maths versus not including English and maths, LGDs (2015/16)
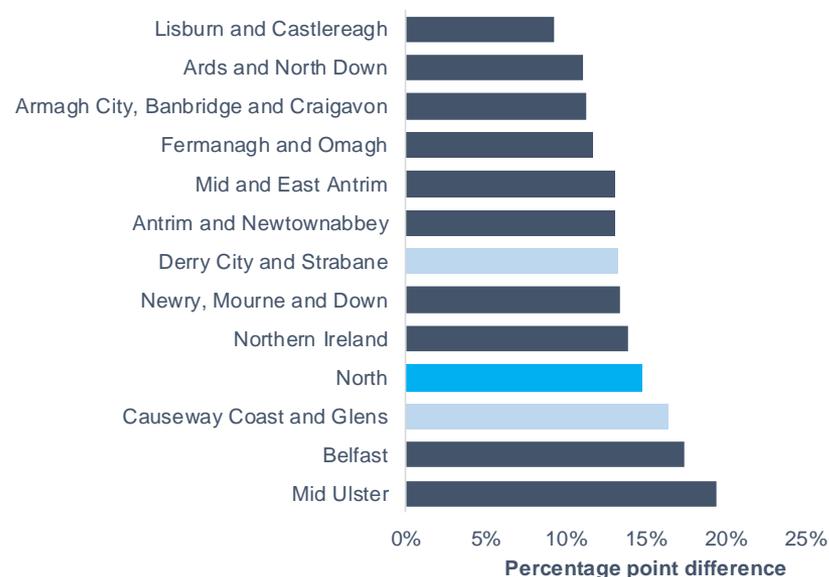

Source: NI school leavers survey

At least a pass grade in English and maths at GCSE is often a prerequisite for jobs and a precondition for education and training courses. A high difference between the proportion of school leavers achieving this level and those not represents potential barriers to labour force participation. In North of the 3,400 school leavers that qualified with at least 5+ GCSE's A*-C 1,300 did not achieve a pass grade in English and maths.

Females consistently outperform males in school attainment levels

School leavers achieving 5+ GCSEs A*-C including English and maths, male versus female, North (2015/16)

Proportion (%) of school leavers achieving 5+ GCSEs A*-C including English and maths, male versus female, North (2007/08-2015/16)
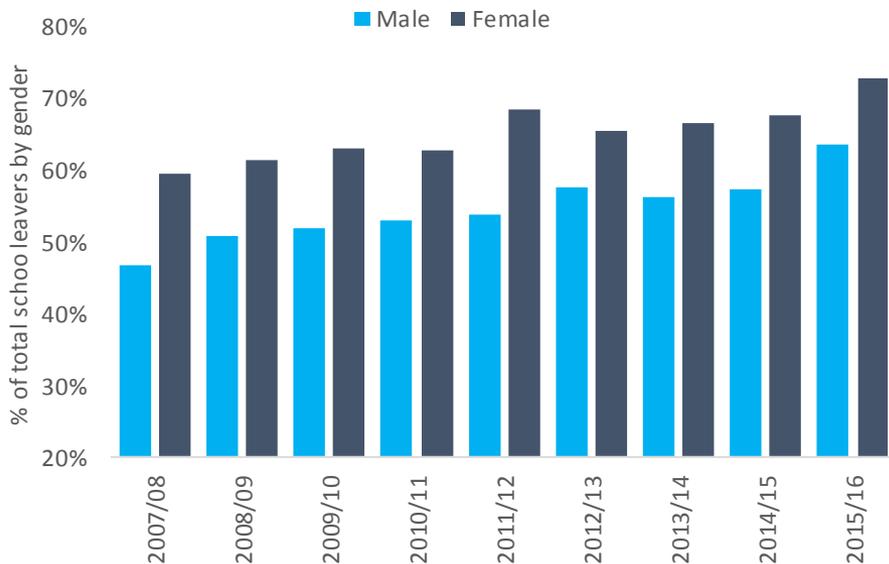
Source: NI school leavers survey

Percentage point difference in school leavers qualification level, male versus female, North (2015/16)
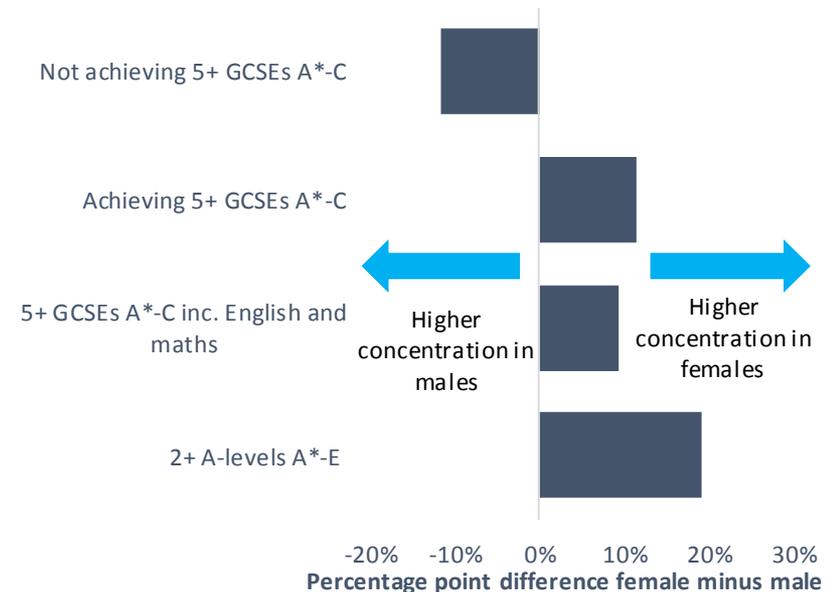

Source: NI school leavers survey

Gender analysis highlights female school leavers in North tend to outperform male school leavers across both GCSE and A-level attainment. For example, the difference in the rate of female and male school leavers achieving 2+ A-levels A*-E is 19 percentage points. This compares to a difference of 17 percentage points across NI as a whole.

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FSME achievement is improving, but the gap is narrowing slowly

School leavers achieving 5+ GCSEs A*-C including English and maths, FSME versus non-FSME, North (2015/16)

Proportion (%) of school leavers achieving 5+ GCSEs A*-C including English and maths, FSME versus non-FSME, North (2007/08-2015/16)
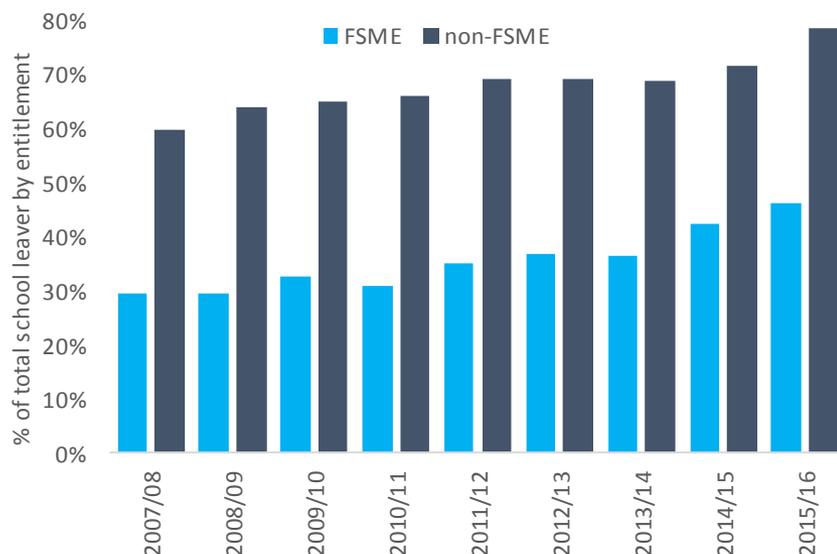
Source: NI school leavers survey

Percentage point difference in school leavers qualification level, FSME vs non-FSME, North (2015/16)

Higher concentration in non-FSME

Higher concentration in FSME

Not achieving 5+ GCSEs A*-C

Achieving 5+ GCSEs A*-C

5+ GCSEs A*-C inc. English and maths

2+ A-levels A*-E

-35%   -15%   5%   25%

Percentage point difference FSME minus non-FSME
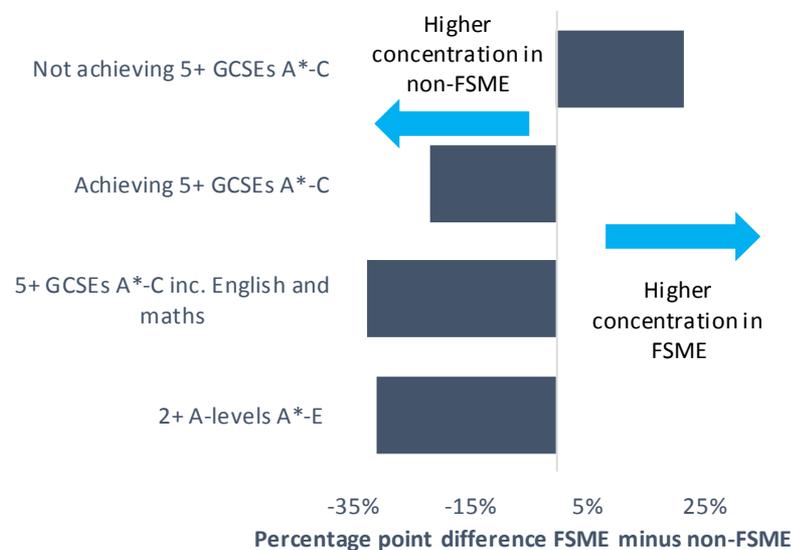
Source: NI school leavers survey

School leaver qualification profile (NQF) by gender and FSME, North (2015/16)

Qualification level	Male			Female		
	FSME	non-FSME	Percentage point difference	FSME	non-FSME	Percentage point difference
2+ A-levels A*-E	26%	58%	-32%	46%	76%	-30%
5+ GCSEs A*-C inc. English and maths	40%	75%	-35%	53%	83%	-30%
Any 5+ GCSEs A*-C	59%	86%	-27%	78%	94%	-17%
Not achieving 5+ GCSEs A*-C	41%	14%	27%	22%	6%	17%

Source: NI school leavers survey

Note: Percentage point difference refers to FSME minus non-FSME

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Areas within North where a high rate of school leavers do not achieve the minimum standard required by employers

Proportion (%) of school leavers not achieving 5 GCSEs (A*-C) including English and maths, North wards (2013/14 – 2015/16)

Inner Derry City

% of school leavers
Not achieving 5 GCSEs
(including English & maths), A*-C

- Above 40%
- Above 30% but below 40%
- Above 20% but below 30%
- Below 20%
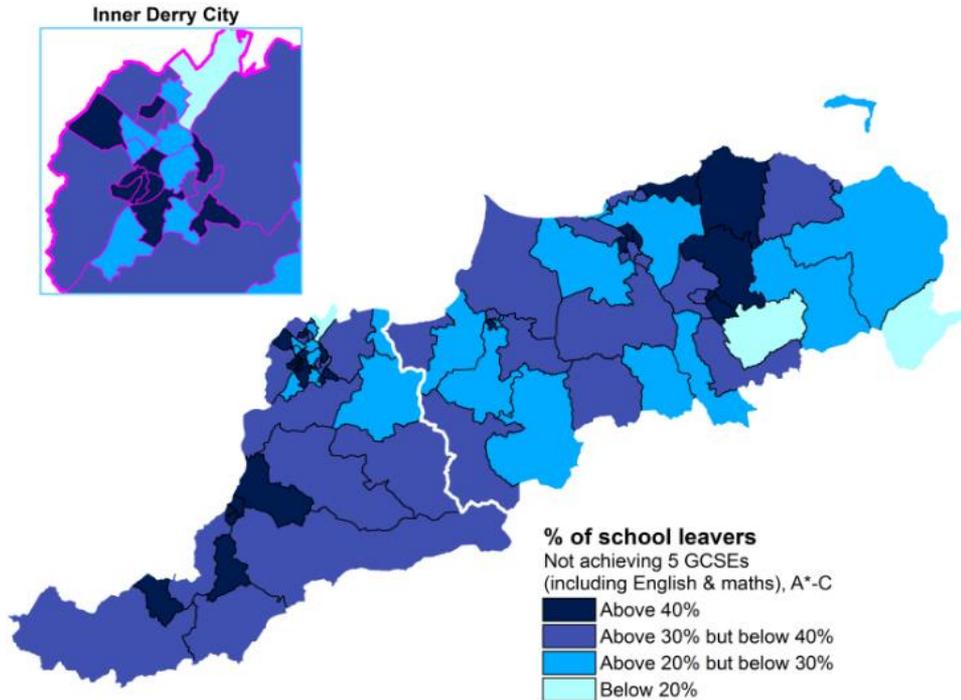
Source: NISRA, NI School Leavers Survey

Lowest achievers in North

	Ward	LGD	%
1	Coolessan	Causeway Coast and Glens	64%
2	Quarry	Causeway Coast and Glens	64%
3	Creggan South	Derry City and Strabane	54%
4	University	Causeway Coast and Glens	53%
5	Brandywell	Derry City and Strabane	52%
6	Galliagh	Derry City and Strabane	50%
7	Giant's Causeway	Causeway Coast and Glens	50%
8	City Walls	Derry City and Strabane	50%
9	Ballymoney East	Causeway Coast and Glens	49%
10	Strabane West	Derry City and Strabane	49%

Highest achievers in North

	Ward	LGD	%
1	Culmore	Derry City and Strabane	11%
2	Dunloy	Causeway Coast and Glens	18%
3	Lurigethan	Causeway Coast and Glens	19%
4	Eglinton	Derry City and Strabane	22%
5	Claudy	Derry City and Strabane	24%
6	Clondermot	Derry City and Strabane	24%
7	Foyle Springs	Derry City and Strabane	24%
8	New Buildings	Derry City and Strabane	25%
9	Madam's Bank	Derry City and Strabane	25%
10	Springtown	Derry City and Strabane	25%

The ward with the poorest school attainment in North is Coolessan (Causeway Coast and Glens) where 64% of school leavers fail to achieve 5+ GCSEs A*-C including English and maths. This is ranked 455th out of 462 wards in NI. On the other hand in Culmore (Derry City and Strabane) only 11% of school leavers fail to achieve 5+ GCSEs A*-C including English and maths, which is ranked 9th out of 462 wards.

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North accounts for a marginally higher number of low achieving areas

School leavers not achieving 5 GCSEs A*-C including English and maths, Wards (2015/16)

	% of total wards	% of wards in lowest performing quartile	% of wards in lowest performing decile
Antrim and Newtownabbey	9%	12%	15%
Armagh City, Banbridge and Craigavon	9%	8%	9%
Belfast	13%	24%	39%
Causeway Coast and Glens	9%	7%	7%
Derry City and Strabane	9%	12%	4%
Fermanagh and Omagh	9%	3%	0%
Lisburn and Castlereagh	9%	4%	4%
Mid and East Antrim	9%	7%	11%
Mid Ulster	9%	9%	2%
Newry, Mourne and Down	9%	6%	2%
Ards and North Down	9%	8%	7%
Northern Ireland	100%	100%	100%
North	17%	19%	11%

Source: NI school leavers survey

An analysis of school performance using small geographical areas highlights if an area has a proportionate or disproportionate share of pupils underachieving.

In North the rate is marginally disproportionate in relation to school leavers not achieving 5 GCSEs including English and maths.

North accounts for 17% of total wards in NI but 19% of total wards within the lowest performing quartile. This is influenced by Derry City and Strabane accounting for 9% of total NI wards but 12% of wards within the lowest performing quartile.

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Potentially 12.9k pupils to leave school by 2027 without achieving 5 GCSE's A*-C inc English and maths

School leavers achieving 5+ GCSEs A*-C including English and maths and those not, North (2007/08-2027/28)
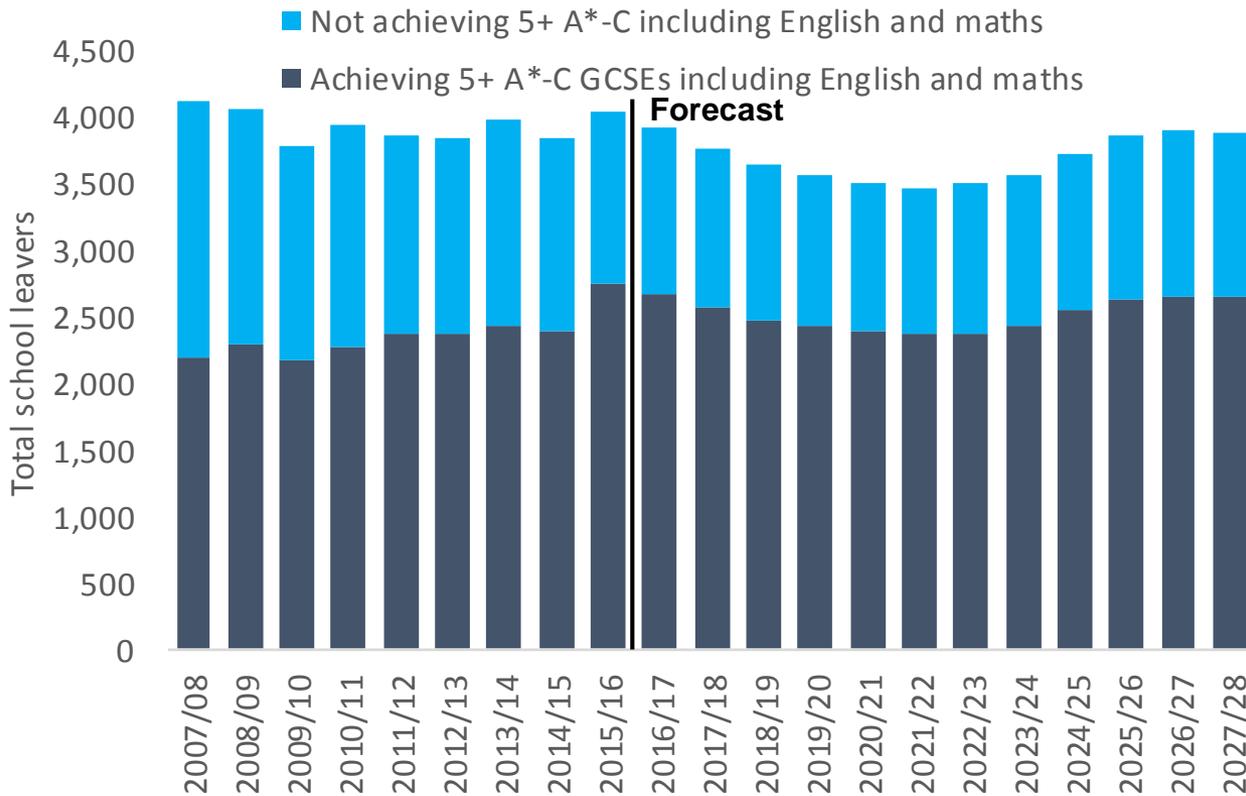
Source: UUEPC, NI school leavers survey

Summary of school leavers attainment

2+ A-levels A*-E - The proportion of North's school leavers achieving 2+ A-levels A*-E performs in line with the NI average, 57% each.

It is important to note the performance of the two LGDs which constitute North ranges from 60% of school leavers in Derry City and Strabane achieving 2+ A-levels A*-E to 53% of Causeway Coast and Glens.

5+ GCSEs A*-C - The rate of school leavers in North achieving 5+ GCSEs A*-C including English and maths also performs in line with the NI average, 68% each.

North recorded increase of 15 percentage points in the rate of school leavers achieving 5+ GCSEs A*-C including English and maths over the period 2007/08-2015/16. This is particularly driven by improvements in Derry City and Strabane of 16 percentage points, recording the strongest improvement across all LGDs over the period.

GCSE's and employability - The difference between the proportion of school leavers achieving 5+ GCSEs A*-C including English and maths and those not including English and maths is important from an employability context. At least a pass grade in the two subjects is often a prerequisite for many jobs in the labour market, as well as a pre-condition for entry to many education and training courses. A high difference between the two achievements in the area could indicate a barrier to labour force participation.

In North of the 3,400 school leavers that qualified with at least 5+ GCSE's A*-C 1,300 did not achieve a pass grade in English and maths.

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Summary of school leavers attainment (continued)

Male versus female - There are also gender differences in the attainment of school leavers wherein females out perform males. For example, a higher proportion of females achieved 2+ A-levels A*-E, 5+ GCSEs A*-C including English and maths and any 5+ GCSEs A*-C, relative to males. Whereas males are more likely to not achieve 5+ GCSEs A*-C.

FSME - Broadly speaking pupils receiving FSME have a significantly lower level of school attainment relative to their peers not in receipt of FSME. For example, 46% of FSME school leavers achieve 5+ GCSEs A*-C including English and maths compared to 78% of those who are not in receipt of FSME.

Whilst the attainment of pupils receiving FSME has improved over time, so too has those not in receipt of FSME meaning the gap has remained largely unchanged. This suggests a lower rate of enrolment in tertiary level education courses is likely amongst children who are socioeconomically deprived, relative to their more affluent peers.

Future attainment - Assuming current school participation and performance rates it is estimated that 12,900 children resident in North over the period 2017-2027 will leave the school system without achieving the minimum standard education expected by most employers i.e. 5+ GCSEs A*-C including English and maths.

A high proportion of low achievers puts pressure on other parts of the education system. For example, high enrolment in low NQF level courses at FE which are publically funded, as well as participation in Government training courses Essential Skills and Training for Success (TfS).

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Supply side – Destination of school leavers

Higher Education is the most common destination for school leavers in North

Destination of school leavers, North versus NI (2015/16)

Destination of school leavers, North (2015/16)

- Higher education, 44%
- Further education, 37%
- Employment, 6%
- Training, 9%
- Unemployed/ Unknown, 4%
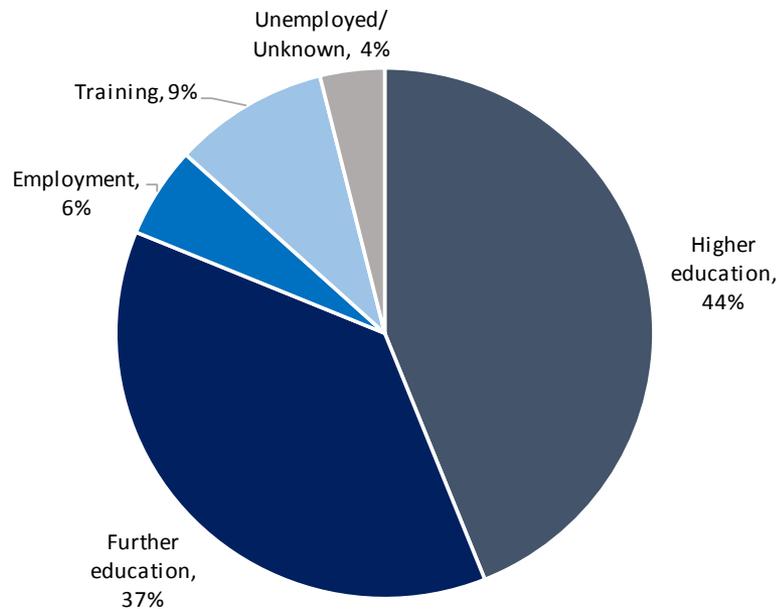
Source: NI school leavers survey

Percentage point difference in destination of school leavers, North versus NI (2015/16)

Higher concentration in NI

Higher concentration in North

Percentage point difference NI minus North
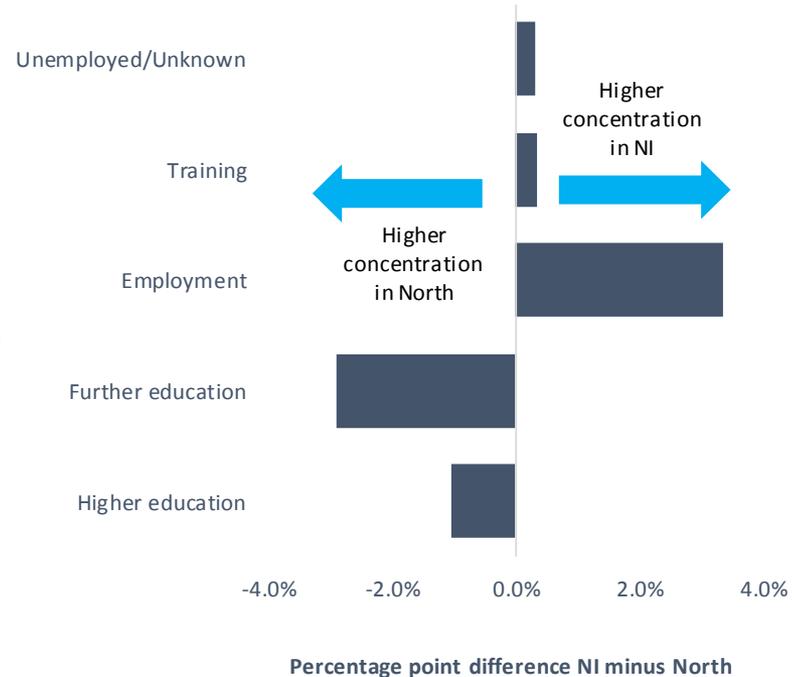
Source: NI school leavers survey

Amongst North's school leavers higher proportions enter Further Education (FE) and Higher Education (HE), and lower proportions enter employment, relative to the NI average.

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HE and FE dominate destinations of school leavers in North

Destination of school leavers, LGDs (2015/16)
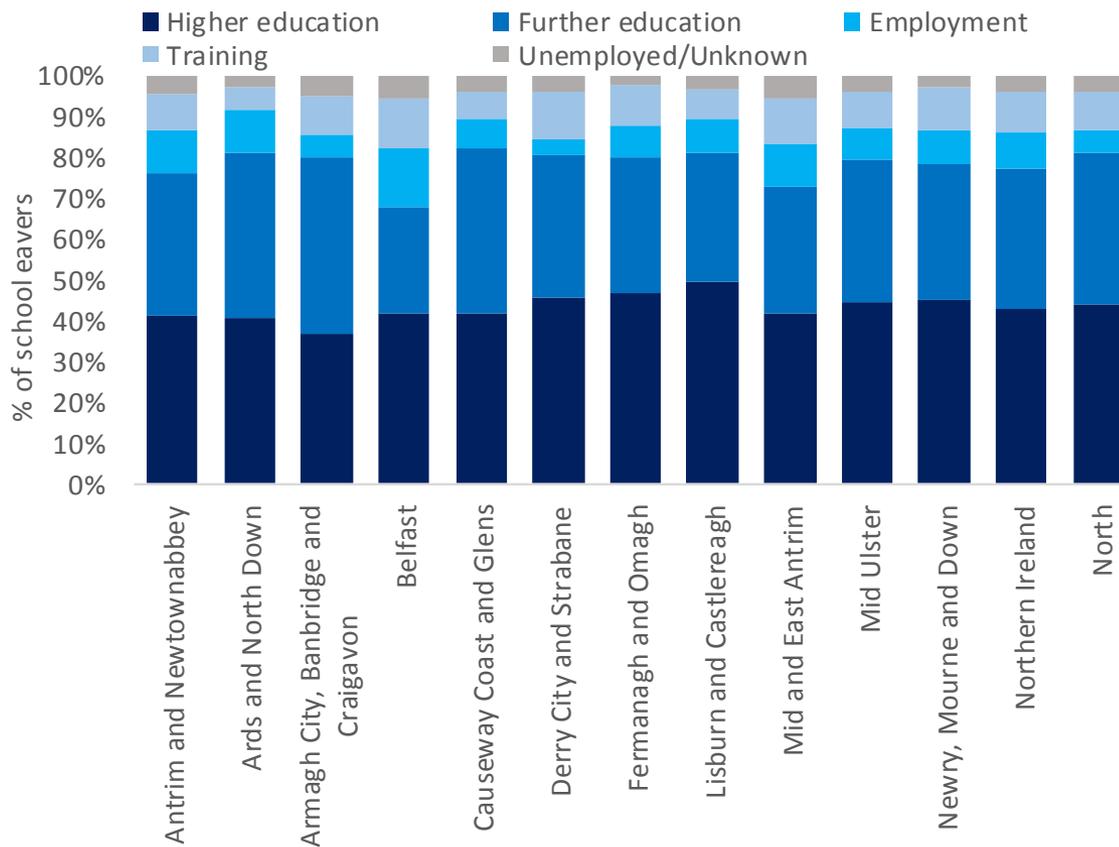
Source: NI school leavers survey

Summary of destination of school leavers

Higher Education - The most common destination of school leavers is HE, accounting for 44% of total (marginally above the NI average). This is influenced by the school attainment across the region, where North's education outcomes are similar to the NI average.

In Derry City and Strabane almost half (46%) of school leavers enter HE which is the third highest rate among all LGD's. Similarly, Derry City and Strabane also constitutes the third highest rate of school leavers achieving 2+ A-levels A*-E (60%).

On the other hand in Causeway Coast and Glens 42% of school leavers enter HE, the fourth lowest rate among NI LGDs. This is linked to relatively poorer school attainment at A-level where 53% of school leavers achieve 2+ A-levels A*-E, the second lowest attainment rate among LGD's.

Further Education - The second most common destination of school leavers is FE which accounts for 37% of North's school leavers, compared to 34% in NI. This is influenced by the relatively high proportion of Causeway Coast and Glens school leavers moving into FE, 40%.

Employment - The proportion of school leavers moving into employment is slightly below the NI average, 6% and 9% respectively. This ranges from a low of 4% in Derry City and Strabane (lowest among all LGDs) to 7% in Causeway Coast and Glens.

Training/unemployed/unknown - A combination of training, unemployed and unknown accounts for 13% of North's leavers, marginally above the NI average. In Derry City and Strabane the rate is 15% of school leavers and in Causeway Coast and Glens this falls to 11%.

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Supply side – Post secondary education

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Relatively high concentration of STEM subjects studied by North residents

Subject studied at Higher Education, North versus NI (2015/16)

Subject studied at Higher Education, North (2015/16)

- Medicine, denistry & subjects allied to medicine, 19%
- Biological, veterinary, agricultural & physical sciences, 14%
- Maths, computing, engineering & technology, 13%
- Social studies & law, 13%
- Business, admin', mass comms & documentation, 14%
- Other disciplines, 27%
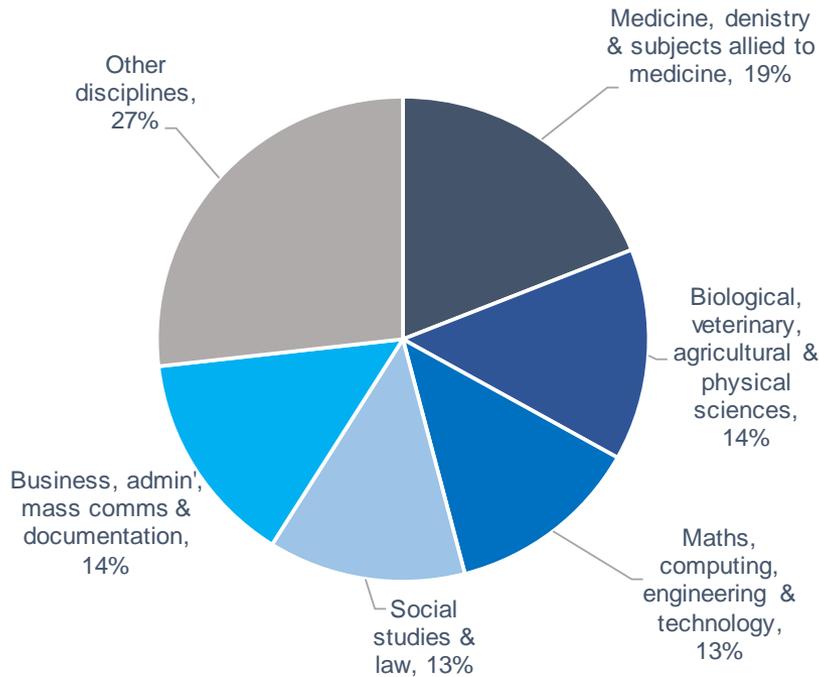
Source: NINIS

HE qualifiers from STEM related subjects, LGDs (2015)

% of HE qualifiers from STEM subjects

- Derry City and Strabane
- Armagh City, Banbridge and Craigavon
- Mid and East Antrim
- North
- Fermanagh and Omagh
- Mid Ulster
- Causeway Coast and Glens
- Lisburn and Castlereagh
- Northern Ireland
- Antrim and Newtownabbey
- Ards and North Down
- Newry, Mourne and Down
- Belfast
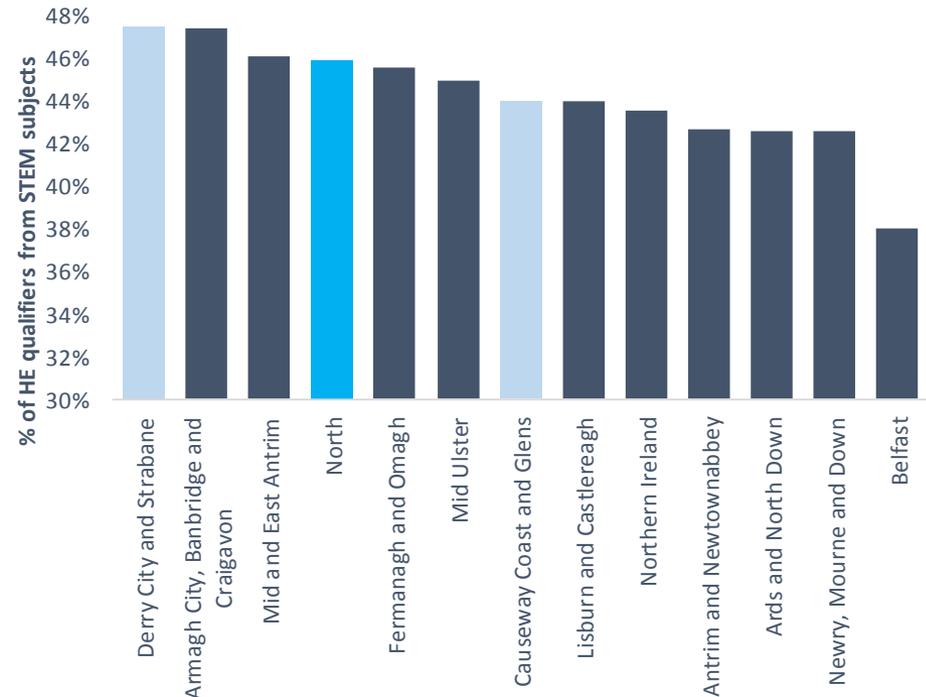
Source: NINIS

In North almost half (46%) of students qualify from a broad STEM related subject, 2 percentage points above the NI average (44%). The figure is driven by the rate in Derry City and Strabane where 48% of HE leavers qualify from broad STEM subjects, the highest rate among NI LGDs.

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Despite having the highest proportion of HE qualifiers from STEM subjects, there is still an undersupply in some areas

Current versus future subject profile of NQF level 6+, North (2015, 2017-2027)*

	% distribution of qualifiers (2015)	% distribution of net requirement (2017 - 2027)	p.p. difference
Medicine, denistry, subjects allied to medicine	19%	18%	1%
Biological, veterinary, agricultural & physical sciences	14%	13%	2%
Maths, computing, engineering and technology	13%	21%	-9%
Social studies & law	13%	10%	3%
Business, administration, mass communication and documentation	14%	15%	-1%
All other disciplines	27%	22%	4%

Source: NINIS

Considering the current subject profile of graduates against forecast net requirement identifies some imbalances. For example, currently 13% of graduates qualify from maths, computing, engineering and technology subjects. However, the net requirement for these subjects at NQF level 6+ is forecast to demand 21% of graduates.

*It should be noted, the subject groupings at LGD levels are too broad to draw any firm conclusions from.

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Over the coming decade around 650 HE qualified North residents will work outside NI per annum

Location of HE qualifiers 6 months after graduating, North (2010/11-2027/28)

Employed in NI   Employed outside NI   Other (further study etc.)
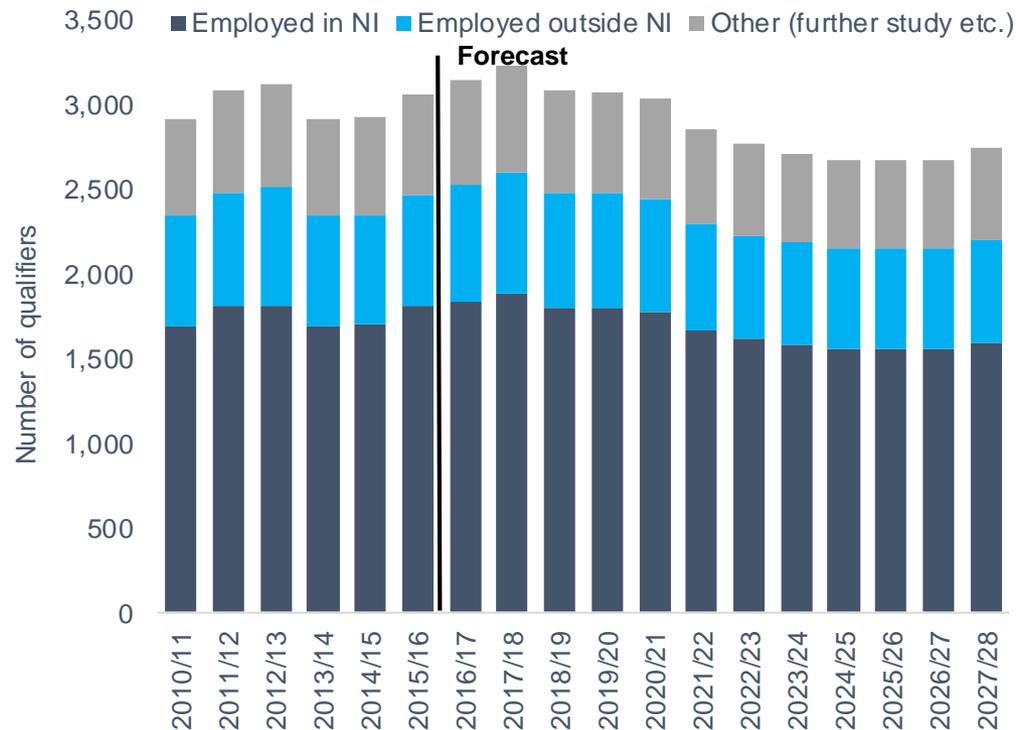
**Source:** DfE, NINIS

Approximately 65% of employed NI qualifiers who graduate from GB HE institutions have not returned home 6 months after graduating. Of employed NI domiciled qualifiers from NI HE institutions 11% are recorded outside NI 6 months after graduating. Assuming the same proportions apply to North residents, this would imply a brain drain of 650 highly skilled North residents in 2015.

North FE qualifiers concentrated in NQF level 3

Qualification (NQF) profile of FE leavers, North versus NI (2016/17)

Further Education leavers (%) achieving NQF level 2 or below, LGDs (2016/17)

Derry City and Strabane
North
Causeway Coast and Glens
Fermanagh and Omagh
Ards and North Down
Lisburn and Castlereagh
Mid Ulster
Antrim and Newtownabbey
Northern Ireland
Mid and East Antrim
Newry, Mourne and Down
Armagh City, Banbridge and Craigavon
Belfast

0% 10% 20% 30% 40% 50% 60% 70%
% of total FE leavers

Source: Further Education Leavers Survey, DfE
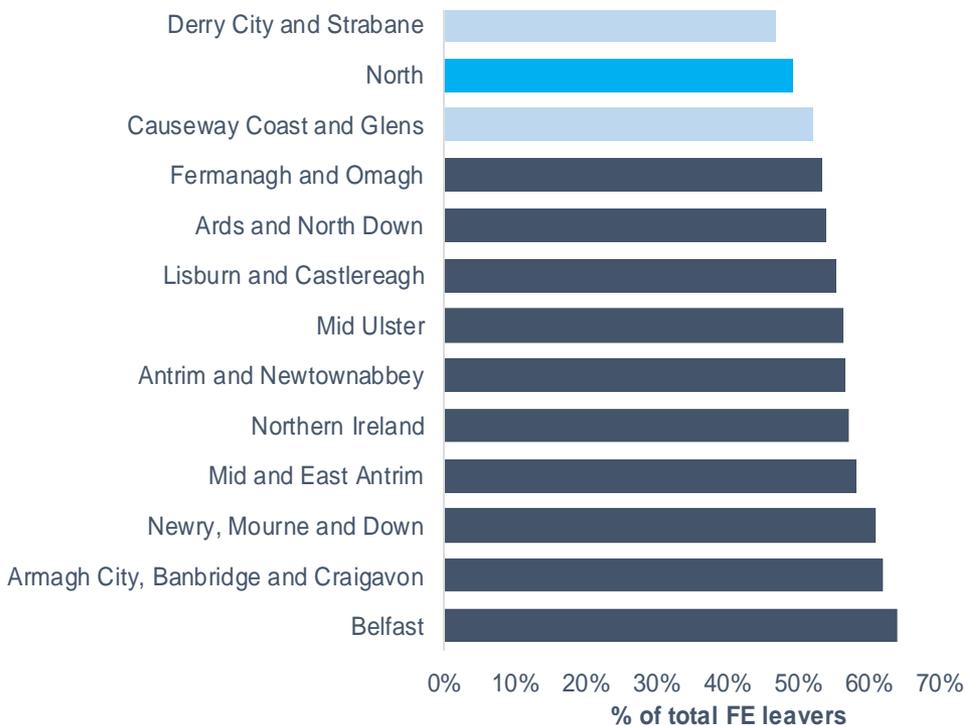
Percentage point difference in FE leavers achieving qualification level, North versus NI, LGDs (2016/17)
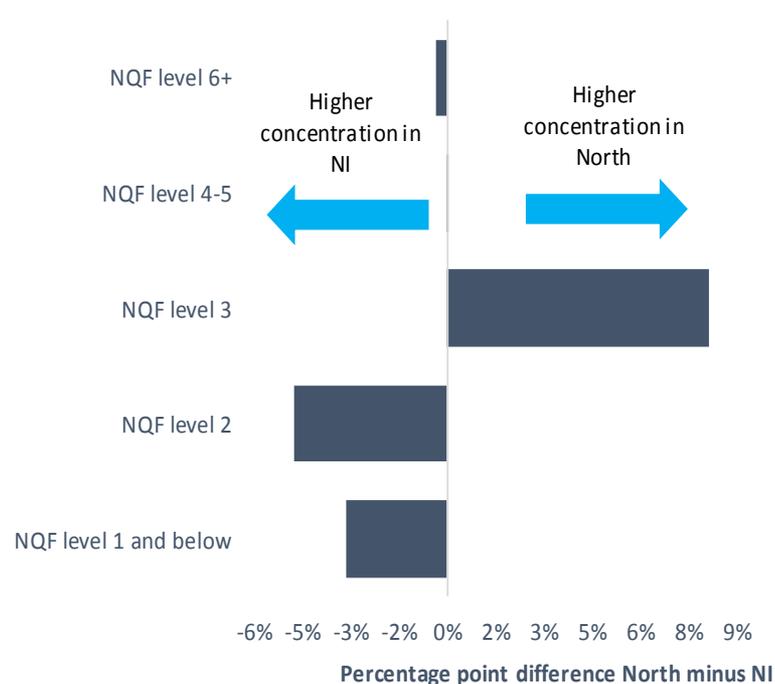
NQF level 6+
NQF level 4-5
NQF level 3
NQF level 2
NQF level 1 and below

Higher concentration in NI
Higher concentration in North

-6% -5% -3% -2% 0% 2% 3% 5% 6% 8% 9%
Percentage point difference North minus NI

Source: Further Education Leavers Survey, DfE

The majority of FE qualifiers tend to qualify from mid-level (NQF level 3) courses, which is atypical to the NI average where the majority qualify from NQF level 2 or below courses. In 2016/17 8,300 North residents qualified from FE, 49% of which are from courses at NQF level 2 or below (8 percentage points below the NI average of 57%). A further 40% qualify from NQF level 3 courses, 8 percentage points above the NI average of 32%.

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Almost half of FE qualifiers move into employment

Destination of FE qualifiers by qualification (NQF), North (2016/17)
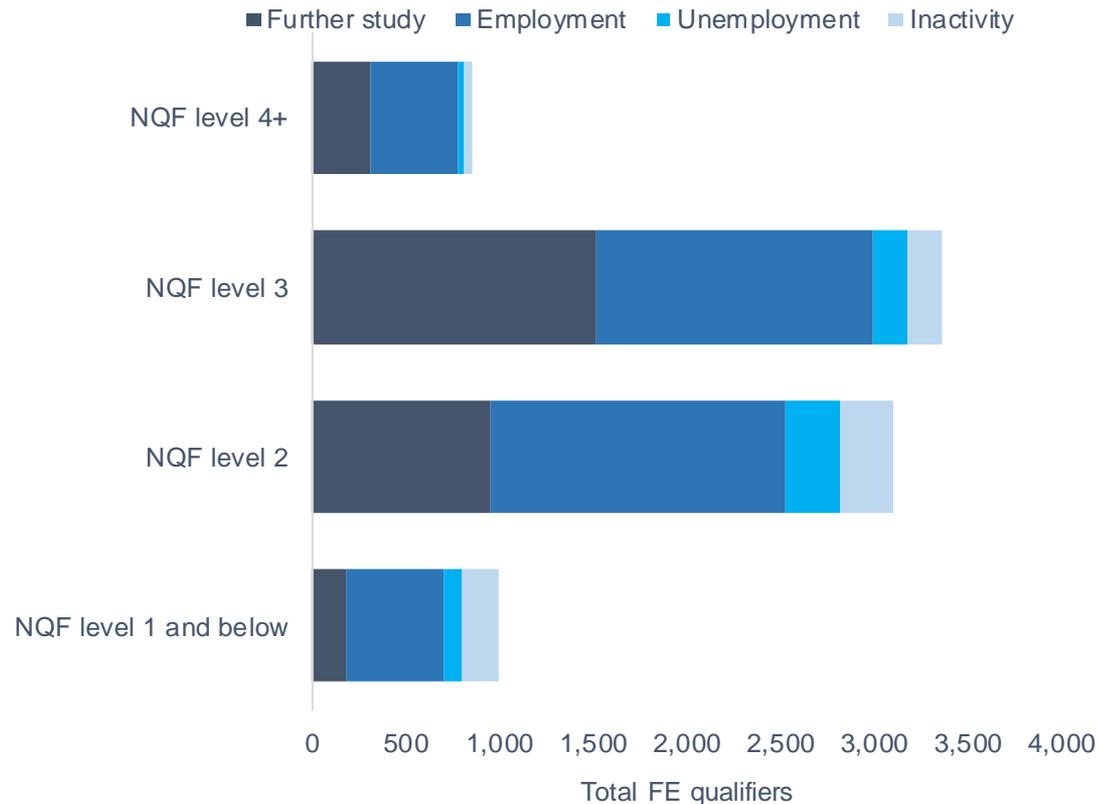
**Source:** DfE, NINIS

Although data at a sub-regional level for destinations of FE leavers is not available, it is possible to estimate by holding constant NI rates across LGDs. In North it is estimated that almost half (49%) of FE leavers will proceed to employment and over one third (35%) to further study. The estimated destination of FE leavers however varies across the qualification profile.

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Low achievement leads to high levels of participation in publically funded training schemes (1)

Training for Success participation (% of 16-17 population), LGDs (2016)

% of 16-17 year olds participating in Trainning for Success

Source: DfE, NINIS
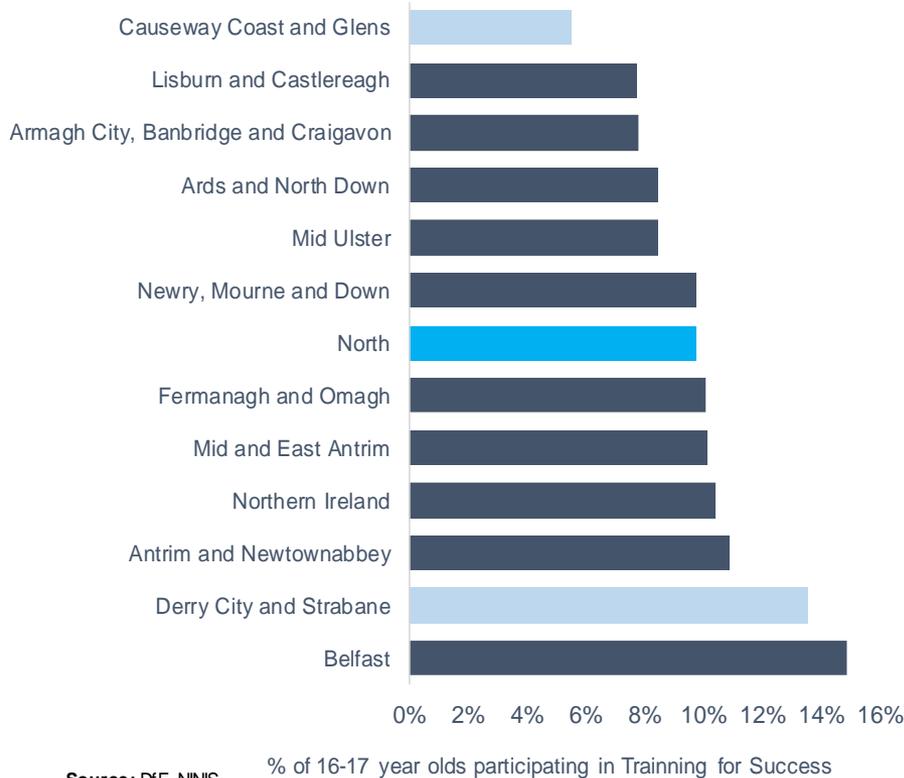
TfS is a government training scheme which provides 16-17 year old low achievers with 104 weeks of training to gain a formal qualification.

Although NQF level 3 is possible to achieve on the training course, most participants are working towards either NQF level 1 or NQF level 2.

In 2016, 780 North residents participated in TfS training. The participation rate varies significantly across the LGDs which comprise North, from 14% in Derry, City and Strabane to 6% in Causeway Coast and Glens.

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Low achievement leads to high levels of participation in publically funded training schemes (2)

Essential Skills enrolments (% of 15-24 population), LGDs (2016)

LGD	Number of enrolments	Essential skills
Northern Ireland	35,780	15%
North	6,690	17%
Belfast	6,180	12%
Derry City and Strabane	3,640	18%
Armagh City, Banbridge and Craigavon	3,550	14%
Mid Ulster	3,250	17%
Causeway Coast and Glens	3,050	16%
Newry, Mourne and Down	2,990	13%
Mid and East Antrim	2,780	17%
Antrim and Newtownabbey	2,590	15%
Ards and North Down	2,460	14%
Fermanagh and Omagh	2,390	17%
Lisburn and Castlereagh	2,180	13%

Source: DfE, NINIS

Essential Skills is a government training course designed to improve reading, writing, maths and/or ICT skills with the opportunity to gain accredited qualifications.

In 2016 6,690 North residents participated within Essential Skills courses, accounting for 17% of the 15-24 year olds.

Derry City and Strabane hosts the highest participation rate at 18% of 15-24 year olds enrolled in Essential Skills courses.

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Low achievement leads to high levels of participation in publically funded training schemes (3)

Steps to Success participation (per 1000 16-64 population), LGDs (2016)

LGD	Total enrolments	Enrolments (per 1,000 16-64 population)
Derry City and Strabane	2,100	21.9
Belfast	2,830	21.4
North	3,160	17.0
Causeway Coast and Glens	1,050	11.7
Fermanagh and Omagh	660	9.1
Ards and North Down	860	8.9
Newry, Mourne and Down	960	8.7
Armagh City, Banbridge and Craigavon	1,020	7.7
Mid and East Antrim	660	7.6
Antrim and Newtownabbey	560	6.3
Mid Ulster	580	6.3
Lisburn and Castlereagh	530	5.9

Source: DfE, NINIS

Steps to Success (StS) is a government training course compulsory for those claiming unemployment benefit for over 6 months.

The training is designed to develop skills and experience required to gain and sustain employment.

In North 3,160 residents participated with StS, accounting for 17 in every 1,000 16-64 year olds.

The rate of enrolments varies across the LGDs which comprise North ranging from 11.7 residents in every 1,000 16-64 year olds within Causeway Coast and Glens to 21.9 in Derry City and Strabane (the highest rate among LGDs).

It should be noted that numbers are inextricably linked to employability of local residents and therefore the rate is higher in areas where unemployment is higher.

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Summary of post secondary education

Subject studied at HE - In North 46% of HE qualifiers have studied a STEM related subject, higher than the NI average of 44%. This is driven by the rate in Derry City and Strabane which is the highest across NI LGDs where, 48% of HE qualifiers are from STEM related subjects.

Current versus future subject profile - There are some imbalances between the current and projected subject mix required from NQF level 6+ qualifiers. For example, currently 13% of North HE leavers qualify in maths, computing, engineering or technology. This is 9 percentage points below the forecast requirement of 21% of NQF level 6+ qualifiers.

Destination of employed HE qualifiers - Assuming NI rates apply to North residents it is estimated 640 NI domiciled HE qualifiers per annum will be lost to working outside NI over the coming decade (2017-2027). This equates to a total loss of 6,990 HE qualifiers over the next decade.

Qualifications of FE leavers - In North FE leavers are less likely to be qualifying from lower level courses relative to the NI average. For example, FE leavers achieving below NQF level 2 in North is lower than the NI average, 49% and 57% respectively. North qualifiers are also more likely to qualify from NQF level 3 relative to the NI average, 40% and 32% respectively.

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Summary of post secondary education (continued)

Destination of FE leavers - It is estimated almost half (49%) of North's FE qualifiers proceed to employment and 35% to further study. However, the destination of FE leavers varies across qualification profiles. For example, over one fifth (21%) of NQF level 2 and below qualifiers are estimated to proceed to worklessness, whereas this figure drops to 11% for NQF level 3+ qualifiers. On the other hand 18% of NQF level 1 qualifiers are estimated to move into further study, this figure increases to 45% for NQF level 3 qualifiers.

TfS - In North 10% of 16-17 year olds participate within TfS government training scheme, this equates to 780 individuals. The rate of participation is equal to the NI average. However, it varies from a high of 14% in Derry and Strabane to 6% in Causeway Coast and Glens (the lowest rate among LGDs). Despite average school attainment levels, Derry City and Strabane holds the second highest participation rate on TfS, second only to Belfast.

Essential skills - Almost one in five (17%)15-24 year olds within North are enrolled on an essential skills course, 2 percentage points above the NI average. This is driven by Derry City and Strabane constituting the highest rate (18%) among NI LGDs.

StS - This government training course accounts for 17.0 in every 1,000 individuals in North, a total of 3,160 individuals. The figure is influenced by a rate of 21.9 per every 1,000 individuals in Derry City and Strabane, the highest rate among LGDs.

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Supply side – Causal factors

Over one in five children fail to achieve basic reading, writing and communication skills

Key Stage 2 assessment results, LGDs (2012)

	Communication in English			Using maths		
	Pupils achieving level 4 or above (%)	% of wards in lowest performing quartile	% of wards in lowest performing decile	Pupils achieving level 4 or above (%)	% of wards in lowest performing quartile	% of wards in lowest performing decile
Antrim and Newtownabbey	78%	10%	7%	79%	9%	9%
Armagh City, Banbridge and Craigavon	77%	9%	9%	79%	9%	6%
Belfast	72%	23%	33%	74%	19%	15%
Causeway Coast and Glens	77%	9%	9%	78%	10%	6%
Derry City and Strabane	79%	6%	2%	79%	9%	6%
Fermanagh and Omagh	79%	9%	7%	81%	8%	13%
Lisburn and Castlereagh	79%	9%	7%	80%	8%	17%
Mid and East Antrim	77%	9%	9%	78%	12%	6%
Mid Ulster	79%	4%	9%	81%	6%	4%
Newry, Mourne and Down	81%	3%	2%	81%	5%	11%
Ards and North Down	77%	10%	9%	78%	7%	4%
Northern Ireland	77%	100%	100%	79%	100%	100%
North	78%	15%	11%	79%	18%	15%

**Source:** Department of Education

Literature suggest communication (reading, writing, talking and listening) is an important skill in the early stages of a child's education. According to research families can arguably have a greater impact on children's development than the school system and that this influence contributes to gaps between children before they start school.

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The level of education of parents has a more significant impact than income levels

Qualification profile of mothers (of children aged 7), LGDs (2011)

Female parents (of seven year old children) with highest qualification below NQF level 2, LGDs (2011)

Region	% school leavers
Lisburn and Castlereagh	~23%
Ards and North Down	~26%
Armagh, Banbridge and Craigavon	~28%
Newry, Mourne and Down	~29%
Fermanagh and Omagh	~29%
Antrim and Newtownabbey	~30%
Mid and East Antrim	~30%
Mid Ulster	~31%
Northern Ireland	~31%
Causeway Coast and Glens	~32%
North	~35%
Derry and Strabane	~39%
Belfast	~40%

% school leavers

Source: NI census 2011
Note: Below NQF level 2 includes 'other qualifications not included in the NQF framework, in addition to apprenticeships that are not defined by NQF level

Qualification profile of mothers (of seven year old children), North vs NI (2011)

- Level 4 qualifications and above
- Level 3 qualifications
- Level 2 qualifications
- Level 1 qualifications
- Other qualifications
- No qualifications

Higher concentration in North ← → Higher concentration in NI

Percentage point difference NI minus North

Source: NI census 2011

Longitudinal research undertaken in the US, UK, Australia and Canada by Bradley et al. (2015) estimates that parents with higher levels of educational attainment are 20%-25% more likely to read to their children everyday than those with low levels of education attainment. In North, 35% of mothers have a highest level of qualification equal to NQF level 2 or below, compared to 31% in NI as a whole.

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# Adult skills and parental aspiration is a significant factor in a young persons education journey

School attainment (2015/16), adult skills (2011) and HE participation (2015/16), North SOA's

% school leavers not achieving 5+ GCSEs including English and maths (2015/16) versus % of 25-64 population with low or no qualifications (2011) , North SOA's

$$y = 0.847x + 0.0082$$
$$R^2 = 0.4652$$
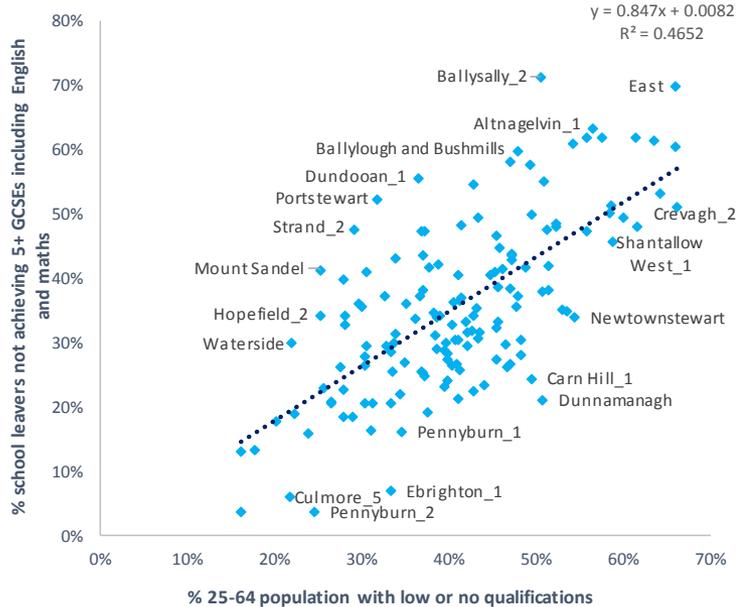
Source: NI Multiple Deprivation Measure

% 18-21 population not enrolled in HE course at HE or FE (2015/16) versus % of 25-64 population with low or no qualifications (2011) , North SOA's

$$y = 0.6645x + 0.3561$$
$$R^2 = 0.5524$$
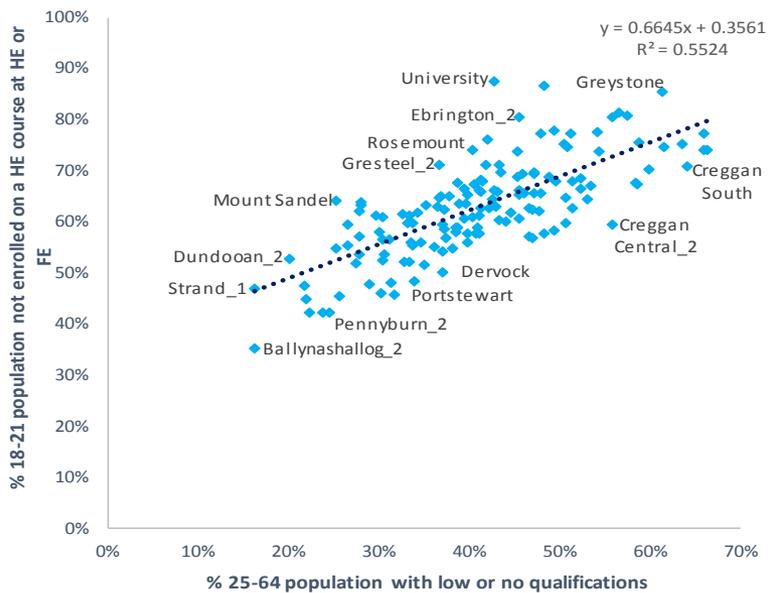
Source: NI Multiple Deprivation Measure
Note: SOAs where no data is available have been excluded

Research from Millennium Cohort study (MCS) highlights 80% of the richest fifth of mothers expect their child to go to University but the figure falls to 40% for the poorest mothers. In North there is a correlation between the rate of young adults not enrolled in a HE level course and the rate of adults with low or no qualifications. In addition, there is a correlation between poor school attainment and low adult qualifications.

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Lone parents are linked to factors which adversely affect childhood education

School attainment (2013/14-2015/16) and mothers characteristics (2016, LGDs) (2014-15, Wards), North

% school leavers not achieving 5+ GCSEs including English and maths (2013/14-2015/16) versus % of births to unmarried mothers (2014-2015), North Wards

y = 0.3663x + 0.1812
R² = 0.3087

Source: NI Multiple Deprivation Measure
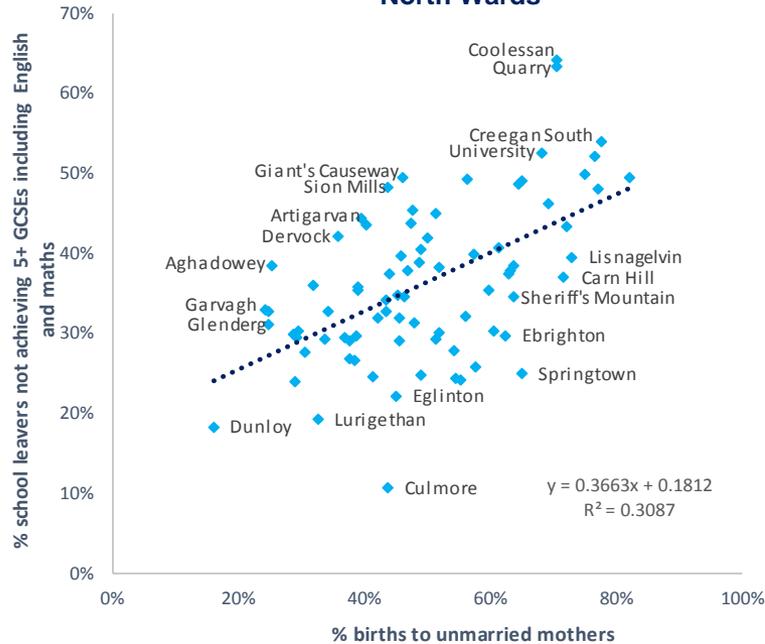
Birth rates mothers demography and household structure, LGDs (2016)

LGD	Birth rate per 1,000 female population aged 15-44	Births to teenage mothers (%)	Births to unmarried mothers (%)	Births to single parent homes (%)
Antrim and Newtownabbey	63.5	3.4%	43.2%	22.9%
Armagh City, Banbridge and Craigavon	72.3	2.7%	40.0%	19.8%
Belfast	61.8	5.3%	57.6%	41.1%
Causeway Coast and Glens	62.0	3.3%	47.2%	28.6%
Derry City and Strabane	66.3	3.3%	55.8%	44.3%
Fermanagh and Omagh	70.4	1.7%	30.3%	16.5%
Lisburn and Castlereagh	66.6	2.8%	34.7%	16.8%
Mid and East Antrim	62.6	3.6%	41.7%	23.8%
Mid Ulster	73.8	2.4%	31.1%	15.8%
Newry, Mourne and Down	73.1	2.1%	37.9%	22.3%
Ards and North Down	59.1	3.2%	39.6%	18.5%
Northern Ireland	66.2	3.3%	43.5%	26.4%
North	64.3	3.3%	51.9%	37.2%

Source: NISRA, ONS

Note: Single parent homes are calculated through the aggregation of joint registrations at different address and sole resistrations, divided by the total number of births.

Research highlights lower cognitive ability in children within lone parent households, relative to those where both parents live together. Further, lone parents are also more likely to be in relative income poverty (40%) and so are disproportionately affected by factors associated with households in poverty. In North the rate of births to single parent homes is 37% - 11 percentage points above the NI average of 26%.

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Experiences of poverty linked to educational attainment from a young age

School attainment (2015/16) and FSME (2015/16), North Wards/LGDs

% school leavers not achieving 5+ GCSEs including English and maths (2013/14-2015/16) versus % of pupils receiving FSME (2013/14-2015/16), North Wards

$$y = 0.4878x + 0.2187$$
$$R^2 = 0.4253$$

Source: NI Multiple Deprivation Measure

% of school leavers in receipt of FSM, LGDs (2015/16)
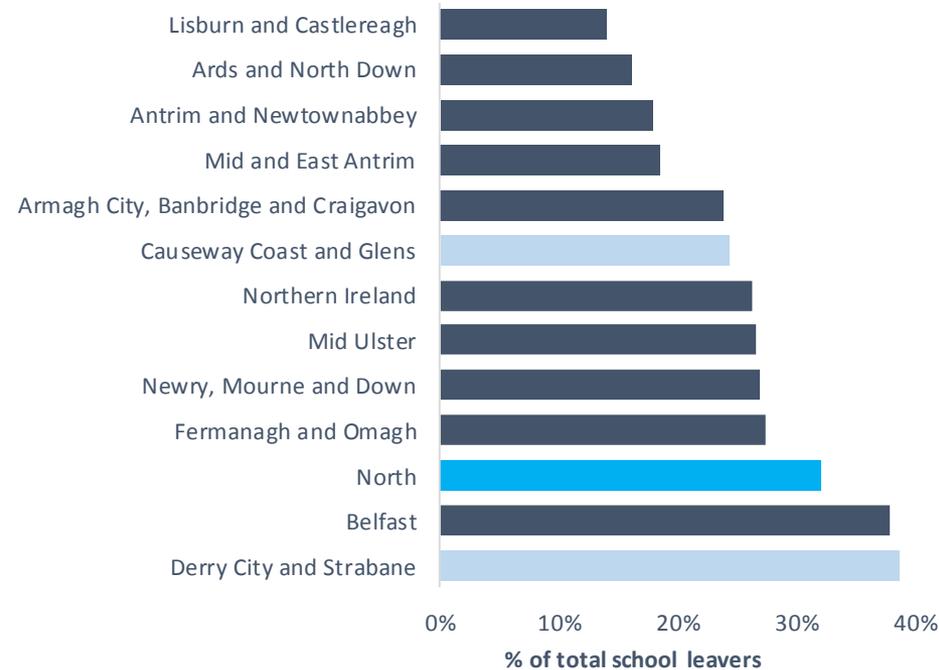
Source: NI school leavers survey

The MCS highlighted that 65% of children who experienced poverty persistently had a vocabulary level below the NI average at age five, compared to 38% of children who never experienced poverty. In North there is a high proportion of school leavers in receipt of FSME relative to NI, 32% and 26% respectively. This is driven by a rate of 39% in Derry City and Strabane, the highest among LGDs.

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Parental worklessness is negatively associated with educational attainment

School attainment (2015/16) and employment deprivation (2015/16), North SOA's

**% school leavers not achieving 5+ GCSEs including English and maths (2015/16) versus % of working age population employment deprived (2015/16), North SOA's**

$y = 0.7431x + 0.162$
$R^2 = 0.3554$

Y-axis: % school leavers not achieving 5+ GCSEs including English and maths

X-axis: % working age population employment deprived

Labels: Ballysally_2, East, Altnagelvin_1, Ballylough and Bushmills, University, Crevagh_2, Shantallow, The Cuts_2, Aghnaloo_2, Dunluce, West_1, The Diamond, Westlland, Shantallow East, Hopefield_2, Carn Hill_1, Greesteel_1, Pennyburn_1, Strand_1, Culmore_1, Ebrighton_1, Pennyburn_2
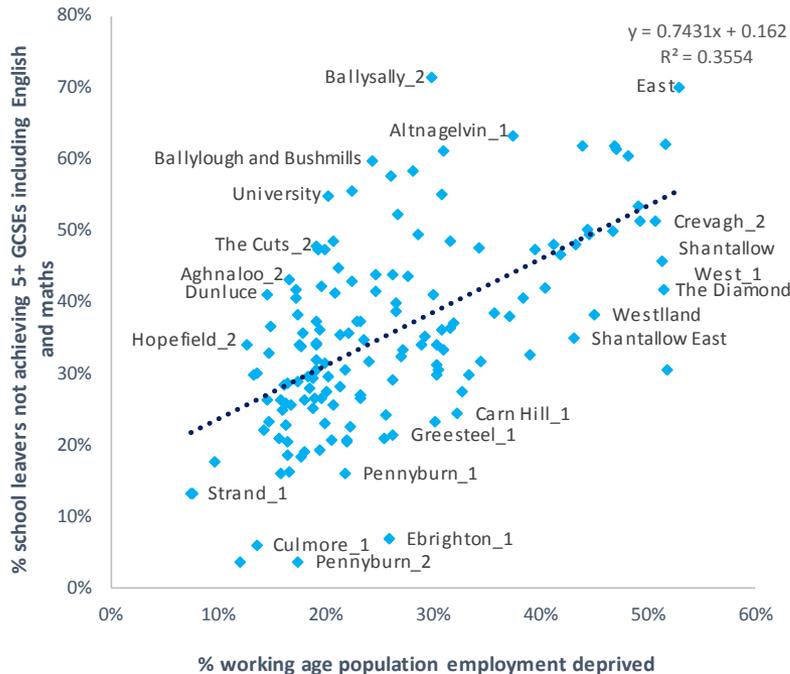
Source: NI Multiple Deprivation Measure

Note: Employment deprived is defined as proportion of working age population who are in receipt of at least one employment related benefit, and individuals who are not in receipt of an employment related benefit, nor have received income from employment

Comparison between relative size of LGDs and the proportion of the working age population who are employment deprived (2015/16)

	% of total SOAs	% of SOAs in lowest performing quartile	% of SOAs in lowest performing decile
Antrim and Newtownabbey	8%	5%	2%
Armagh City, Banbridge and Craigavon	10%	6%	6%
Belfast	20%	37%	54%
Causeway Coast and Glens	8%	6%	2%
Derry City and Strabane	8%	17%	26%
Fermanagh and Omagh	6%	5%	3%
Lisburn and Castlereagh	8%	1%	0%
Mid and East Antrim	7%	5%	1%
Mid Ulster	7%	3%	0%
Newry, Mourne and Down	9%	9%	4%
Ards and North Down	10%	5%	1%
Northern Ireland	100%	100%	100%
North	16%	23%	28%

Source: NI multiple deprivation measure

The correlation between poor school attainment and high employment deprivation highlights worklessness in local communities as a factor holding back school achievements. In North there is a disproportionate number of employment deprived SOA's as the region accounts for 16% of total SOA's but 28% in the lowest performing decile.

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Summary of causal supply side factors*

KS2 assessment results - Communication (reading, writing, talking and listening) is an important skill in the early years of a child's education.

Over one in five (22%) children that reside in North fail to achieve what is essentially basic reading writing and communication skills, compared to 23% in NI as a whole. Proficiency in numeracy skills show a similar pattern, 21% of North residents do not achieve proficiency level 4 or above, equal to the NI average.

Influence of parents education - Research indicates the educational attainment of parents is a strong predictor in the educational performance of children. In North, 35% of female parents (of seven year old children) have a highest qualification level below NQF level 2, that is 4 percentage points above the NI average.

At detailed geographies (SOA's) bivariate analysis highlights positive correlations between: low adult qualification levels and higher rates of poor school attainment; and low adult skill levels and higher rates of young adults not enrolled in a HE level course.

* A full set of correlations is provided in Annex C.

Household structure - Advanced countries have experienced increases in the rate of single parent households in recent decades. Research highlights characteristics of lone parent households are often linked to factors which negatively affect children's education performance, particularly in the early years (e.g. low income, low qualifications etc.).

In North there a high proportion of births are to single parent homes (37%) compared to NI as a whole (26%). Among the LGD's which constitute North this figure ranges from 44% of births to single parent homes Derry City and Strabane (highest proportion across all NI LGD's) to 29% in Causeway Coast and Glens.

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Summary of causal supply side factors (continued)

Parental worklessness - The strong correlation between poor school attainment and employment deprivation across detailed geographical boundaries highlights the impact of worklessness on educational achievements.

In North there is a disproportionate affect as the region hosts 16% of total NI wards but 23% in the lowest performing decile of employment deprivation.

Poverty and education attainment - Research highlights experiencing poverty has a negative impact on children's vocabulary ability in early years (MCS). In North there is a disproportionately higher rate of disadvantaged pupils (as defined by FSME).

As skills represents the most effective route out of poverty it is important that tackling low performance in these 'left behind' areas is a priority for an economy with an aspiration of promoting inclusive growth.

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Can North's residents service tomorrow's skills needs?

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The missing middle

Net requirement vs qualification profile (NQF) of labour market entrants, North (2017-2027)

■ North - entering the labour market (%)　■ North - net requirement (%)

- NQF Level 6+
- NQF Level 4-5
- NQF Level 3
- NQF Level 2
- Below NQF Level 2

0%　10%　20%　30%　40%
% of total
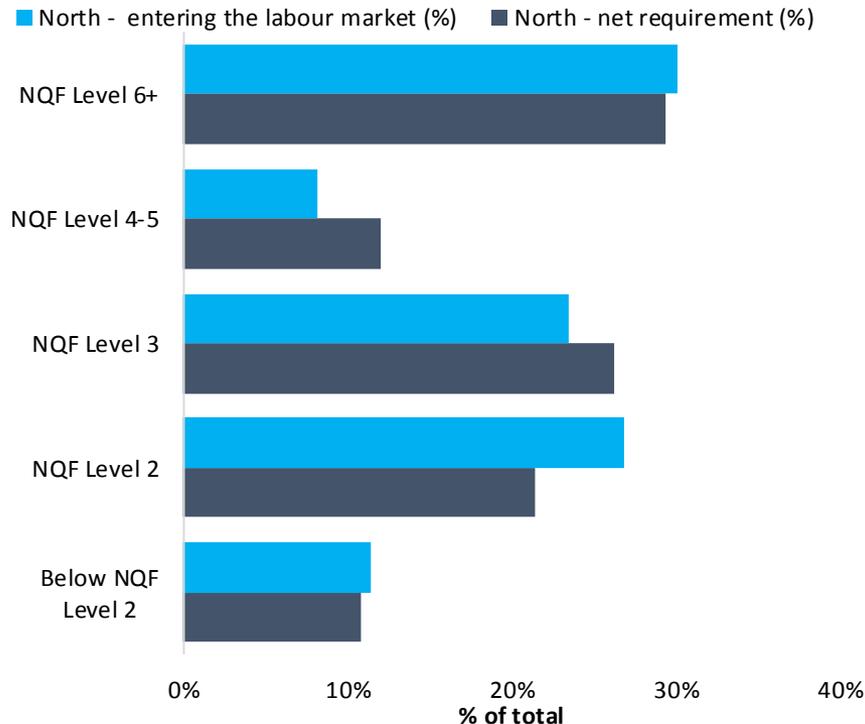
Source: UUEPC

In total 14,200 North residents per annum are forecast to gain qualifications over the coming decade and 7,430 of such are projected to enter the labour market.

Benchmarking the skills profile of net requirement against those entering the labour market outlines:

- A general alignment at high-level skills (NQF level 6+) suggesting the subject mix may be more of an issue here.

- A shortage of mid-level skills (NQF level 3-5) driven by over two fifths (43%) of qualifiers across these levels proceeding to further study (as opposed to entering the labour market) after qualifying.

- An over supply of low-level skills (NQF level 2 and below) as 38% of qualifiers entering the labour enter market at this level, compared to a net requirement of 32%.

Labour market supply by qualification level (NQF), North (2017-2027, annual average)

	School leavers		FE leavers		HE leavers		Total	
	Total leavers	Entering labour market	Total leavers	Entering labour market	Total leavers	Entering labour market	Total leavers	Entering labour market
Below NQF level 2	630	280	920	570	*	*	1,550	850
NQF level 2	950	270	2,860	1,720	*	*	3,810	1,990
NQF level 3	2,090	210	3,100	1,530	*	*	5,190	1,740
NQF level 4 - 5	*	*	770	450	220	170	990	620
NQF level 6	*	*	10	0	2,040	1,670	2,050	1,670
NQF level 7 - 8	*	*	0	0	610	560	610	560

Source: UUEPC

Note: * refers to not applicable

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The skill balance varies across the North region

Net requirement versus supply, North DEA's (2017-2027)

Percentage point difference in demand and supply by NQF level 6+, North DEA's (2017-2027)

Percentage point difference in labour market supply and net requirement

Source: UUEPC
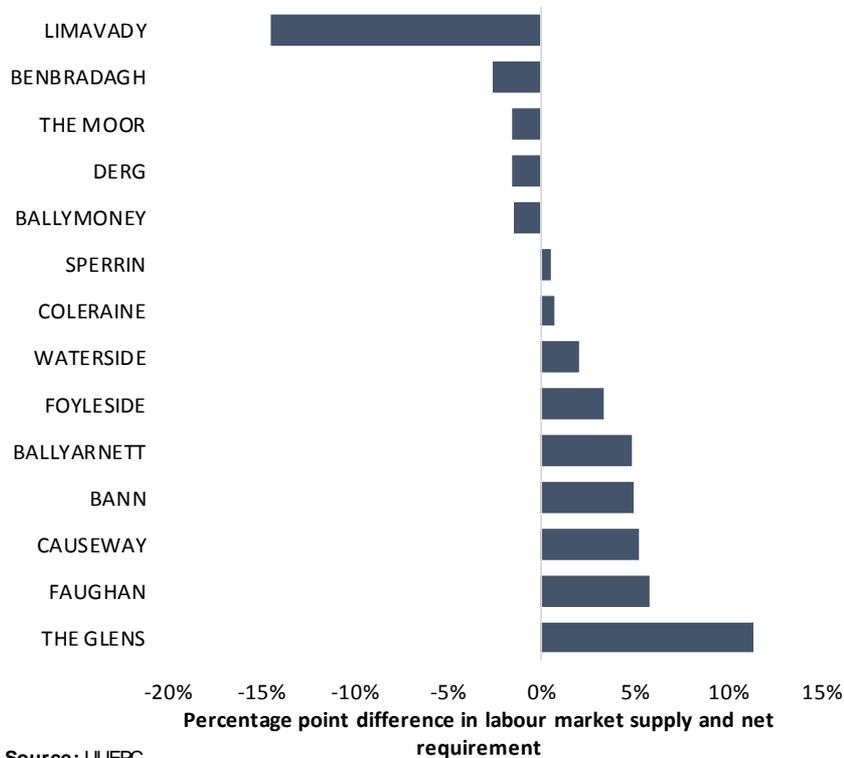
Percentage point difference in demand and supply by below NQF level 2, North DEA's (2017-2027)

Percentage point difference in labour market supply and net requirement

Source: UUEPC
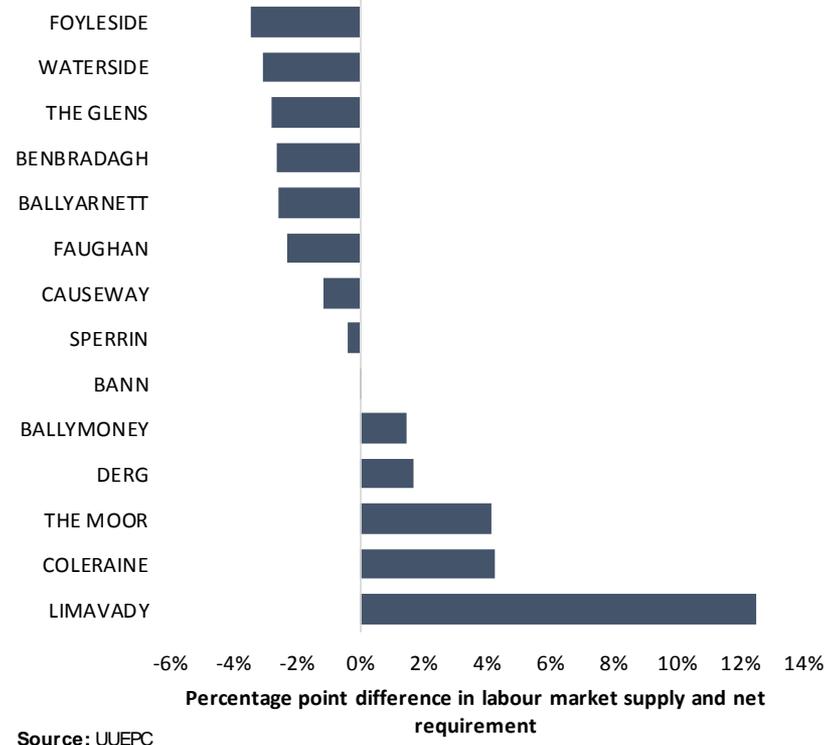
The largest gap between supply and demand at NQF level 6+ is in Limavady where supply is 14 percentage points below the net requirement. This compares to The Glens where supply of high level qualifications is 11 percentage points above the net requirement. However, it should be noted these figures refer to proportionate differences and not absolute figures.

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Diverse labour markets operate within North

Net requirement versus qualification profile of labour market entrants, Limavady and The Glens, (2017-2027)

Net requirement (North) vs skills profile of labour market entrants (Limavady) (2017-2027)

■ LIMAVADY - entering labour market ■ North - net requirement (%)

Source: UUEPC

Net requirement (North) vs skills profile of labour market entrants (The Glens), (2017-2027)

■ THE GLENS - entering labour market ■ North - net requirement (%)

Source: UUEPC
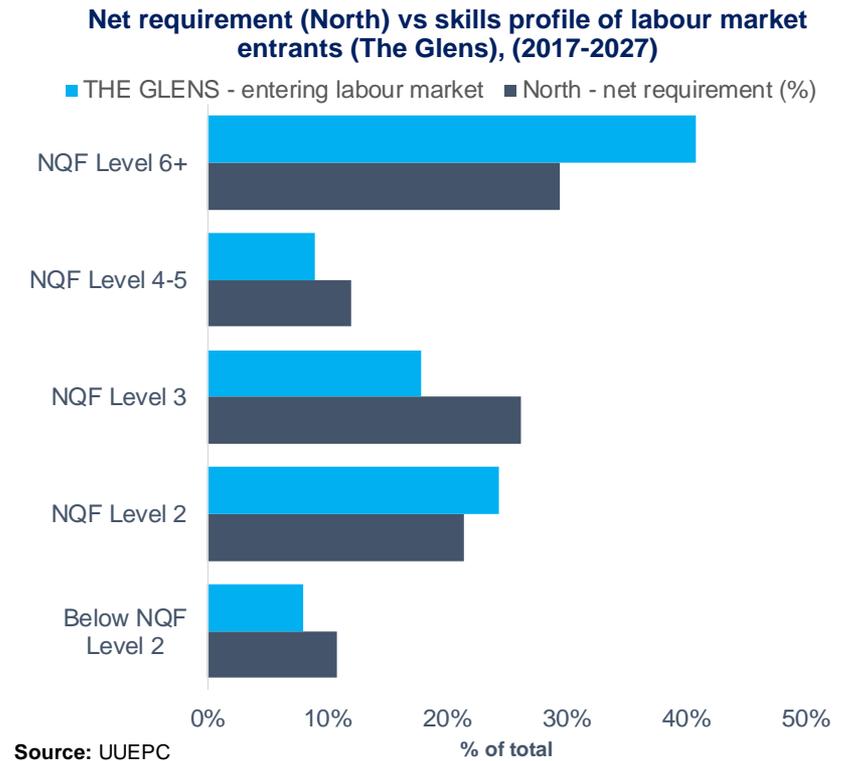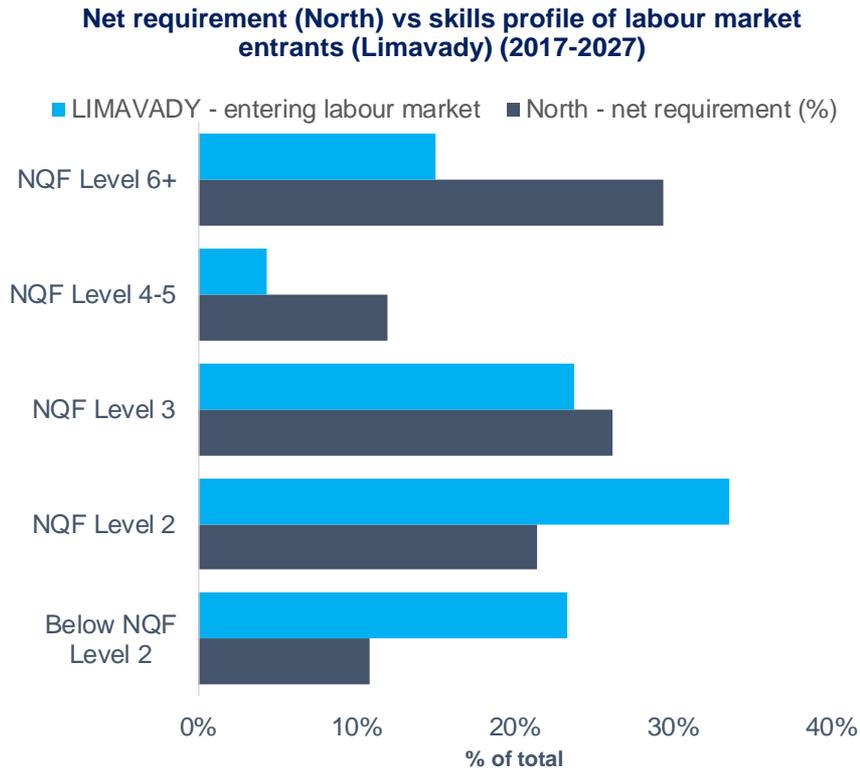
In Limavady 23% of individuals due to enter the labour market over the coming decade have below NQF level 2 qualifications, compared to only 8% in The Glens. On the other hand, in Limavady 15% of individuals due to enter the labour market over the coming decade are expected to have NQF level 6+ qualifications, compared to 41% in The Glens. These differentials highlight the contrast in educational outcomes across Derry City and Strabane and Causeway Coast and Glens.

Economic and social challenges must be overcome to improve the skills flow and skills stock

Scorecard (1= top performing in NI, 80= bottom performing in NI), Derry City and Strabane DEA's

Derry City and Strabane	Sperrin	Foyleside	The Moor	Ballyarnett	Derg	Waterside	Faughan
Skills flow							
% of school leavers achieving 5 GCSE's (including English and maths)	60	24	72	28	61	32	14
% of school enrolments entitled to FSM	66	75	78	73	70	63	46
% of school leavers entitled to FSM achieving 5 GCSE's (including English and maths)	66	73	77	78	55	52	58
% of FE qualifiers achieving a highest level of qualification at NQF level 2 and below	9	7	10	8	31	3	2
% of FE qualifiers achieving a highest level of qualification at NQF level 2	20	5	42	9	28	3	13
Qualifiers from tertiary level education in either FE or HE as a % of the 20-24 year olds	20	69	46	10	48	29	12
% of HE qualifiers achieving a postgraduate qualification (NQF level 7-8)	70	46	79	45	51	54	27
% of HE qualifiers gaining qualifications in maths, computing, engineering & technology	50	33	30	41	4	60	17
Skills stock							
% of 16-64 population with low qualifications (Below level 2)	75	35	78	60	77	46	40
% of 16-64 population with high qualifications (NQF level 4+)	74	41	77	48	76	36	31
% of 16-34 population with low qualifications (Below NQF level 2)	65	34	76	67	70	56	46
% of 16-34 population with high qualifications (NQF level 4+)	66	49	78	72	74	41	35
Labour market and socio-economic indicators							
Social security clients (client group analysis) as a % of the population (16-64)	72	74	80	76	70	68	45
Social security clients (client group analysis) as a % of the population (16-34)	62	66	78	77	60	76	50
Housing benefit claimants as a % of the population (16-64)	66	74	80	77	59	70	44
Housing benefit claimants as a % of the population (16-34)	61	68	78	77	54	75	53
% of households with no adults in employment	73	76	80	74	68	70	26
% of households with no adults in employment with dependent children	70	74	79	80	72	66	63
% of households with lone parents with dependent children	57	74	75	79	62	71	61
% of people employed who are either managers/senior officials or professionals	68	55	77	41	72	59	22
Employment rate (%, 16-74 population)	73	76	80	75	72	69	52
Unemployed who have never worked (% of unemployed)	74	72	80	78	67	71	53

Source: NISRA, DfE, DE, 2011 Census, DfC, UUEPC

🟩 Ranked in the top 10 performing DEA's in NI

🟥 Ranked in the bottom 10 performing DEA's in NI

It is concerning that areas that have performed poorly with regard to the skills stock are also performing poorly on metrics related to the flow of skills. By implication, these areas are falling behind more affluent parts of the city and in all likelihood will continue to rank amongst the lowest performing DEA's for many years to come without some form of policy intervention.

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Economic and social challenges must be overcome to improve the skills flow and skills stock

Scorecard (1= top performing in NI, 80= bottom performing in NI), Causeway Coast and Glens DEA's

Causeway Coast and Glens		Bann	Benbradagh	Causeway	The Glens	Ballymoney	Coleraine	Limavady
Skills flow	% of school leavers achieving 5 GCSE's (including English and maths)	15	21	57	20	39	71	69
	% of school enrolments entitled to FSM	18	58	40	35	39	59	67
	% of school leavers entitled to FSM achieving 5 GCSE's (including English and maths)	38	69	15	39	30	31	60
	% of FE qualifiers achieving a highest level of qualification at NQF level 2 and below	4	1	16	29	19	48	64
	% of FE qualifiers achieving a highest level of qualification at NQF level 2	35	4	26	24	37	57	75
	Qualifiers from tertiary level education in either FE or HE as a % of the 20-24 year olds	24	50	68	18	54	61	63
	% of HE qualifiers achieving a postgraduate qualification (NQF level 7-8)	20	77	29	55	29	22	41
	% of HE qualifiers gaining qualifications in maths, computing, engineering & technology	20	20	62	57	20	59	4
Skills stock	% of 16-64 population with low qualifications (Below level 2)	41	63	23	43	55	57	73
	% of 16-64 population with high qualifications (NQF level 4+)	34	72	17	53	71	64	75
	% of 16-34 population with low qualifications (Below NQF level 2)	40	45	21	43	44	59	71
	% of 16-34 population with high qualifications (NQF level 4+)	47	58	34	59	67	73	77
Labour market and socio-economic indicators	Social security clients (client group analysis) as a % of the population (16-64)	30	63	32	47	48	62	66
	Social security clients (client group analysis) as a % of the population (16-34)	28	47	43	41	52	68	72
	Housing benefit claimants as a % of the population (16-64)	23	52	46	48	50	65	68
	Housing benefit claimants as a % of the population (16-34)	28	45	40	37	49	73	67
	% of households with no adults in employment	32	36	65	58	49	64	71
	% of households with no adults in employment with dependent children	34	67	30	48	47	62	71
	% of households with lone parents with dependent children	23	47	18	29	21	67	58
	% of people employed who are either managers/senior officials or professionals	32	71	17	47	42	49	62
	Employment rate (%, 16-74 population)	41	66	62	63	58	64	74
	Unemployed who have never worked (% of unemployed)	42	37	23	58	49	44	66

Source: NISRA, DfE, DE, 2011 Census, DfC, UUEPC

Ranked in the top 10 performing DEA's in NI

Ranked in the bottom 10 performing DEA's in NI

Note: Due to disclosure of data for % of school leavers entitled to FSM achieving 5 GCSE's (including English and maths) Benbradagh has been placed in the bottom 10 DEAs with available data.

Although Causeway Coast and Glens has a smaller number of areas amongst NI's lowest performing DEA's compared to Derry City and Strabane, Limavady ranks in the bottom ten across a number of metrics. There are also relatively few instances of DEA's in Causeway Coast and Glens ranking among the top performing DEA's across a wide range of metrics. Therefore there are economic and social challenges to overcome that will ultimately help improve the skills stock of Causeway Coast and Glens.

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Summary of skill balances

North skills balance - The number of high-skilled (NQF level 6+) individuals supplied is largely in alignment with the number demanded. However, it is important to recognise the subject mix of such qualifiers is likely to cause issue as opposed to the overall volume.

At mid-level (NQF level 3-5) there is a shortage of skills driven by fewer people studying these qualifications and subsequently moving into the labour market. Instead, it is more likely individuals who study at this level proceed into further study.

There is an oversupply of low-level (below NQF level 2) skills as 38% of qualifiers entering the labour market enter at this level, compared to 32% required through net requirement.

Diverse labour market - There are significant differences in the skill profile across North. Therefore, it is important for economic policy to ensure job opportunities are available across the qualification spectrum, enabling inclusive growth. In addition, misalignments between demand and supply across North's DEA's* highlights a need to upskill individuals in order to meet demand where required.

Understanding what works - It is evident that many of the lowest performing areas across a range of skills indicators have consistently scored poorly on a range of other socio-economic indicators. In an inclusive growth agenda policy intervention should prioritise tackling these poorly performing indicators, or such areas will continue to fall behind better performing areas.

* A scorecard for each DEA in North is provided in Annex E.

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Conclusions

Limited in-commuting in North's workplace

The commuting patterns reviewed in this research emphasised a high volume workers commute out of the North region to secure employment and relatively few workers commute to the region to for employment.

North out-commuters: North residents that work within North account for 87% of total resident employment, suggesting 13% of residents commute elsewhere. According to the Census 2011 this translated to around 13,000 workers commuting out of North to other LGD's within NI for employment. These workers typically commute out of the region for jobs within the public sector and of a relatively higher skilled nature, compared to the North workplace.

North in-commuters: North residents account for 94% of total workplace employment, suggesting 6% of workers commute to the region. According to the Census 2011 this translated to around 6,000 workers commuting to North from other LGD's within NI for employment.

The net commuting flow is an outflow of workers from North, most predominantly to Belfast and Mid and East Antrim. A continually high volume of North residents leaving the region for employment opportunities (particularly in Belfast) could have implications for future infrastructure planning and over the longer term it will be important that such labour market opportunities are available in the North region.

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Demand side growth of the North economy

Recent performance: The number of jobs in North increased by 8,840 over the 2012-2017 period, accounting for 13% of job growth in NI. In absolute terms, the largest quantum of job growth was in human health and social work, manufacturing, restaurants and hotels, other service activities and administration and support activities.

Future growth: Under a high growth scenario, future job growth (expansion demand) over the coming decade in North will be driven by high skill sectors such as health and social work professional services. This translates to high growth in science and technology occupations, which highlights the importance of education performance in STEM subject areas.

When focusing on skills forecasting it is prudent to plan for skills needs in an aspirational nature based on the ambitions of economic policy. There is a risk of oversupplying skills if the aims of economic policy are not achieved. This would involve a personal cost to individual's investing in their skills development who are unable to find suitable employment opportunities. However, this potential cost is relatively lower when considered alongside the potential cost of undersupplying skills. If businesses are unable to find the skilled labour required to expand their businesses it depresses competitiveness, productive capacity and holds back future job growth.

Forecasting in any context is never a precise science. While it is prudent to plan for high growth, it is important to undertake **contingency planning** in the event that the ambitions of economic policy are not achieved. The skills requirements based on a more conservative baseline scenario are provided in Annex A.

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Labour market flows generate job opportunities

Replacement demand: North is forecast to experience employment growth (i.e. expansion demand) in the UUEPC high growth scenario, however net replacement demand is expected to account for a much larger quantum of opportunities (e.g. replacing workers who have retired, moved to another position etc.).

Sector distribution of replacement demand: The largest sectors tend to be associated with the highest levels of replacement demand. Therefore, sectors such as health, restaurants and hotels and retail will have relatively large levels of replacement demand in the North economy. This is an important point with regard to careers advice, as sectors do not necessarily have to be growing rapidly in order to provide job opportunities.

Transitions within the labour market: A significant proportion of job vacancies are filled by people already working in the labour market (i.e. job-to-job movements). Many of the vacancies requiring lower levels of qualification are filled within the labour market rather than recruitment from the education system (net requirement).

Qualifications versus skills: Although there remains a significant proportion of people working in the labour market with low-level qualifications, they have work experience and are not necessarily low skilled. There is an insider-outsider element to the end of the labour market characterised by low qualifications. Individuals inside the labour market have some mobility to move between jobs. However, once a person with low levels of qualifications is out of work it is difficult for them to find suitable opportunities to re-engage in the labour market.

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Qualifications are increasingly important for labour market access

The net requirement from education and migration is the total number of job opportunities (expansion and replacement) which require labour from either the education system or from migration (i.e. that the demand cannot be filled from inside the existing labour market).

Sector outlook: Wholesale and retail is forecast to provide the most job opportunities in North. This is a useful example relating to the importance of replacement demand. Although wholesale and retail are forecast to create less than half as many additional jobs as professional services, it creates more job opportunities overall through higher replacement demand.

Labour demand is increasingly qualifications hungry: Of the net requirement from education and migration over the coming decade, 29% of job opportunities will require a degree level qualification (NQF level 6+). Only 11% of the net requirement from education and migration will require qualifications below NQF level 2. This suggests that it is imperative that the number of young people with low-level qualifications is minimised. Education and labour market policies that support the most vulnerable groups can bolster inclusive economic growth by equipping individuals of all backgrounds with the skills to obtain 'good' jobs.

Subject demand: The most in-demand degree subjects (NQF level 6+) are medical related subjects; business and finance; and maths and computer science. At sub-degree level (NQF level 4-5) the most in-demand subjects are health, public services and care; engineering and manufacturing technologies and business administration finance and law.

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Educational attainment in schools

School leaver attainment: In North 68% of school leavers achieved at least five GCSE's A*-C (including English and maths), marginally above NI average (68%). This figure has improved by 15 percentage points over the last 8 years, the strongest improvement across each region. However, school leavers achieving 2+ A-levels A*-E (57%) is roughly equivalent to the NI average (57%).

Tackling low achievement is a significant spatial challenge: Low education achievement is geographically concentrated, and North contains a disproportionately large number of low achieving areas. For example, 17% of the wards in NI are in North, yet 19% of the wards in the lowest performing quartile are in North.

Children in deprived households face significant challenges: Children in deprived households are identified by their FSME. Almost half (46%) of FSME children achieve 5 GCSE's A*-C (including English and maths), compared to almost four fifths (78%) of non-FSME pupils. Although the outcomes for FSME pupils has improved, the outcomes for non-FSME pupils has improved at a marginally faster rate, meaning the gap has widened in the most recent year.

Literacy and numeracy: Given the importance that employers put on literacy and numeracy skills the mix of GCSE subjects is worth consideration. In North 83% of school leavers achieve at least five GCSE's, yet only 68% achieve at least five GCSE's including English and maths. In other words, there is a significant number of school leavers who achieve NQF level 2; however, they have not achieved the key subjects of English and maths. This will cause labour market challenges as many jobs, education courses and employment programmes require English and maths for access. Many school leavers who fail to achieve English and maths will end up re-sitting these qualifications in another setting such as FE institutions.

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The determinants of education performance transcend across a range

Early intervention initiatives have the most significant influence. This is because gaps between children have already emerged prior to starting school. These gaps are influenced by multifarious economic and social factors outside the school environment.

- **Intergenerational transfer of low skills:** There is a high correlation between areas where a high proportion of school leavers are failing to achieve at least 5 GCSE's including English and maths, and the skills of the 25-64 population. This suggests that there is an increased probability of low achievement at school where parents' highest level of qualification is relatively low.

- **Socioeconomic status:** There is a strong correlation between school performance and socioeconomic indicators such as poverty (free school meal entitlement) and employment deprivation .

- **Aspiration in high deprivation areas:** The participation of young people in HE in small areas also correlates significantly with the qualifications of qualifications of the 25-64 year old population. This data highlights a lower participation rate in areas where adult skills are low, suggesting that low adult skills in an area can negatively affect the education aspiration of young people in that area.

- **Family structure:** There is a statistically significant relationship between the proportion of births to lone parents and school performance, with lone parents likely to be low achievers relative to other family types. Lone parents are a particularly vulnerable group and areas with a high proportion of lone parents tend to correlate significantly with a number of indicators relating to poverty.

These factors reinforce each other, which contributes to the geographic concentration of low achievement in discrete areas, particularly within inner city Derry as opposed to Causeway Coast and Glens. There is no single policy initiative that will solve the spatial concentration of skills deficits. Therefore, a multi-agency locally focused response is required. Without a recognised panacea to address this issue there is scope to test pilot initiatives. With high concentrations of underachievement in relatively small spatial units new approaches can be tested and rolled out to other locations if there is evidence of a demonstrable positive impact.

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Skills balances

Graduates (NQF level 6+) balances: In North the demand and supply of graduates are broadly aligned. Approximately 30% of North residents enter the labour market with an NQF level 6+ qualification compared to 29% of the net requirement. However, it should be noted there may still be a mismatch of subject requirements at this level.

Mid-level skills (NQF level 3-5): There is some misalignment between the profile of demand and supply for mid-level skills. Relatively fewer people enter the labour market with this level of qualification. In North 38% of the net requirement is related to NQF level 3-5, yet only 32% of North residents entering the labour market are qualified to NQF level 3-5. This may be linked to over four fifths (43%) of further education leavers qualified at this level returning to further study, as opposed to enter the labour market.

Low-level skills (NQF level 2 and below): There is an oversupply of qualifications associated with low NQF level qualifications. That is, 38% of those entering the labour market hold NQF level 2 or below qualifications, compared to a 32% net requirement. With employers becoming increasingly 'qualifications hungry' there are limited job opportunities that will be available to this group without further study.

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Wider considerations

Lifelong learning: The modern labour force is currently undergoing a period of transformational change, with some occupations being vulnerable to skills biased technological change. This change highlights the importance of lifelong learning to enable greater occupational mobility in the labour market.

Skills versus qualifications: There are many people in the labour market who have a low level of qualification, yet are highly skilled. In other words, people who have accumulated skills on the job but do not have a qualification on the NQF framework to recognise their skill level. Validating formal and non-formal learning strengthens an individuals incentive to invest in training, and improves the signalling power of those who are highly skilled but poorly qualified.

Applied work skills: Employer surveys consistently report a lack of basic employability skills amongst graduates. Improving the soft skills of graduates should be a shared responsibility between education providers and employers. Education providers contribute to employability skills through curriculum design, and, where possible, simulation a work environment in teaching methods. Employers enhance employability skills via effective training. The provision of work placements is one method which has proved to be very effective in improving the employability skills of graduates. However, the number of available placements provided by employers has not expanded at the same pace as higher education participation in recent years.

The cost of the long tail of underachievement: Low achievers are likely to become tied up in the education and training system for a number of years at a significant public cost. In the long run they are also more likely to become workless and generate a fiscal cost via out of work benefits. The analysis in this report has highlighted the link between socio-economic indicators and education underperformance, and the concentration of underachievement in relatively deprived small areas. As skills represents the most effective route out of poverty, tackling low performance in these 'left behind areas' must be a priority to ensure future economic growth is inclusive for all.

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Annex A: Baseline scenario

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Expansion and replacement demand under the baseline scenario

UUEPC's baseline scenario directly links to UUEPC forecasting model and is considered to be the most likely economic trajectory for the local economy.

The employment outlook in the baseline scenario is considerably lower than the high growth scenario previously presented.

Under baseline conditions there is a lower expansion demand and a larger component of labour demand comes from replacing workers who have left their position. Therefore the net replacement demand over the coming decade is forecast to be 2,370 compared to an expansion demand of 170. On average over the 2017-2027 period annual the annual net requirement from education and migration is forecast to be 690 lower compared to the high growth scenario.

Expansion demand and replacement demand (baseline scenario), North (2017-2027)

Demand category	2012-2017 (annual)	2017-2027 (annual)
(A) Gross demand	9,500	9,130
(B) Expansion demand	390	170
(C) Replacement demand	9,110	8,960
(D) Filled from within the existing labour market	6,790	6,590
(E) Net replacement demand	2,320	2,370
(F) Net requirement from education and migration	**2,710**	**2,540**

Source: UUEPC

Relationship between rows: A=B+C, E=C-D, F=E+B

Differences between the baseline and high growth scenarios are largest in forecast high growth sectors

Expansion demand and replacement demand by sector (1-digit), baseline versus high growth scenarios, North (2017-2027)

Net requirement (expansion and replacement) by sector (1-digit), (2017-2017 annual average)

Legend:
- ■ Expansion demand
- ■ Net replacement demand

Y-axis sectors (top to bottom): Mining, Elect' & gas, Finance & insurance, Real estate, Water supply & waste, Transport & storage, Public admin & defence, Agriculture, Other service activities, Professional scientific & technical, Arts & entertainment, Information & communication, Education, Construction, Admin' & support services, Manufacturing, Health & social work, Wholesale & retail, Restaurants and hotels

X-axis: **Number of people demanded** (-100, 0, 100, 200, 300, 400, 500)

Source: UUEPC

Difference between baseline and high growth scenario's by sector (1-digit), (2017-2027 annual average)

Y-axis sectors (top to bottom): Professional scientific & technical, Information & communication, Health & social work, Restaurants and hotels, Construction, Finance & insurance, Public admin & defence, Admin' & support services, Arts & entertainment, Manufacturing, Education, Agriculture, Wholesale & retail, Other service activities, Transport & storage, Real estate, Elect' & gas, Water supply & waste, People employed by households, Mining

X-axis: **Difference in baseline and high growth net requirement** (-120, -100, -80, -60, -40, -20, 0, 20)

Source: UUEPC

Under the baseline scenario the sectors with the largest net requirement from education and migration are restaurants and hotels (350 per annum) and wholesale and retail (350 per annum). The largest differences between the two scenarios are in professional services (100 less net requirement per annum under the baseline scenario) and ICT (100 less net requirement per annum under the baseline scenario).

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Replacement demand represents a higher proportion of labour demand the baseline scenario

Expansion demand and replacement demand by occupation (2-digit), baseline versus high growth scenarios, North (2017-2027)

Net requirement (expansion and replacement) by occupation (2-digit), North (2017-2027)

Legend:
- Expansion demand
- Net replacement demand

X-axis: Number of people demanded (-100, 0, 100, 200, 300)

Categories (top to bottom):
Skilled agricultural trades, Protective service occs, Mgrs & proprietors agric & services, Sales occs, Customer service occs, Caring personal service occs, Health & social welfare assoc profs, Secretarial & related occs, Culture, media & sports occs, Leisure & other personal service occs, Science & technology assoc profs, Transport & mobile machine drivers & operatives, Textiles, printing & other skilled trades, Teaching & research profs, Skilled construction & building trades, Corporate managers, Business & public service profs, Business & public service assoc profs, Administrative occs, Elementary trades, plant & storage occs, Skilled metal & electrical trades, Process, plant & machine operatives, Health profs, Science & technology profs, Elementary admin & service occs

Source: UUEPC

Difference between baseline and high growth scenarios by occupation (2 digit), North (2017-2027)

X-axis: Difference in baseline and high growth net requirement (-90, -80, -70, -60, -50, -40, -30, -20, -10, 0)

Categories (top to bottom):
Science & technology profs, Administrative occs, Elementary admin & service occs, Business & public service profs, Business & public service assoc profs, Health profs, Caring personal service occs, Corporate managers, Skilled construction & building trades, Science & technology assoc profs, Skilled metal & electrical trades, Textiles, printing & other skilled trades, Mgrs & proprietors agric & services, Process, plant & machine operatives, Culture, media & sports occs, Secretarial & related occs, Transport & mobile machine drivers & operatives, Sales occs, Skilled agricultural trades, Elementary trades, plant & storage occs, Leisure & other personal service occs, Teaching & research profs, Customer service occs, Health & social welfare assoc profs, Protective service occs

Source: UUEPC

Under the baseline scenario the occupations with the largest net requirement over the coming decade are elementary administration and service occupations (270) and science and technology professionals (250). The largest differences between the two scenarios are in science and technology professionals (80 less net requirement per annum under the baseline scenario) and administration occupations (70 less net requirement per annum under the baseline scenario).

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The percentage distribution of the net requirement is similar in both scenarios but absolute numbers vary significantly

Average annual net requirement by qualification (NQF) baseline versus high growth scenario, North (2017-2027)

	Baseline	High growth
NQF Level 6+	690	950
NQF Level 4-5	300	390
NQF Level 3	680	850
NQF Level 2	570	690
Below NQF 2	310	350

Net requirement per annum (2017-2027)

Source: UUEPC

27% of the net requirement **in the baseline scenario** require degree level qualifications.

Total **baseline** = 2,550 p.a.

Only 12% of the net requirement **under the baseline scenario** will require qualifications below NQF level 2
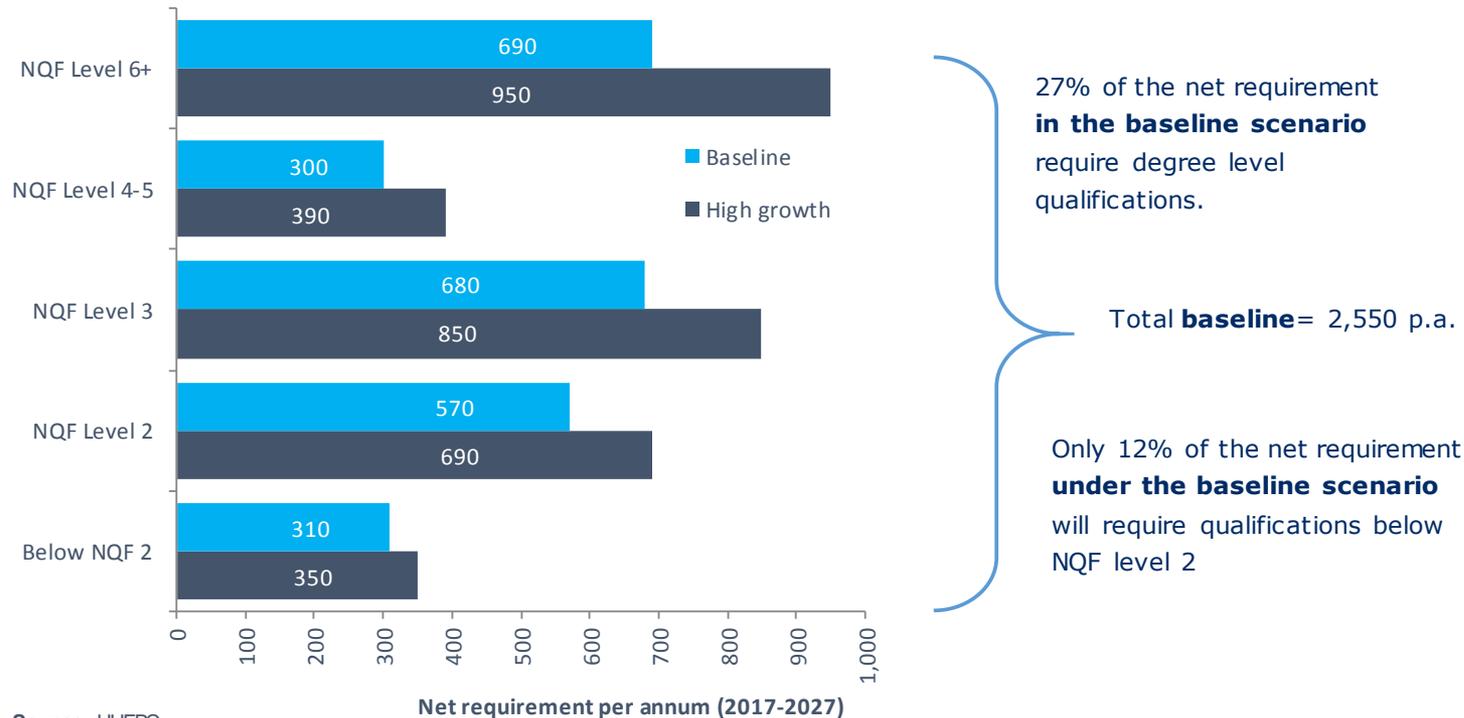
The profile of skills demand across the two scenarios is relatively similar. Under the baseline scenario 27% of the net requirement is associated with qualifications at NQF level 6+, compared to 29% in the high growth scenario. However, in absolute terms there are 260 fewer people per annum demanded at NQF level 6+ under the baseline scenario. Similarly, although the proportions of people demanded below NQF level 2 are relatively similar under both scenarios (12% and 11% respectively), the absolute number of people demanded is 13% lower in the baseline scenario.

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The largest NQF level 6+ subject in demand under baseline conditions is maths and computer science

Average annual net requirement by NQF level 6+, baseline versus high growth scenario, North (2017-2027)
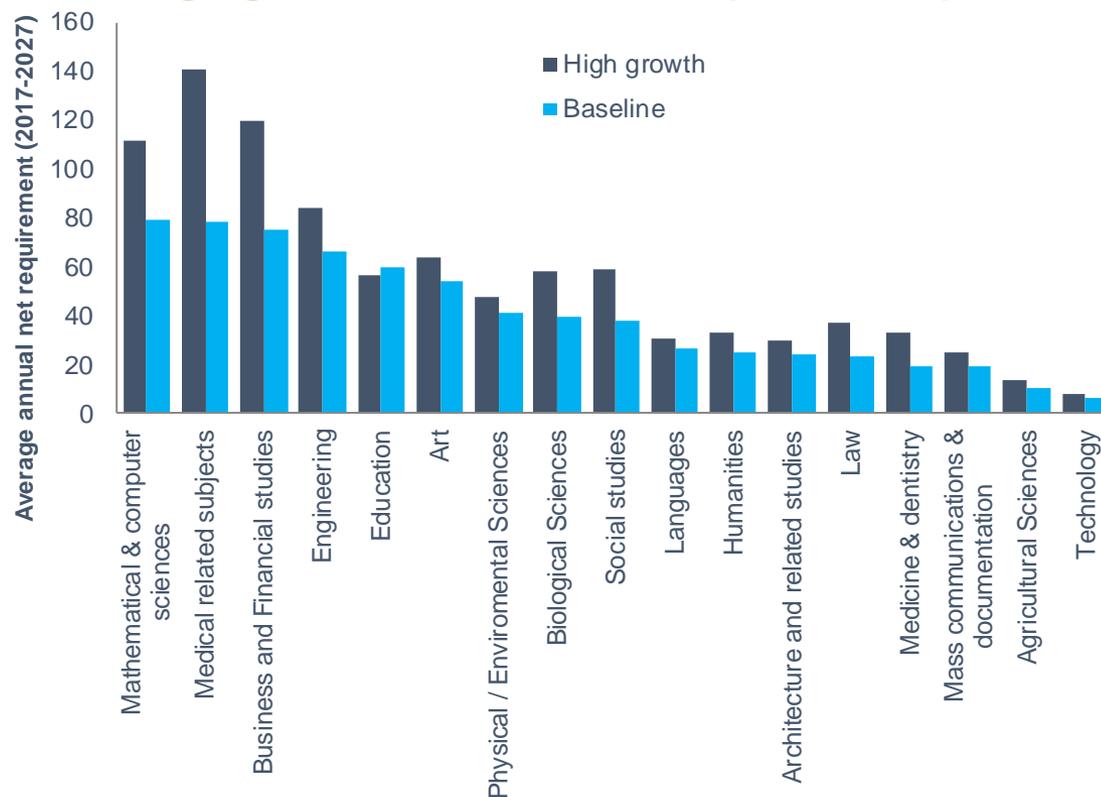
Source: UUEPC

Under baseline conditions, over the next decade the largest subject in demand for NQF level 6+ degree programmes and above is medical related subjects representing 12% of the NQF level 6+ demand. Compared to the high growth scenario the absolute number of people demanded from medical related subjects at NQF level 6+ is 41% lower under the baseline scenario.

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Health, public services and care is the most in-demand subject at NQF level 4-5 under baseline conditions

Average annual net requirement by NQF level 4-5, baseline versus high growth scenario, North (2017-2027)
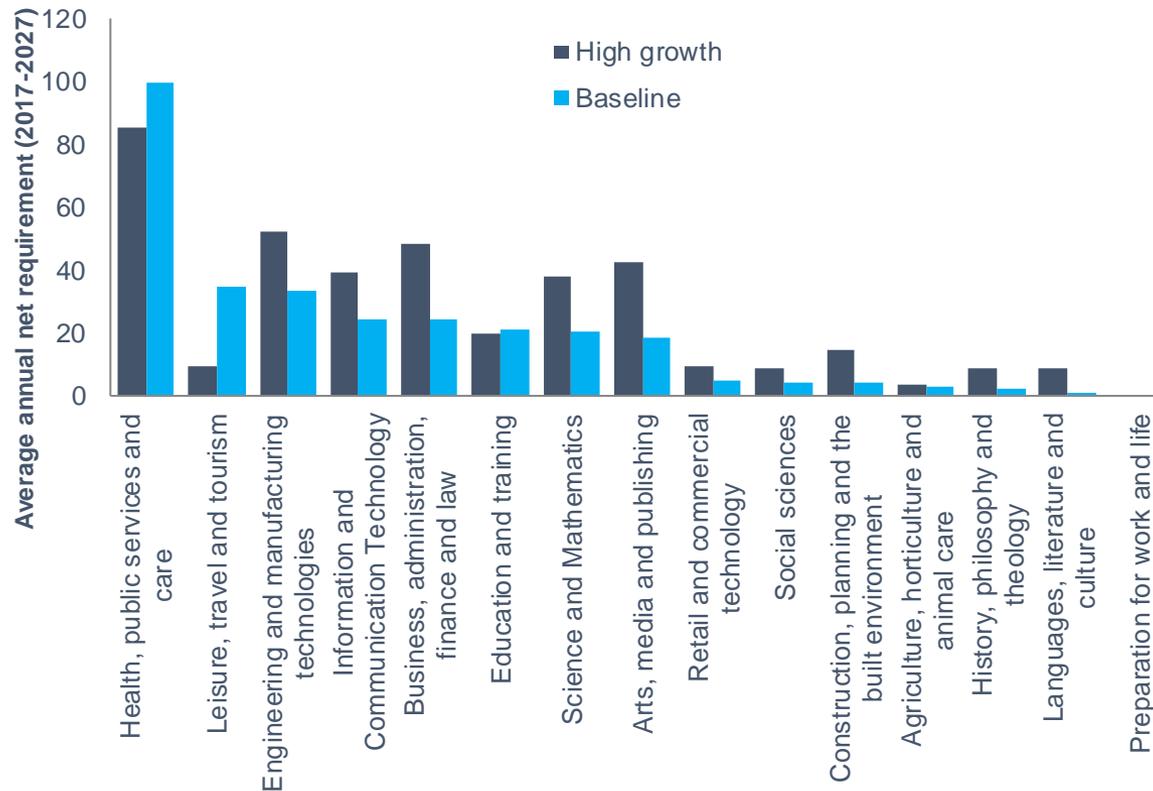
Source: UUEPC

Under baseline conditions, over the next decade the largest subject in demand for sub-degree programmes at NQF level 4-5 is health, public services and care at 100 persons per annum, representing 34% of the NQF level 4-5 demand. This is followed by and leisure, travel and tourism (35 qualifiers per annum) and engineering and manufacturing technologies (30 qualifiers per annum).

An oversupply of degree level and low qualifications but a shortage of sub-degree tertiary level qualifications

Net requirement versus qualification profile of labour market entrants, North (2017-2027)

■ North - entering the labour market (%)　　■ North - net requirement (%)
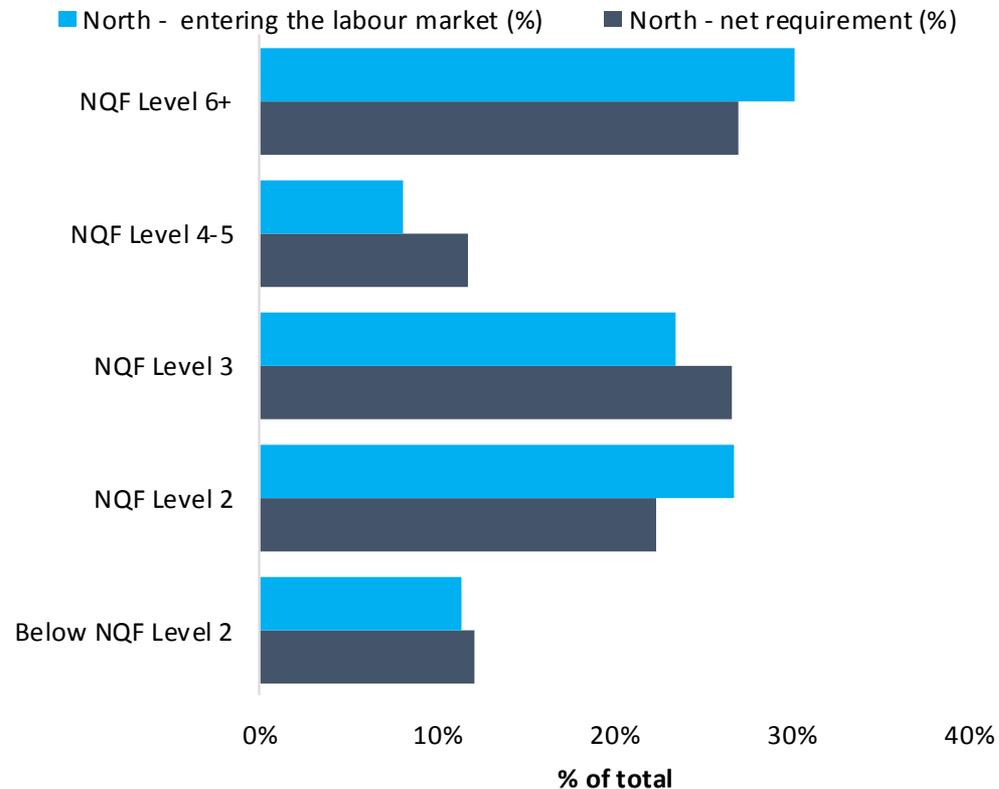
Source: UUEPC

Proportionately there is a marginal oversupply of degree level and above qualifiers entering into the labour market relative to the net requirement under baseline conditions, 27% and 30% respectively. There is also an undersupply of NQF level 3-5 qualifications entering the labour market, relative to the forecast demand, 32% and 38% respectively.

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The largest subject gap in current and future skills is in maths, computing, engineering and technology

The largest gaps in current and future skills exist in maths, computing, engineering and technology (-9 percentage points). This suggests that the current subject mix is currently out of sync with the subject demand for high-level skills under the baseline scenario.

It is important to remember that this analysis simply compares the percentage distribution of the demand and supply of skills.

Under baseline conditions, despite there being a clear difference in the subject distribution between the demand and supply, with a lower number of graduates demanded overall under baseline conditions there is unlikely to be a skills shortage in this area.

Distribution of current versus net requirement by NQF level 6+ and subject, North (2017-2027)

	% distribution of qualifiers (2015)	% distribution of net requirement (2017 - 2027)	p.p. difference
Medicine, denistry, subjects allied to medicine	19%	14%	5%
Biological, veterinary, agricultural & physical sciences	14%	13%	1%
Maths, computing, engineering and technology	13%	22%	-9%
Social studies & law	13%	9%	4%
Business, administration, mass communication and documentation	14%	14%	1%
All other disciplines	27%	28%	-1%

Source: NINIS

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Annex B: Maps

Annex B1: School leaver attainment by North wards (2013/14-2015/16)

School leavers (%) achieving 2+ A-levels A*-E, North wards (2013/14-2015/16)

School leavers (%) achieving 5+ GCSEs A*-C including English & maths, North wards (2013/14-2015/16)
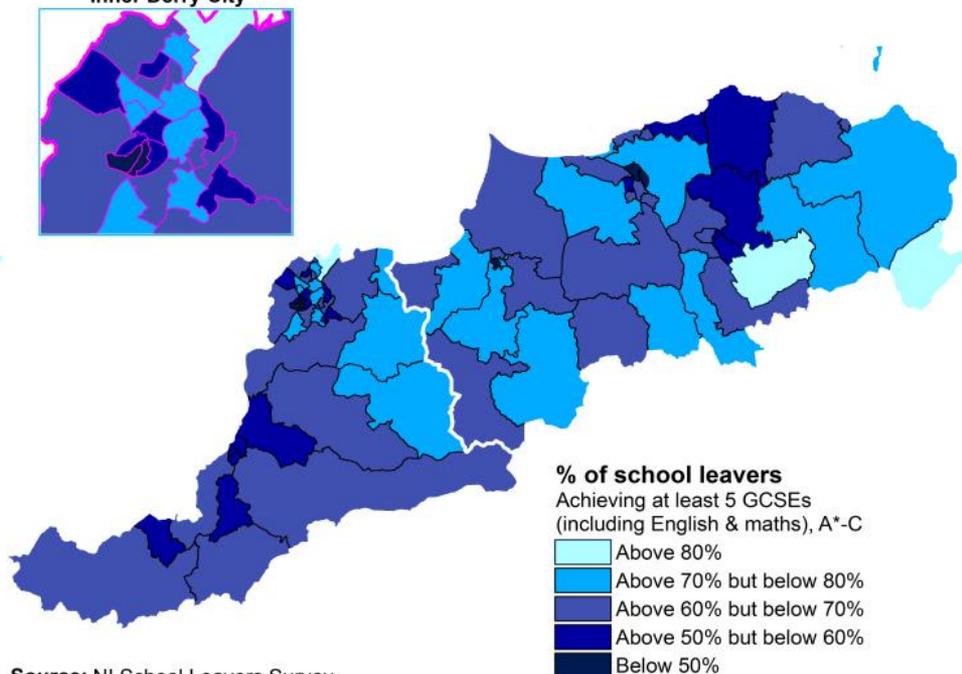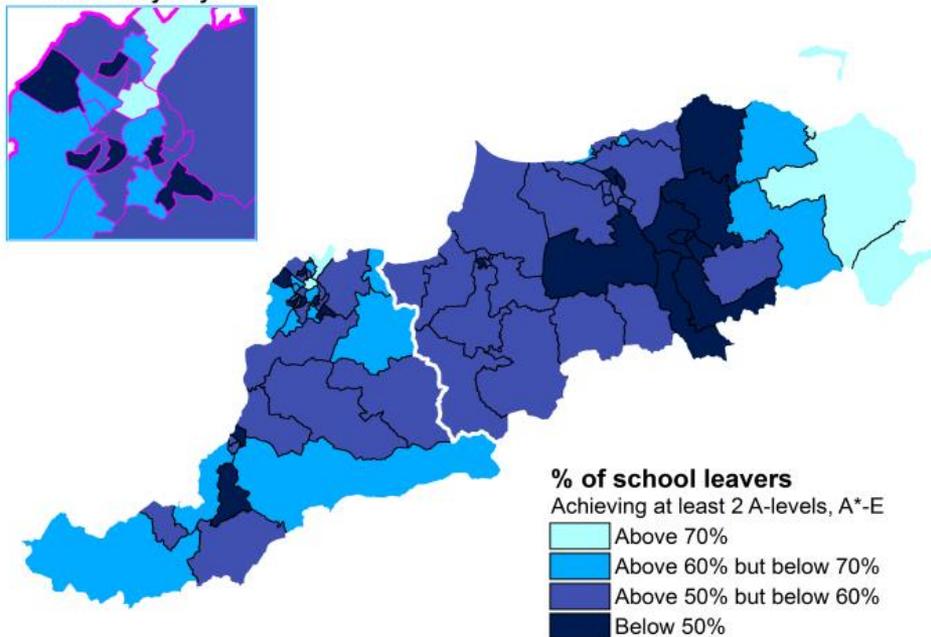
Annex B2: School leaver attainment by North wards (2013/14-2015/16)

School leavers (%) achieving 5+ GCSEs A*-C, North wards (2013/14-2015/16)

Inner Derry City

% of school leavers
Achieving at least 5 GCSEs, A*-C
- Above 85%
- Above 80% but below 85%
- Above 75% but below 80%
- Below 75%
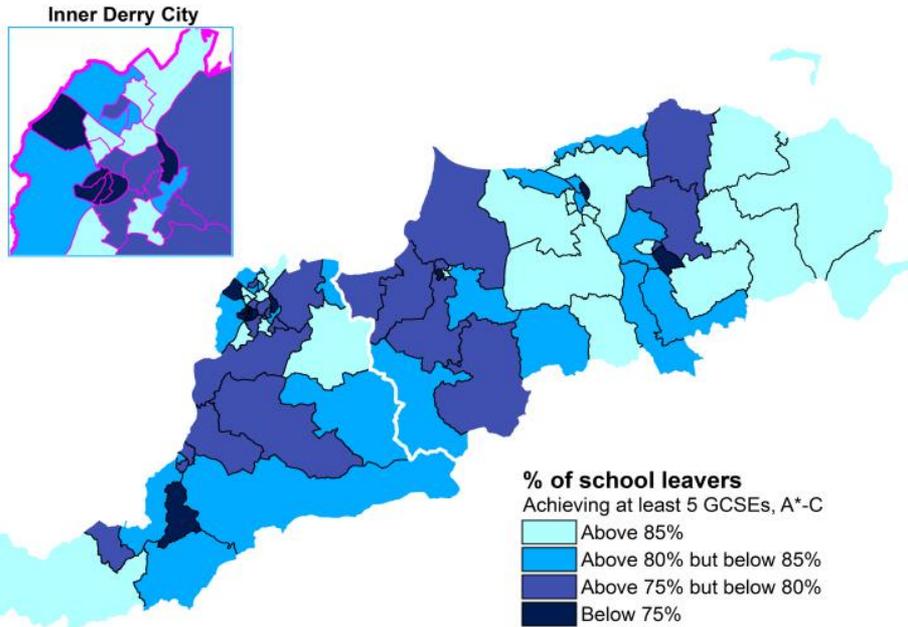
Source: NI School Leavers Survey

School leavers (%) not achieving 5+ GCSEs A*-C, North wards (2013/14-2015/16)

Inner Derry City

% of school leavers
Not achieving at least 5 GCSEs, A*-C
- Above 30%
- Above 20% but below 30%
- Above 15% but below 20%
- Below 15%
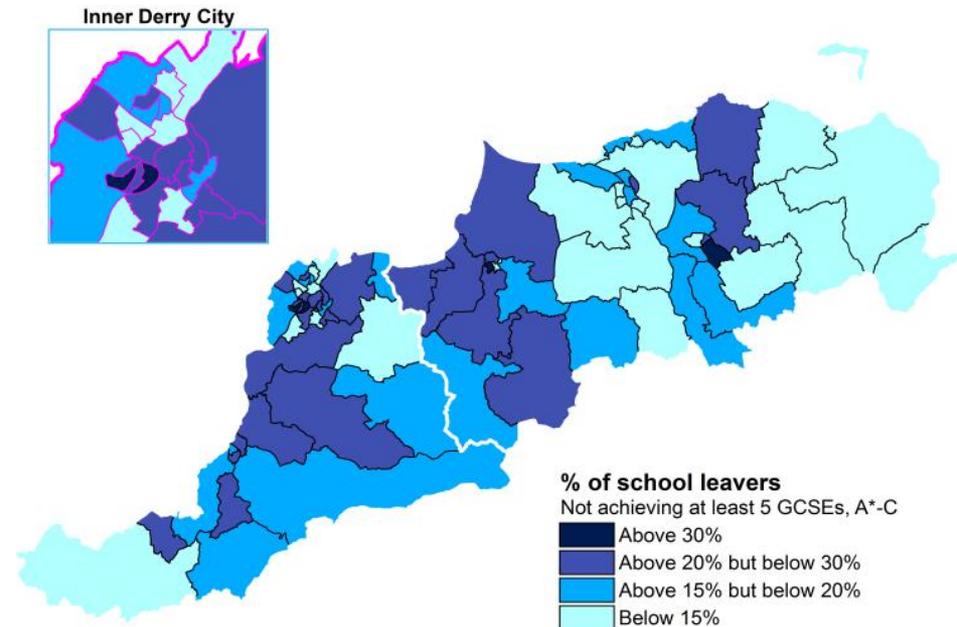
Source: NI School Leavers Survey

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Annex B3: Highest qualification below NQF level 2 (2011) versus school leavers not entering education, employment or training (2013/14 to 2014/15), North DEA's/SOA's

Working age population (%) with NQF level 2 or below, North DEA's (2011)

School leavers (%) not entering education, employment or training, North SOA's (2013/14 to 2014/15)

% of working age population
With highest qualification below NQF level 2
- Above 45%
- Above 40% but below 45%
- Above 35% but below 40%
- Below 35%

Inner Derry City

% of school leavers aged 16-18
Not entering Education, Employment or Training (NEETs)
- Above 5%
- Above 3% but below 5%
- Above 2% but below 3%
- Above 1% but below 2%
- Below 1%

Source: NISRA, Census 2011

Source: NI Multiple Deprivation Measure

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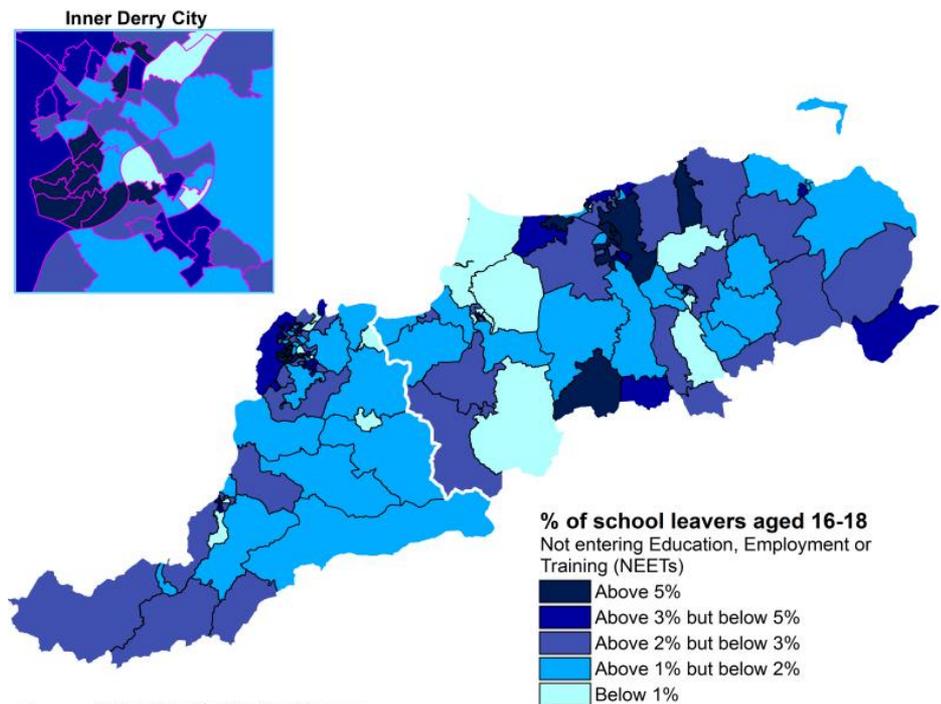
Annex B4: Employment deprivation (2015/16) versus population aged 18-21 not enrolled in a HE course at HE or FE, North SOA's (2012/13-2014/15)

Proportion (%) of population aged 25-64 who are employment deprived, North SOA's (2015/16)

Proportion (%) of population aged 18-21 not enrolled in a HE course at HE or FE, North SOA's (2012/13-2015/16)

% of population aged 25-64
Employment deprived
- Above 25%
- Above 20% but below 25%
- Above 15% but below 20%
- Below 15%

% of population aged 18-21
Not enrolled in Higher Education
- Above 80%
- Above 70% but below 80%
- Above 60% but below 70%
- Above 50% but below 60%
- Below 50%
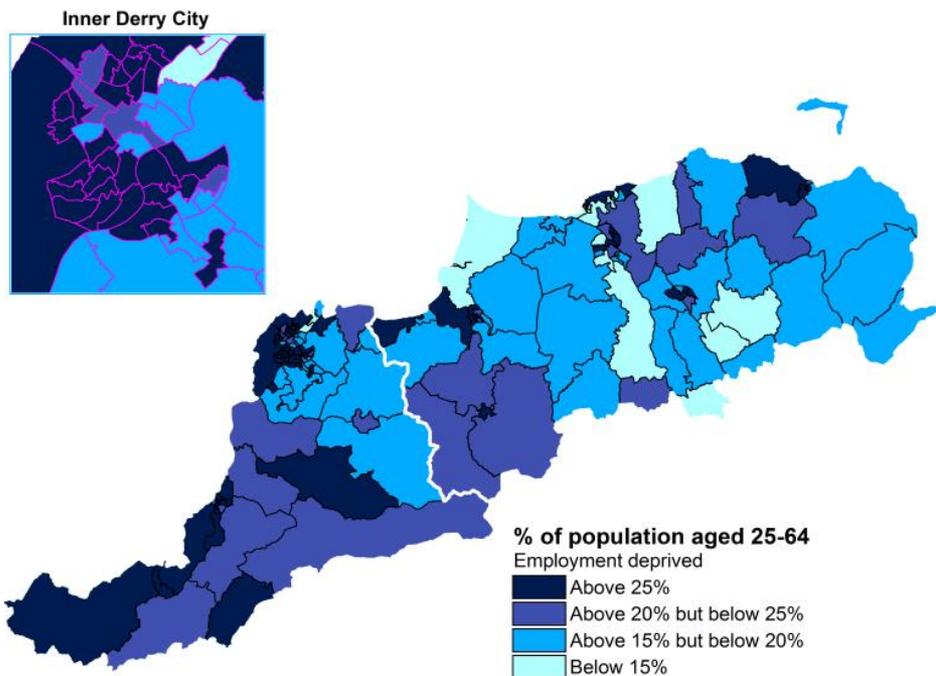
Source: NI Mulitple Deprivation Measure
Note: Employment derpived is defined as the proportion of working age population who are in reciept of at least one employment benefit and individuals who are not in receipt of the selected benefits, nor have received income from employment.
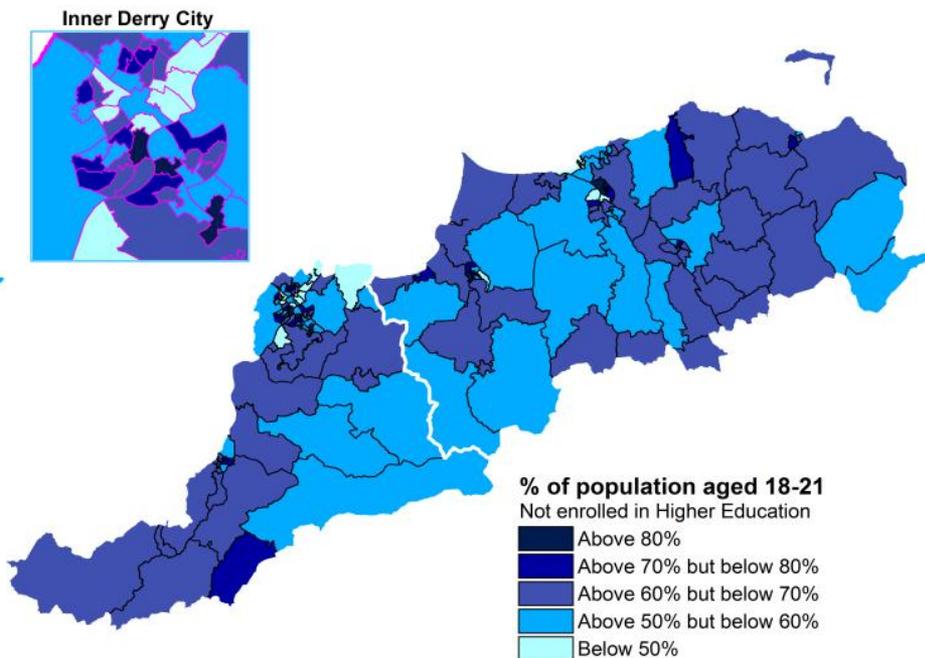
Source: NI Multiple Deprivation Measure
Note: Not enrolled in higher education course in a higher or further education institution

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Annex B5: NQF level 4+ qualifications, workplace versus resident, North SOA's (2011)

Proportion (%) of 16-74 population with NQF level 4+ qualifications (workplace based), North SOA's (2011)

% of workplace population
With at least NQF level 4 qualifications
- Above 40%
- Above 30% but below 40%
- Above 25% but below 30%
- Above 20% but below 25%
- Below 20%
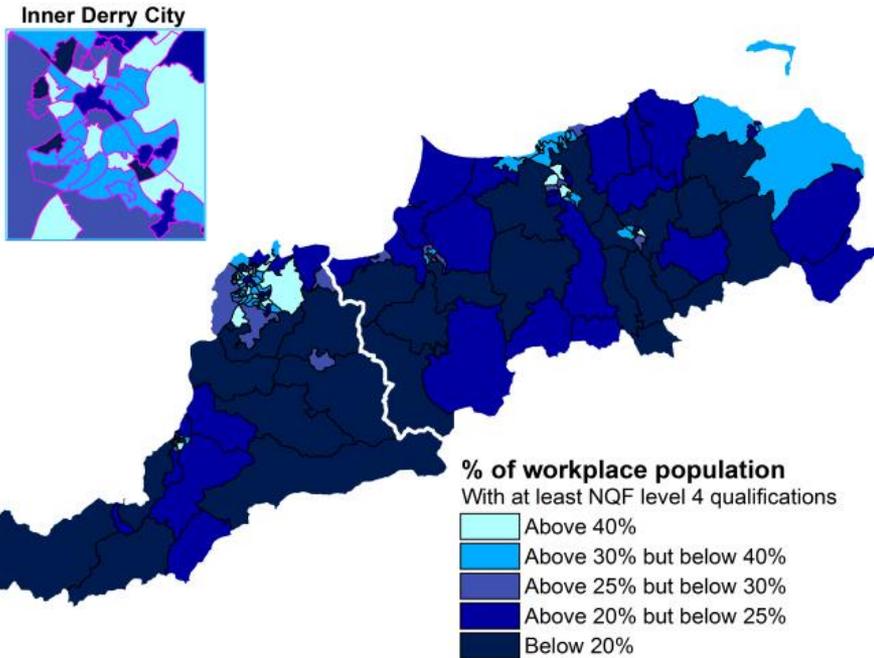
Source: NISRA, Census 2011

Proportion (%) of 25-64 population with NQF level 4+ qualifications (resident based), North SOA's (2011)

% of population aged 25-64
With at least NQF level 4 qualifications
- Above 40%
- Above 30% but below 40%
- Above 25% but below 30%
- Above 20% but below 25%
- Below 20%

Source: NISRA, Census 2011

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Annex C: Scatters

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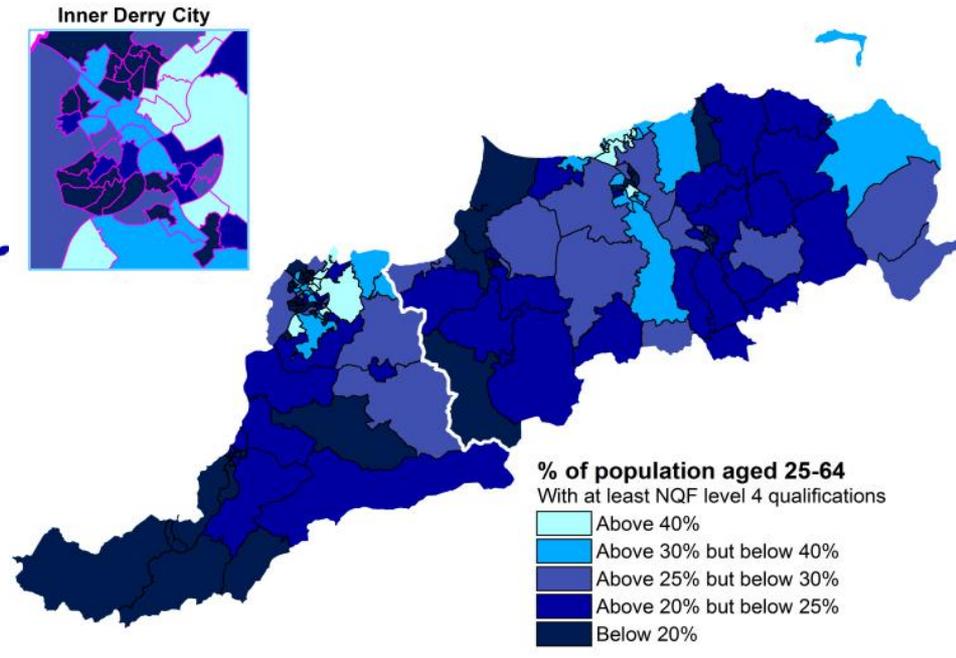
Annex C1: Employment deprivation (2015/16) versus low or no qualifications (2011), North and NI SOA's

% working age population employment deprived (2015/16) versus % of 25-64 population with low or no qualifications (2011), North SOA's

y = 0.8108x - 0.0723
R² = 0.6622

% working age population employment deprived (2015/16) versus % of 25-64 population with low or no qualifications (2011), NI SOA's

y = 0.7309x - 0.0517
R² = 0.7613

**Source:** NI Multiple Deprivation Measure

Note: Employment deprived is defined as proportion of working age population who are in receipt of at least one employment related benefit, and individuals who are not in receipt of an employment related benefit, nor have received income from employment

Source: NI Multiple Deprivation Measure

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Annex C2: Educational attainment (2013/14-2015-16) versus proportion of pupils entitles to free school meals (2013/14-2015/16), North and NI wards

% school leavers not achieving 5+ GCSEs including English and maths (2013/14-2015/16) versus % of pupils receiving FSME (2013/14-2015/16), North Wards

y = 0.4878x + 0.2187
R² = 0.4253
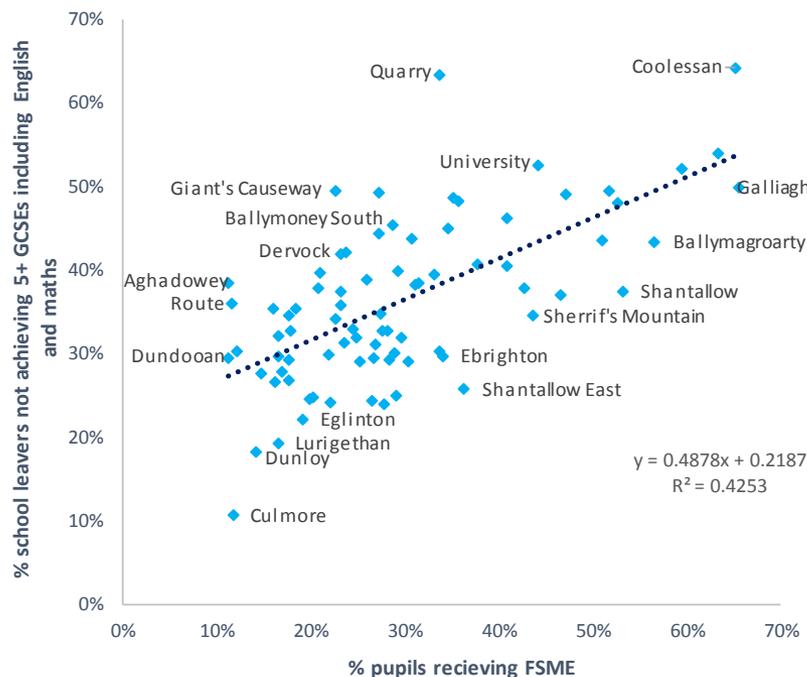
% school leavers not achieving 5+ GCSEs including English and maths (2013/14-2015/16) versus % of pupils receiving FSME (2013/14-2015/16), NI Wards

y = 0.6898x + 0.1789
R² = 0.5391

Source: NI School leavers survey

Source: NI Multiple Deprivation Measure

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Annex C3: Educational attainment (2013/14-2015/16) versus proportion of births to unmarried mothers (2014-15), North and NI wards

% school leavers not achieving 5+ GCSEs including English and maths (2013/14-2015/16) versus % of births to unmarried mothers (2014-2015), North Wards

$y = 0.3663x + 0.1812$
$R^2 = 0.3087$

Source: NI Multiple Deprivation Measure
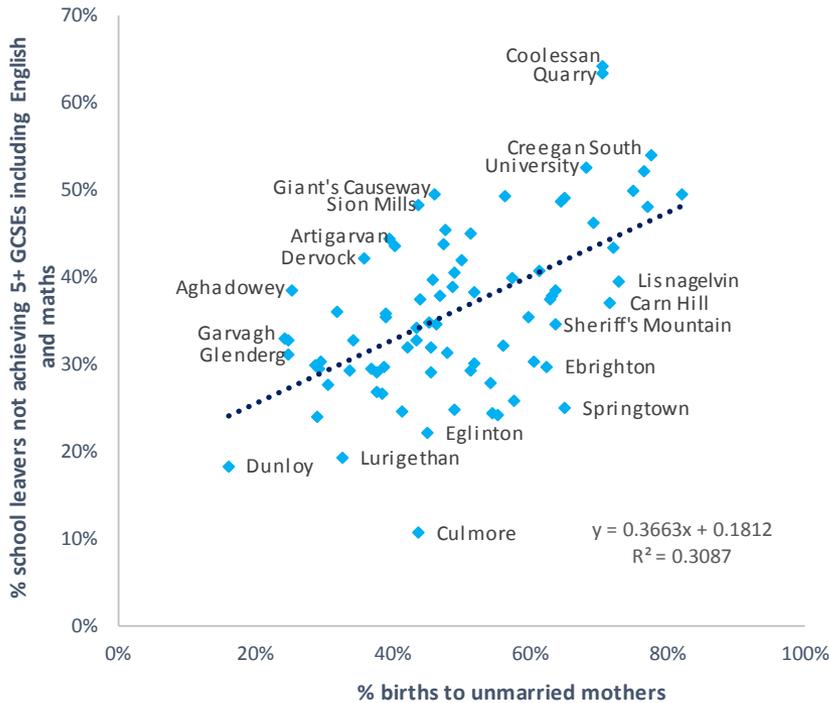
% school leavers not achieving 5+ GCSEs including English and maths (2013/14-2015/16) versus % of births to unmarried mothers (2014-2015), NI Wards

$y = 0.536x + 0.1192$
$R^2 = 0.5409$

Source: NI School leavers survey

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Annex C4: Educational attainment (2015/16) versus employment deprivation (2015-16), North and NI SOA's

% school leavers not achieving 5+ GCSEs including English and maths (2015/16) versus % of working age population employment deprived (2015/16), North SOA's

$y = 0.7431x + 0.162$
$R^2 = 0.3554$

Labels visible: Ballysally_2, East, Altnagelvin_1, Ballylough and Bushmills, University, Crevagh_2, Shantallow, The Cuts_2, West_1, Aghnaloo_2, Dunluce, The Diamond, Westlland, Shantallow East, Hopefield_2, Carn Hill_1, Greesteel_1, Pennyburn_1, Strand_1, Culmore_1, Ebrighton_1, Pennyburn_2

X-axis: % working age population employment deprived

Source: NI Multiple Deprivation Measure

Note: Employment deprived is defined as proportion of working age population who are in receipt of at least one employment related benefit, and individuals who are not in receipt of an employment related benefit, nor have received income from employment

% school leavers not achieving 5+ GCSEs including English and maths (2015/16) versus % of working age population employment deprived (2015/16), NI SOA's

$y = 1.1262x + 0.1044$
$R^2 = 0.4984$

Labels visible: Ballee, New Lodge_3, Windsor_4, Bloomfield_1, Steeple, Scrabo_1, Lambeg_2, Botanic_4, New Lodge_2, Loughview_2, Windsor_3, Water Works_2, Shantallow West_1, The Diamond, Westland, Shantallow East, Strand_1, Carn Hill_1, Donard_1, Lagan Valley_2, Ebrighton_1, Pennyburn_2

X-axis: % working age population employment deprived

Source: NI Multiple Deprivation Measure

Note: Employment deprived is defined as proportion of working age population who are in receipt of at least one employment related benefit, and individuals who are not in receipt of an employment related benefit, nor have received income from employment

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# Annex C5: Educational attainment (2015/16) and adult population with low or no qualifications (2011), North and NI SOA's

% school leavers not achieving 5+ GCSEs including English and maths (2015/16) versus % of 25-64 population with low or no qualifications (2011), North SOA's

$y = 0.847x + 0.0082$
$R^2 = 0.4652$

Ballysally_2
East
Altnagelvin_1
Ballylough and Bushmills
Dundooan_1
Portstewart
Strand_2
Crevagh_2
Mount Sandel
Shantallow
West_1
Hopefield_2
Waterside
Newtownstewart
Carn Hill_1
Dunnamanagh
Pennyburn_1
Culmore_5   Ebrighton_1
Pennyburn_2

% 25-64 population with low or no qualifications

% school leavers not achieving 5+ GCSEs including English and maths

% school leavers not achieving 5+ GCSEs including English and maths (2015/16) versus % of 25-64 population with low or no qualifications (2011), NI SOA's

$y = 1.0268x - 0.0273$
$R^2 = 0.5904$

Ballee
New Lodge_3
Bloomfield_1   Woodville_1
Windsor_4 Springfarm_2
Falls_2
Botanic_4
Crumlin_1
Windsor_3
Crevagh_2
Aldergrove_1
Drumnamoe_1
Cairnshill_2
Whiterock_1
Ballynafeigh_2
Newtownstewart
Broadway_2
Carn Hill_1
Windsor_2
Dunnamanagh
Jordanstown_3
Donagh
Carrigatuke
Ebrighton_2
Pennyburn_2

% 25-64 population with low or no qualifications

% school leavers not achieving 5+ GCSEs including English and maths

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Annex C6: Tertiary education participation (2015/16) versus adult population with low or no skills (2011), North and NI SOA's

% 18-21 population not enrolled in HE course at HE or FE (2015/16) versus % of 25-64 population with low or no qualifications (2011), North SOA's

y = 0.6645x + 0.3561
R² = 0.5524

% 18-21 population not enrolled in HE course at HE or FE (2015/16) versus % of 25-64 population with low or no qualifications (2011), NI SOA's

y = 0.7435x + 0.3743
R² = 0.568
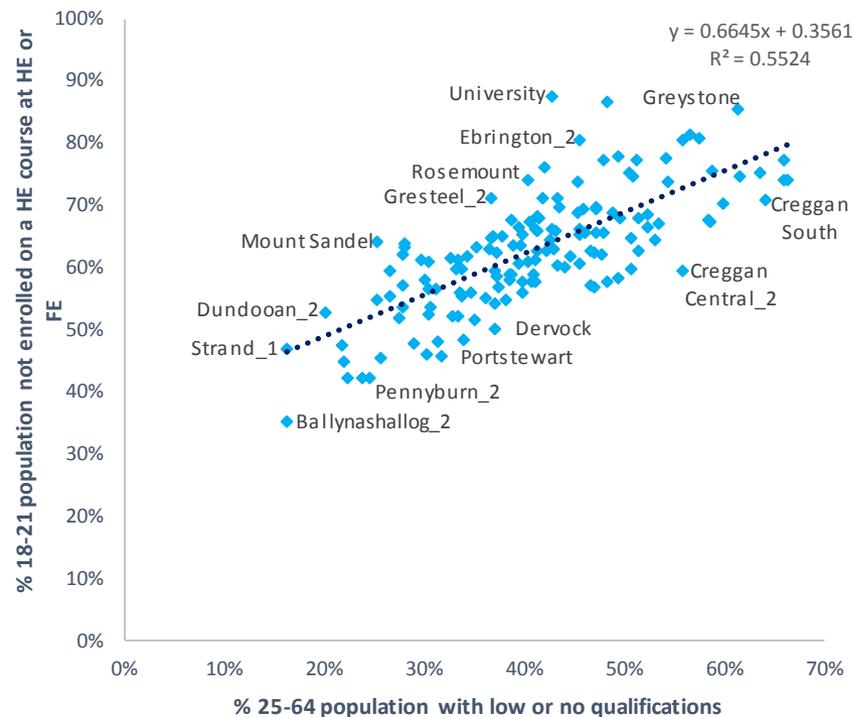
Source: NI Multiple Deprivation Measure
Note: SOAs where no data is available have been excluded

Source: NI Multiple Deprivation Measure

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Annex D: DEA Net requirement

Annex D1: DEA Net Requirement (Ballyarnett and Ballymoney)

Net requirement (North) vs skills profile of labour market entrants (Ballyarnett) (2017-2027)

- BALLYARNETT - entering labour market
- North - net requirement (%)
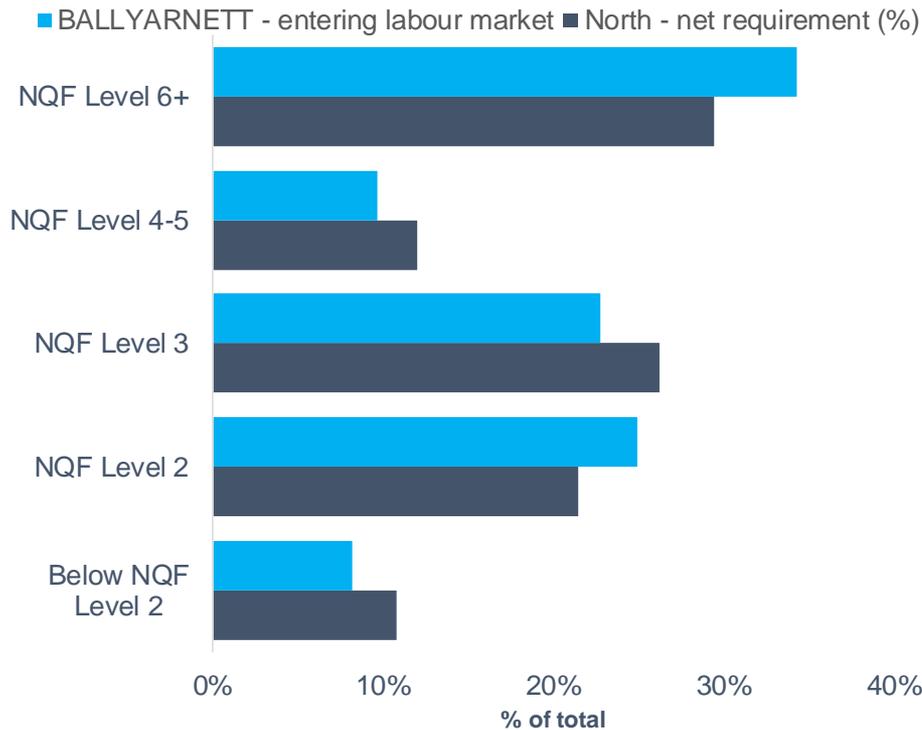
Net requirement (North) vs skills profile of labour market entrants (Ballymoney) (2017-2027)

- BALLYMONEY - entering labour market
- North - net requirement (%)
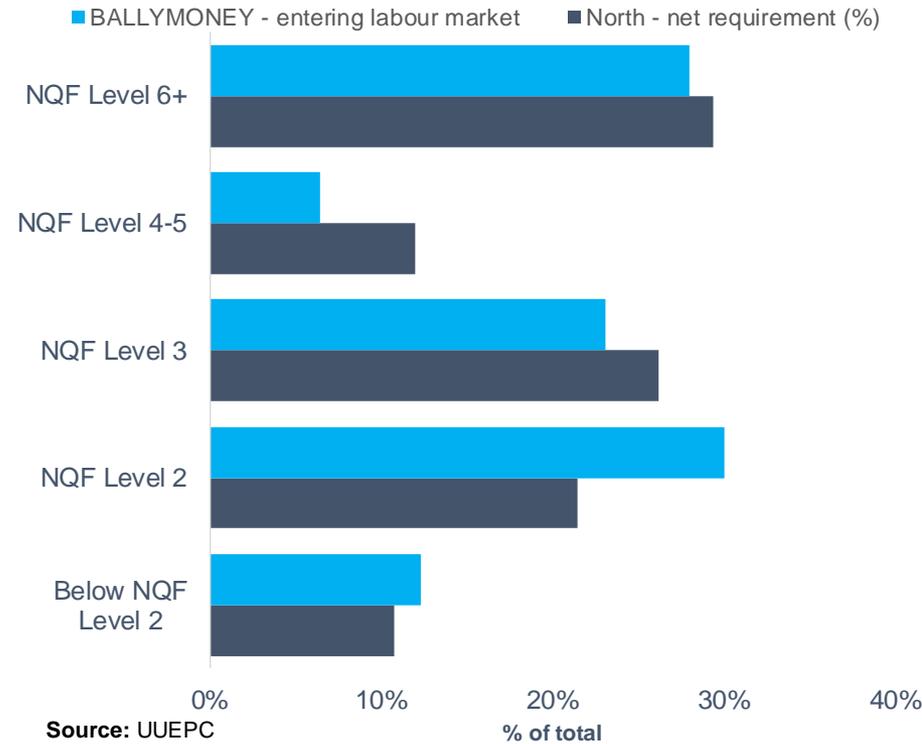
Source: UUEPC

Annex D2: DEA Net Requirement (Bann and Benbradagh)

Net requirement (North) vs skills profile of labour market entrants (Bann) (2017-2027)

■ BANN - entering labour market ■ North - net requirement (%)

% of total

Source: UUEPC
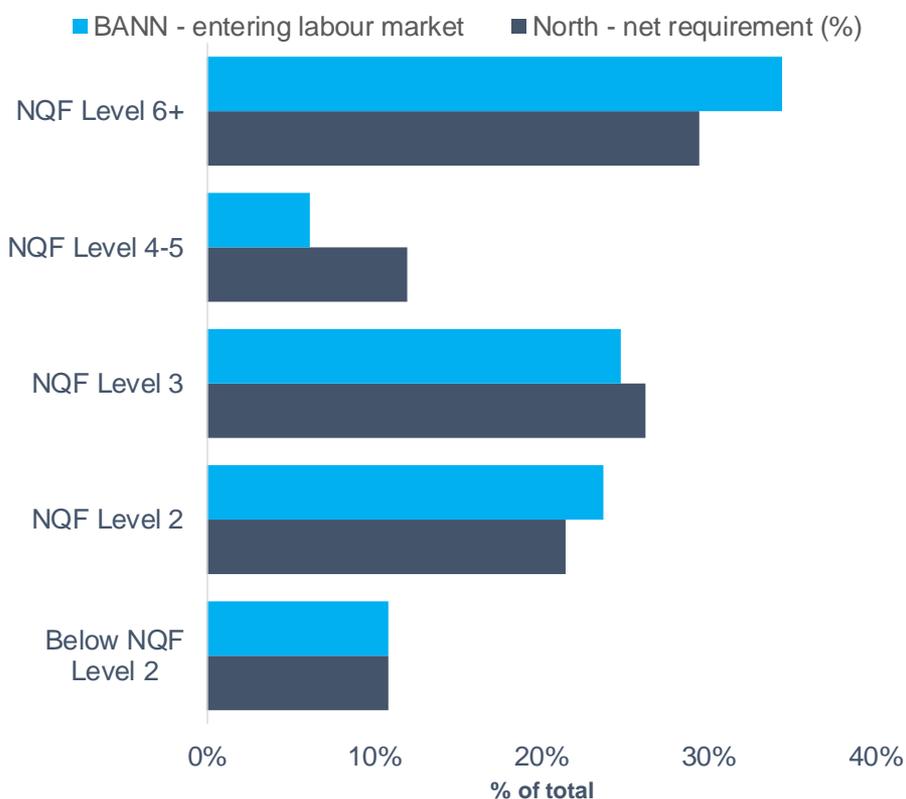
Net requirement (North) vs skills profile of labour market entrants (Benbradagh) (2017-2027)

■ BENBRADAGH - entering labour market ■ North - net requirement (%)

% of total

Source: UUEPC

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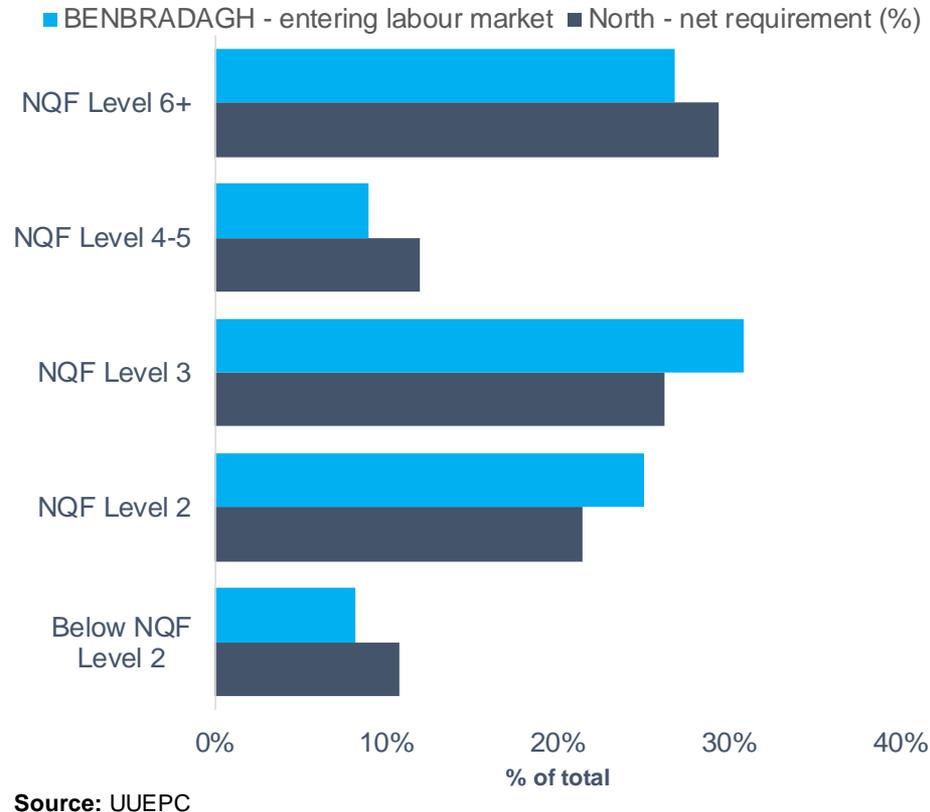
Annex D3: DEA Net Requirement (Causeway and Coleraine)

Net requirement (North) vs skills profile of labour market entrants (Causeway) (2017-2027)

■ CAUSEWAY - entering labour market ■ North - net requirement (%)

% of total

Source: UUEPC
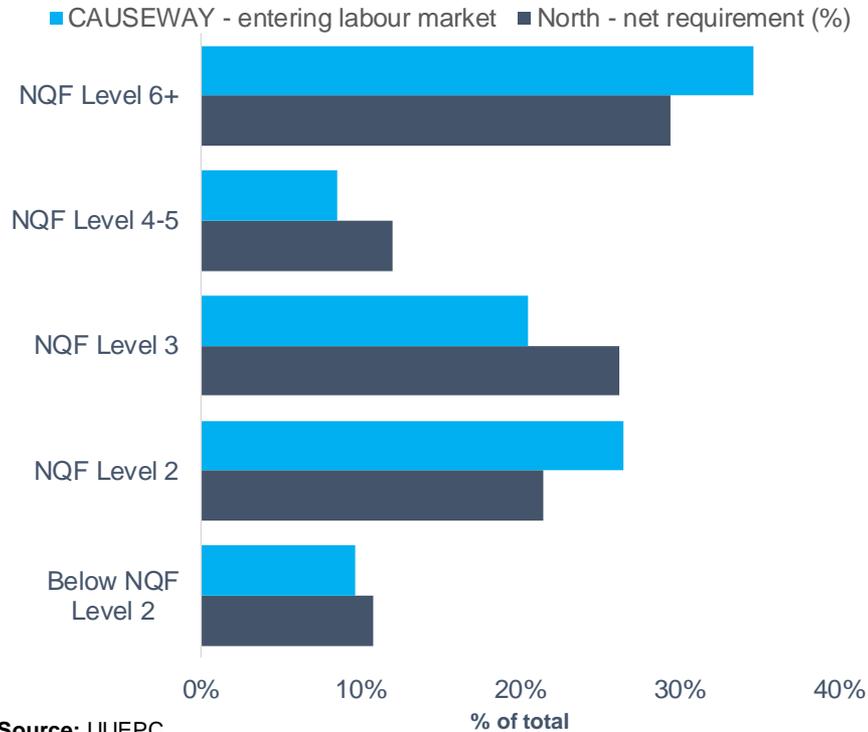
Net requirement (North) vs skills profile of labour market entrants (Coleraine) (2017-2027)

■ COLERAINE - entering labour market ■ North - net requirement (%)

% of total
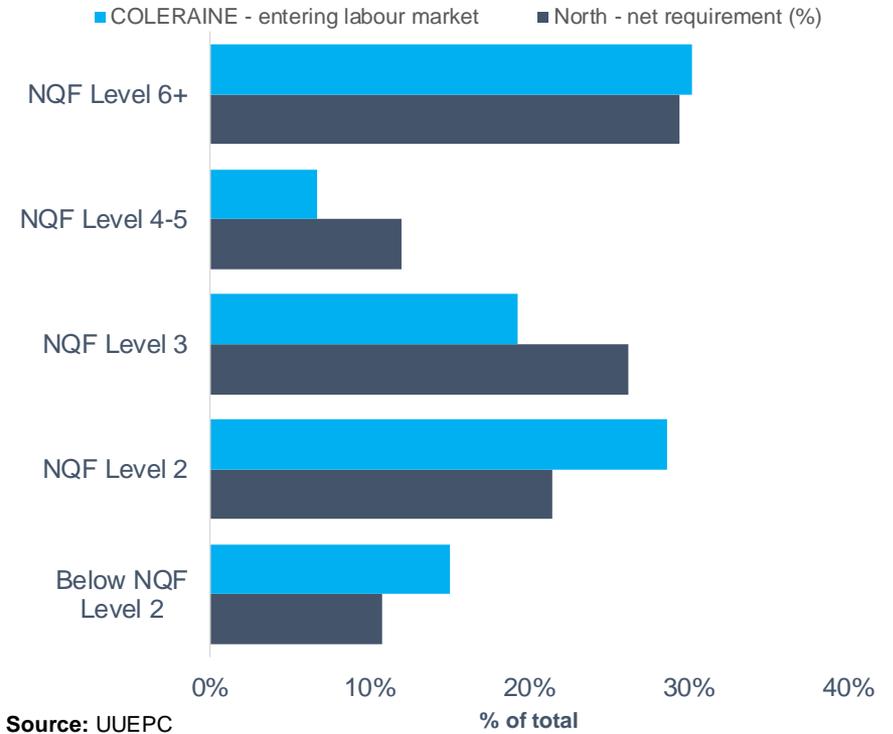
Source: UUEPC

Annex D4: DEA Net Requirement (Derg and Faughan)

Net requirement (North) vs skills profile of labour market entrants (Derg) (2017-2027)

Legend: ■ DERG - entering labour market ■ North - net requirement (%)

Categories (top to bottom): NQF Level 6+, NQF Level 4-5, NQF Level 3, NQF Level 2, Below NQF Level 2

X-axis: 0% 10% 20% 30% 40% — % of total
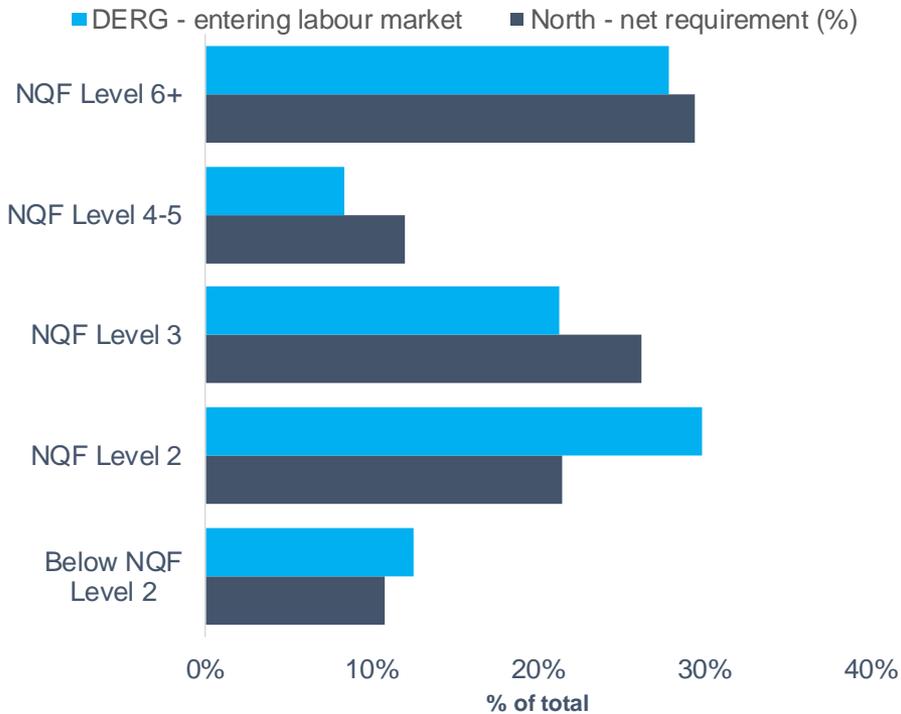
Source: UUEPC

Net requirement (North) vs skills profile of labour market entrants (Faughan) (2017-2027)

Legend: ■ FAUGHAN - entering labour market ■ North - net requirement (%)

Categories (top to bottom): NQF Level 6+, NQF Level 4-5, NQF Level 3, NQF Level 2, Below NQF Level 2

X-axis: 0% 10% 20% 30% 40% — % of total

Source: UUEPC

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Annex D5: DEA Net Requirement (Foyleside and Limavady)


Net requirement (North) vs skills profile of labour market entrants (Foyleside) (2017-2027)
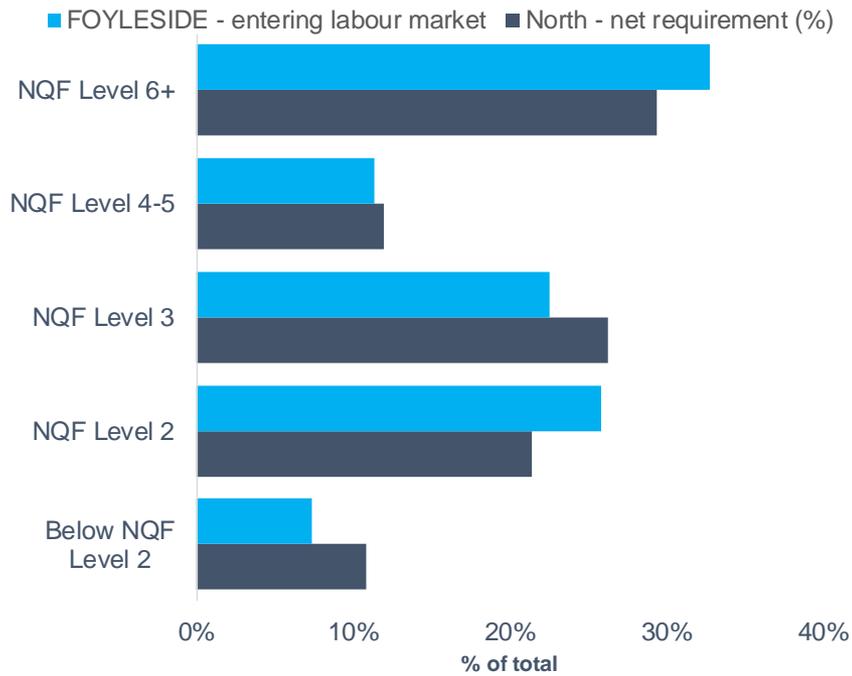
- FOYLESIDE - entering labour market
- North - net requirement (%)

NQF Level 6+
NQF Level 4-5
NQF Level 3
NQF Level 2
Below NQF Level 2

% of total

Source: UUEPC

Net requirement (North) vs skills profile of labour market entrants (Limavady) (2017-2027)

- LIMAVADY - entering labour market
- North - net requirement (%)

NQF Level 6+
NQF Level 4-5
NQF Level 3
NQF Level 2
Below NQF Level 2

% of total

Source: UUEPC

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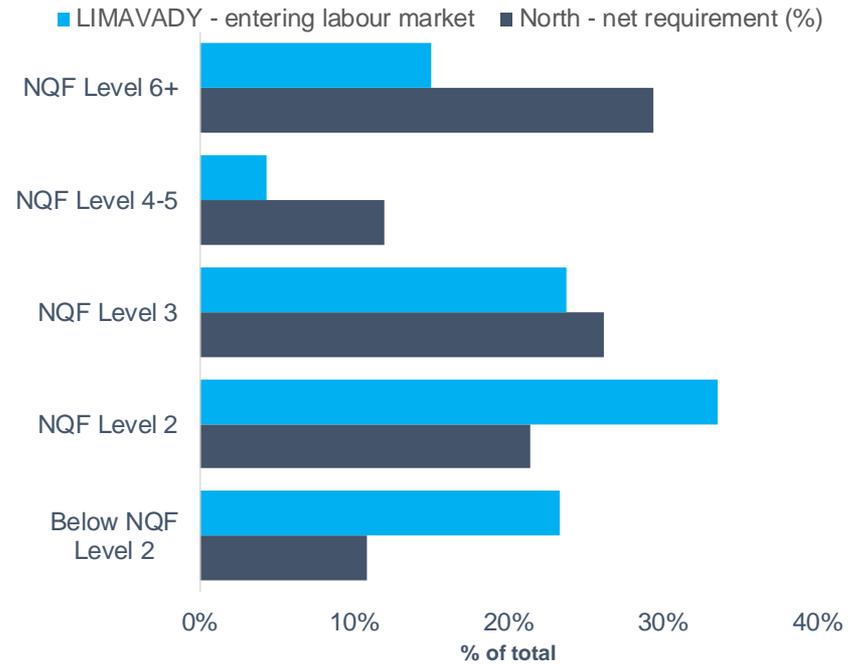
Annex D6: DEA Net Requirement (Sperrin and The Glens)

Net requirement (North) vs skills profile of labour market entrants (Sperrin) (2017-2027)
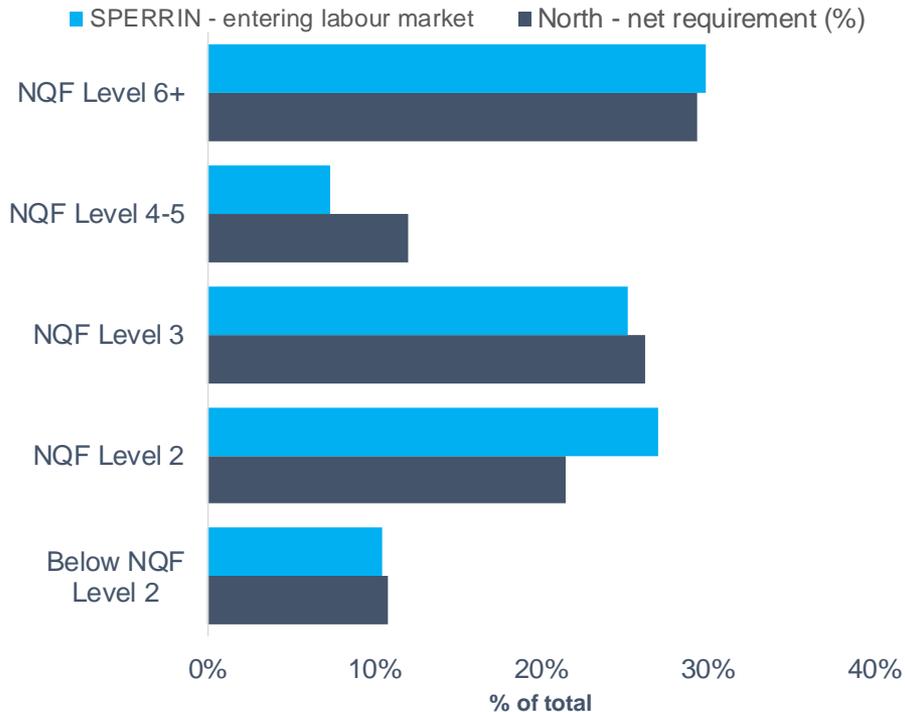
Legend: SPERRIN - entering labour market ■ North - net requirement (%)

Net requirement (North) vs skills profile of labour market entrants (The Glens) (2017-2027)

Legend: THE GLENS - entering labour market ■ North - net requirement (%)
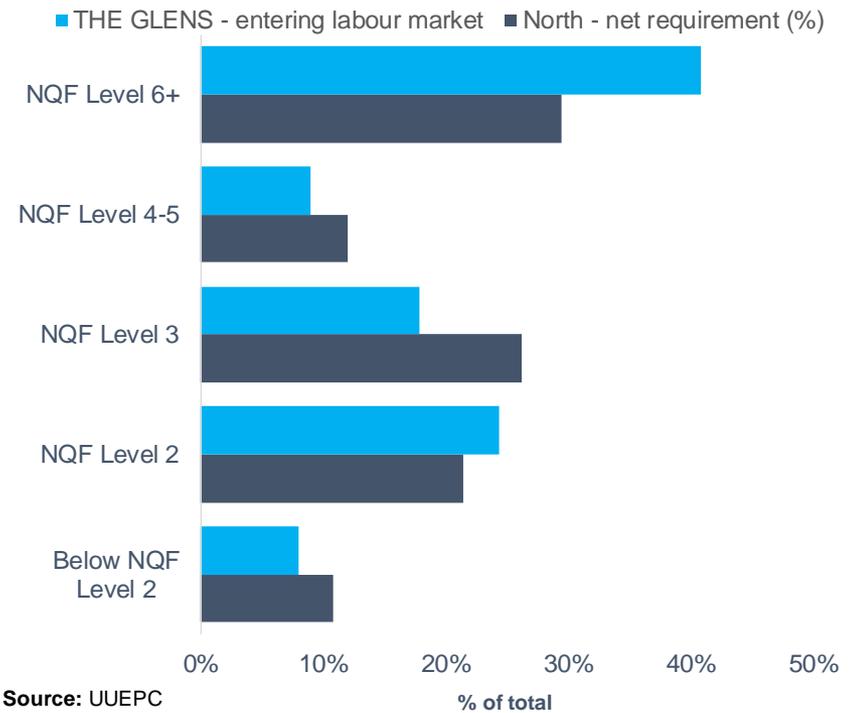
Source: UUEPC

Source: UUEPC

Annex D7: DEA Net Requirement (The Moor and Waterside)

Net requirement (North) vs skills profile of labour market entrants (The Moor) (2017-2027)

- ■ THE MOOR - entering labour market
- ■ North - net requirement (%)
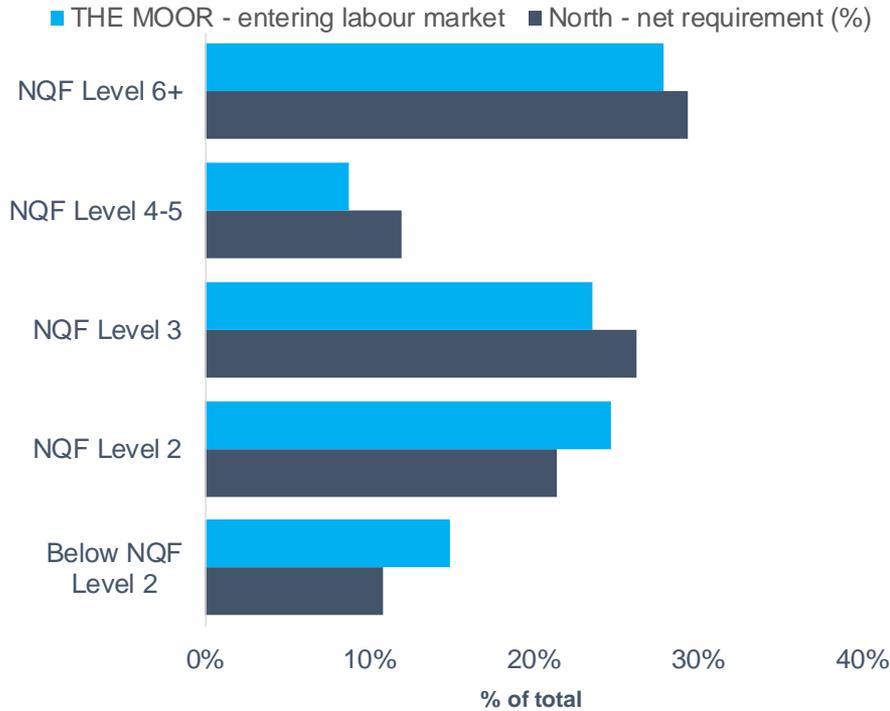
Source: UUEPC

Net requirement (North) vs skills profile of labour market entrants (Waterside) (2017-2027)

- ■ WATERSIDE - entering labour market
- ■ North - net requirement (%)
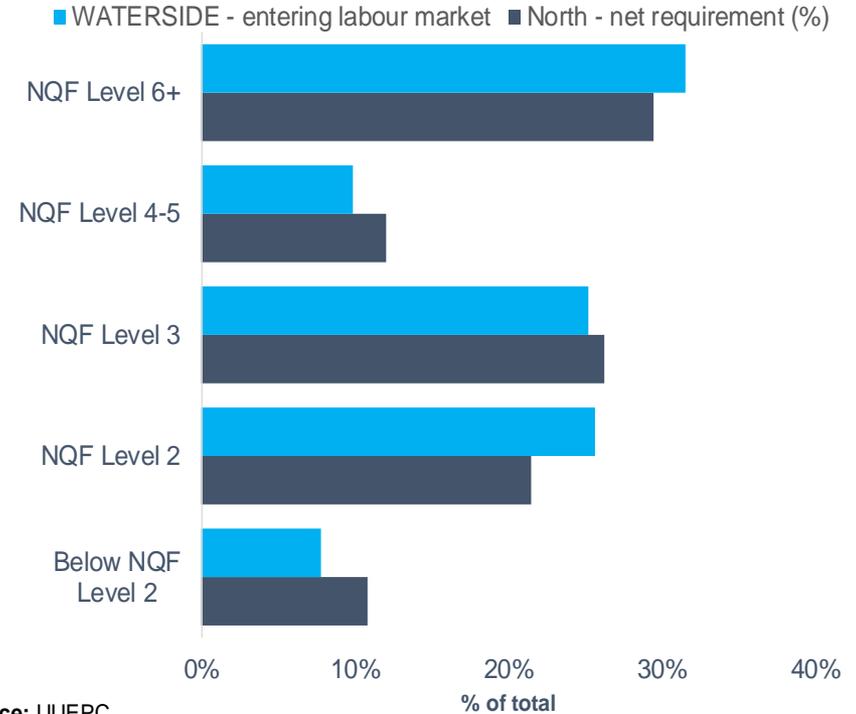
Source: UUEPC

Annex E: DEA Score cards

Annex E1: Ballymoney (Causeway Coast and Glens)

	Ballymoney	%	Rank
Skills flow	% of school leavers achieving 5 GCSE's (including English and maths)	68%	39
	% of school enrolments entitled to FSM	24%	39
	% of school leavers entitled to FSM achieving 5 GCSE's (including English and maths)	9%	30
	% of FE qualifiers achieving a highest level of qualification at NQF level 2 and below	51%	19
	% of FE qualifiers achieving a highest level of qualification at NQF level 2	13%	37
	Qualifiers from tertiary level education in either FE or HE as a % of the 20-24 year olds	14%	54
	% of HE qualifiers achieving a postgraduate qualification (NQF level 7-8)	26%	29
	% of HE qualifiers gaining qualifications in maths, computing, engineering & technology	14%	20
Skills stock	% of 16-64 population with low qualifications (below NQF level 2)	42%	55
	% of 16-64 population with high qualifications (NQF level 4+)	20%	71
	% of 16-34 population with low qualifications (below NQF level 2)	29%	44
	% of 16-34 population with high qualifications (NQF level 4+)	21%	67
Labour market and socio-economic indicators	Social security clients (client group analysis) as a % of the population (16-64)	22%	48
	Social security clients (client group analysis) as a % of the population (16-34)	16%	52
	Housing benefit claimants as a % of the population (16-64)	9%	50
	Housing benefit claimants as a % of the population (16-34)	7%	49
	% of households with no adults in employment	36%	49
	% of households with no adults in employment with dependent children	5%	47
	% of households with lone parents with dependent children	6%	21
	% of people employed who are either managers/senior officials or professionals	8%	42
	Employment rate (%, 16-74 population)	59%	58
	Unemployed who have never worked (% of unemployed)	16%	49

Source: NISRA, DfE, DE, 2011 Census, DfC, UUEPC

Ranked in the top 10 performing DEA's in NI

Ranked in the bottom 10 performing DEA's in NI

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Annex E2: Bann (Causeway Coast and Glens)

	Bann	%	Rank
Skills flow	% of school leavers achieving 5 GCSE's (including English and maths)	75%	15
	% of school enrolments entitled to FSM	18%	18
	% of school leavers entitled to FSM achieving 5 GCSE's (including English and maths)	10%	38
	% of FE qualifiers achieving a highest level of qualification at NQF level 2 and below	44%	4
	% of FE qualifiers achieving a highest level of qualification at NQF level 2	12%	35
	Qualifiers from tertiary level education in either FE or HE as a % of the 20-24 year olds	18%	24
	% of HE qualifiers achieving a postgraduate qualification (NQF level 7-8)	27%	20
	% of HE qualifiers gaining qualifications in maths, computing, engineering & technology	14%	20
Skills stock	% of 16-64 population with low qualifications (below NQF level 2)	39%	41
	% of 16-64 population with high qualifications (NQF level 4+)	25%	34
	% of 16-34 population with low qualifications (below NQF level 2)	29%	40
	% of 16-34 population with high qualifications (NQF level 4+)	23%	47
Labour market and socio-economic indicators	Social security clients (client group analysis) as a % of the population (16-64)	18%	30
	Social security clients (client group analysis) as a % of the population (16-34)	12%	28
	Housing benefit claimants as a % of the population (16-64)	7%	23
	Housing benefit claimants as a % of the population (16-34)	6%	28
	% of households with no adults in employment	33%	32
	% of households with no adults in employment with dependent children	5%	34
	% of households with lone parents with dependent children	6%	23
	% of people employed who are either managers/senior officials or professionals	8%	32
	Employment rate (%, 16-74 population)	61%	41
	Unemployed who have never worked (% of unemployed)	15%	42

Source: NISRA, DfE, DE, 2011 Census, DfC, UUEPC

🟩 Ranked in the top 10 performing DEA's in NI

🟥 Ranked in the bottom 10 performing DEA's in NI

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Annex E3: Benbradagh (Causeway Coast and Glens)

	Benbradagh	%	Rank
Skills flow	% of school leavers achieving 5 GCSE's (including English and maths)	74%	21
	% of school enrolments entitled to FSM	33%	58
	% of school leavers entitled to FSM achieving 5 GCSE's (including English and maths)	18%	69
	% of FE qualifiers achieving a highest level of qualification at NQF level 2 and below	38%	1
	% of FE qualifiers achieving a highest level of qualification at NQF level 2	7%	4
	Qualifiers from tertiary level education in either FE or HE as a % of the 20-24 year olds	15%	50
	% of HE qualifiers achieving a postgraduate qualification (NQF level 7-8)	14%	77
	% of HE qualifiers gaining qualifications in maths, computing, engineering & technology	14%	20
Skills stock	% of 16-64 population with low qualifications (below NQF level 2)	43%	63
	% of 16-64 population with high qualifications (NQF level 4+)	20%	72
	% of 16-34 population with low qualifications (below NQF level 2)	29%	45
	% of 16-34 population with high qualifications (NQF level 4+)	22%	58
Labour market and socio-economic indicators	Social security clients (client group analysis) as a % of the population (16-64)	25%	63
	Social security clients (client group analysis) as a % of the population (16-34)	14%	47
	Housing benefit claimants as a % of the population (16-64)	10%	52
	Housing benefit claimants as a % of the population (16-34)	7%	45
	% of households with no adults in employment	33%	36
	% of households with no adults in employment with dependent children	8%	67
	% of households with lone parents with dependent children	9%	47
	% of people employed who are either managers/senior officials or professionals	6%	71
	Employment rate (%, 16-74 population)	57%	66
	Unemployed who have never worked (% of unemployed)	14%	37

Source: NISRA, DfE, DE, 2011 Census, DfC, UUEPC

Ranked in the top 10 performing DEA's in NI

Ranked in the bottom 10 performing DEA's in NI

Note: Due to disclosure of data for % of school leavers entitled to FSM achieving 5 GCSE's (including English and maths) Benbradagh has been placed in the bottom 10 DEAs with available data.

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Annex E4: Causeway (Causeway Coast and Glens)

	Causeway	%	Rank
Skills flow	% of school leavers achieving 5 GCSE's (including English and maths)	65%	57
	% of school enrolments entitled to FSM	25%	40
	% of school leavers entitled to FSM achieving 5 GCSE's (including English and maths)	7%	15
	% of FE qualifiers achieving a highest level of qualification at NQF level 2 and below	50%	16
	% of FE qualifiers achieving a highest level of qualification at NQF level 2	11%	26
	Qualifiers from tertiary level education in either FE or HE as a % of the 20-24 year olds	12%	68
	% of HE qualifiers achieving a postgraduate qualification (NQF level 7-8)	26%	29
	% of HE qualifiers gaining qualifications in maths, computing, engineering & technology	10%	62
Skills stock	% of 16-64 population with low qualifications (below NQF level 2)	35%	23
	% of 16-64 population with high qualifications (NQF level 4+)	29%	17
	% of 16-34 population with low qualifications (below NQF level 2)	26%	21
	% of 16-34 population with high qualifications (NQF level 4+)	25%	34
Labour market and socio-economic indicators	Social security clients (client group analysis) as a % of the population (16-64)	19%	32
	Social security clients (client group analysis) as a % of the population (16-34)	14%	43
	Housing benefit claimants as a % of the population (16-64)	9%	46
	Housing benefit claimants as a % of the population (16-34)	6%	40
	% of households with no adults in employment	39%	65
	% of households with no adults in employment with dependent children	4%	30
	% of households with lone parents with dependent children	6%	18
	% of people employed who are either managers/senior officials or professionals	9%	17
	Employment rate (%, 16-74 population)	58%	62
	Unemployed who have never worked (% of unemployed)	13%	23

Source: NISRA, DfE, DE, 2011 Census, DfC, UUEPC

Ranked in the top 10 performing DEA's in NI

Ranked in the bottom 10 performing DEA's in NI

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Annex E5: Coleraine (Causeway Coast and Glens)

	Coleraine	%	Rank
Skills flow	% of school leavers achieving 5 GCSE's (including English and maths)	60%	71
	% of school enrolments entitled to FSM	33%	59
	% of school leavers entitled to FSM achieving 5 GCSE's (including English and maths)	9%	31
	% of FE qualifiers achieving a highest level of qualification at NQF level 2 and below	57%	48
	% of FE qualifiers achieving a highest level of qualification at NQF level 2	17%	57
	Qualifiers from tertiary level education in either FE or HE as a % of the 20-24 year olds	13%	61
	% of HE qualifiers achieving a postgraduate qualification (NQF level 7-8)	27%	22
	% of HE qualifiers gaining qualifications in maths, computing, engineering & technology	11%	59
Skills stock	% of 16-64 population with low qualifications (below NQF level 2)	42%	57
	% of 16-64 population with high qualifications (NQF level 4+)	21%	64
	% of 16-34 population with low qualifications (below NQF level 2)	33%	59
	% of 16-34 population with high qualifications (NQF level 4+)	19%	73
Labour market and socio-economic indicators	Social security clients (client group analysis) as a % of the population (16-64)	25%	62
	Social security clients (client group analysis) as a % of the population (16-34)	22%	68
	Housing benefit claimants as a % of the population (16-64)	14%	65
	Housing benefit claimants as a % of the population (16-34)	14%	73
	% of households with no adults in employment	39%	64
	% of households with no adults in employment with dependent children	7%	62
	% of households with lone parents with dependent children	11%	67
	% of people employed who are either managers/senior officials or professionals	8%	49
	Employment rate (%, 16-74 population)	57%	64
	Unemployed who have never worked (% of unemployed)	15%	44

Source: NISRA, DfE, DE, 2011 Census, DfC, UUEPC

Ranked in the top 10 performing DEA's in NI

Ranked in the bottom 10 performing DEA's in NI

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Annex E6: Limavady (Causeway Coast and Glens)

	Limavady	%	Rank
Skills flow	% of school leavers achieving 5 GCSE's (including English and maths)	61%	69
	% of school enrolments entitled to FSM	38%	67
	% of school leavers entitled to FSM achieving 5 GCSE's (including English and maths)	16%	60
	% of FE qualifiers achieving a highest level of qualification at NQF level 2 and below	62%	64
	% of FE qualifiers achieving a highest level of qualification at NQF level 2	24%	75
	Qualifiers from tertiary level education in either FE or HE as a % of the 20-24 year olds	13%	63
	% of HE qualifiers achieving a postgraduate qualification (NQF level 7-8)	24%	41
	% of HE qualifiers gaining qualifications in maths, computing, engineering & technology	18%	4
Skills stock	% of 16-64 population with low qualifications (below NQF level 2)	46%	73
	% of 16-64 population with high qualifications (NQF level 4+)	19%	75
	% of 16-34 population with low qualifications (below NQF level 2)	35%	71
	% of 16-34 population with high qualifications (NQF level 4+)	17%	77
Labour market and socio-economic indicators	Social security clients (client group analysis) as a % of the population (16-64)	27%	66
	Social security clients (client group analysis) as a % of the population (16-34)	23%	72
	Housing benefit claimants as a % of the population (16-64)	14%	68
	Housing benefit claimants as a % of the population (16-34)	13%	67
	% of households with no adults in employment	41%	71
	% of households with no adults in employment with dependent children	9%	71
	% of households with lone parents with dependent children	10%	58
	% of people employed who are either managers/senior officials or professionals	7%	62
	Employment rate (%, 16-74 population)	50%	74
	Unemployed who have never worked (% of unemployed)	19%	66

Source: NISRA, DfE, DE, 2011 Census, DfC, UUEPC

Ranked in the top 10 performing DEA's in NI

Ranked in the bottom 10 performing DEA's in NI

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Annex E7: The Glens (Causeway Coast and Glens)

	The Glens	%	Rank
Skills flow	% of school leavers achieving 5 GCSE's (including English and maths)	74%	20
	% of school enrolments entitled to FSM	23%	35
	% of school leavers entitled to FSM achieving 5 GCSE's (including English and maths)	11%	39
	% of FE qualifiers achieving a highest level of qualification at NQF level 2 and below	54%	29
	% of FE qualifiers achieving a highest level of qualification at NQF level 2	11%	24
	Qualifiers from tertiary level education in either FE or HE as a % of the 20-24 year olds	19%	18
	% of HE qualifiers achieving a postgraduate qualification (NQF level 7-8)	20%	55
	% of HE qualifiers gaining qualifications in maths, computing, engineering & technology	11%	57
Skills stock	% of 16-64 population with low qualifications (below NQF level 2)	40%	43
	% of 16-64 population with high qualifications (NQF level 4+)	23%	53
	% of 16-34 population with low qualifications (below NQF level 2)	29%	43
	% of 16-34 population with high qualifications (NQF level 4+)	22%	59
Labour market and socio-economic indicators	Social security clients (client group analysis) as a % of the population (16-64)	22%	47
	Social security clients (client group analysis) as a % of the population (16-34)	14%	41
	Housing benefit claimants as a % of the population (16-64)	9%	48
	Housing benefit claimants as a % of the population (16-34)	6%	37
	% of households with no adults in employment	37%	58
	% of households with no adults in employment with dependent children	6%	48
	% of households with lone parents with dependent children	7%	29
	% of people employed who are either managers/senior officials or professionals	8%	47
	Employment rate (%, 16-74 population)	57%	63
	Unemployed who have never worked (% of unemployed)	18%	58

Source: NISRA, DfE, DE, 2011 Census, DfC, UUEPC

Ranked in the top 10 performing DEA's in NI

Ranked in the bottom 10 performing DEA's in NI

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Annex E8: Ballyarnett (Derry City and Strabane)

	Ballyarnett	%	Rank
Skills flow	% of school leavers achieving 5 GCSE's (including English and maths)	71%	28
	% of school enrolments entitled to FSM	46%	73
	% of school leavers entitled to FSM achieving 5 GCSE's (including English and maths)	25%	78
	% of FE qualifiers achieving a highest level of qualification at NQF level 2 and below	46%	8
	% of FE qualifiers achieving a highest level of qualification at NQF level 2	8%	9
	Qualifiers from tertiary level education in either FE or HE as a % of the 20-24 year olds	21%	10
	% of HE qualifiers achieving a postgraduate qualification (NQF level 7-8)	23%	45
	% of HE qualifiers gaining qualifications in maths, computing, engineering & technology	12%	41
Skills stock	% of 16-64 population with low qualifications (below NQF level 2)	43%	60
	% of 16-64 population with high qualifications (NQF level 4+)	23%	48
	% of 16-34 population with low qualifications (below NQF level 2)	34%	67
	% of 16-34 population with high qualifications (NQF level 4+)	20%	72
Labour market and socio-economic indicators	Social security clients (client group analysis) as a % of the population (16-64)	36%	76
	Social security clients (client group analysis) as a % of the population (16-34)	29%	77
	Housing benefit claimants as a % of the population (16-64)	22%	77
	Housing benefit claimants as a % of the population (16-34)	18%	77
	% of households with no adults in employment	42%	74
	% of households with no adults in employment with dependent children	16%	80
	% of households with lone parents with dependent children	20%	79
	% of people employed who are either managers/senior officials or professionals	8%	41
	Employment rate (%, 16-74 population)	50%	75
	Unemployed who have never worked (% of unemployed)	26%	78

Source: NISRA, DfE, DE, 2011 Census, DfC, UUEPC

Ranked in the top 10 performing DEA's in NI

Ranked in the bottom 10 performing DEA's in NI

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Annex E9: Derg (Derry City and Strabane)

	Derg	%	Rank
Skills flow	% of school leavers achieving 5 GCSE's (including English and maths)	64%	61
	% of school enrolments entitled to FSM	39%	70
	% of school leavers entitled to FSM achieving 5 GCSE's (including English and maths)	14%	55
	% of FE qualifiers achieving a highest level of qualification at NQF level 2 and below	54%	31
	% of FE qualifiers achieving a highest level of qualification at NQF level 2	12%	28
	Qualifiers from tertiary level education in either FE or HE as a % of the 20-24 year olds	15%	48
	% of HE qualifiers achieving a postgraduate qualification (NQF level 7-8)	21%	51
	% of HE qualifiers gaining qualifications in maths, computing, engineering & technology	18%	4
Skills stock	% of 16-64 population with low qualifications (below NQF level 2)	51%	77
	% of 16-64 population with high qualifications (NQF level 4+)	17%	76
	% of 16-34 population with low qualifications (below NQF level 2)	35%	70
	% of 16-34 population with high qualifications (NQF level 4+)	19%	74
Labour market and socio-economic indicators	Social security clients (client group analysis) as a % of the population (16-64)	29%	70
	Social security clients (client group analysis) as a % of the population (16-34)	19%	60
	Housing benefit claimants as a % of the population (16-64)	12%	59
	Housing benefit claimants as a % of the population (16-34)	9%	54
	% of households with no adults in employment	40%	68
	% of households with no adults in employment with dependent children	9%	72
	% of households with lone parents with dependent children	10%	62
	% of people employed who are either managers/senior officials or professionals	6%	72
	Employment rate (%, 16-74 population)	53%	72
	Unemployed who have never worked (% of unemployed)	19%	67

Source: NISRA, DfE, DE, 2011 Census, DfC, UUEPC

Ranked in the top 10 performing DEA's in NI

Ranked in the bottom 10 performing DEA's in NI

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Annex E10: Faughan (Derry City and Strabane)

	Faughan	%	Rank
Skills flow	% of school leavers achieving 5 GCSE's (including English and maths)	76%	14
	% of school enrolments entitled to FSM	28%	46
	% of school leavers entitled to FSM achieving 5 GCSE's (including English and maths)	15%	58
	% of FE qualifiers achieving a highest level of qualification at NQF level 2 and below	42%	2
	% of FE qualifiers achieving a highest level of qualification at NQF level 2	9%	13
	Qualifiers from tertiary level education in either FE or HE as a % of the 20-24 year olds	20%	12
	% of HE qualifiers achieving a postgraduate qualification (NQF level 7-8)	26%	27
	% of HE qualifiers gaining qualifications in maths, computing, engineering & technology	14%	17
Skills stock	% of 16-64 population with low qualifications (below NQF level 2)	39%	40
	% of 16-64 population with high qualifications (NQF level 4+)	26%	31
	% of 16-34 population with low qualifications (below NQF level 2)	30%	46
	% of 16-34 population with high qualifications (NQF level 4+)	24%	35
Labour market and socio-economic indicators	Social security clients (client group analysis) as a % of the population (16-64)	21%	45
	Social security clients (client group analysis) as a % of the population (16-34)	15%	50
	Housing benefit claimants as a % of the population (16-64)	9%	44
	Housing benefit claimants as a % of the population (16-34)	8%	53
	% of households with no adults in employment	32%	26
	% of households with no adults in employment with dependent children	7%	63
	% of households with lone parents with dependent children	10%	61
	% of people employed who are either managers/senior officials or professionals	9%	22
	Employment rate (%, 16-74 population)	60%	52
	Unemployed who have never worked (% of unemployed)	17%	53

Source: NISRA, DfE, DE, 2011 Census, DfC, UUEPC

Ranked in the top 10 performing DEA's in NI

Ranked in the bottom 10 performing DEA's in NI

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Annex E11: Foyleside (Derry City and Strabane)

	Foyleside	%	Rank
Skills flow	% of school leavers achieving 5 GCSE's (including English and maths)	73%	24
	% of school enrolments entitled to FSM	47%	75
	% of school leavers entitled to FSM achieving 5 GCSE's (including English and maths)	20%	73
	% of FE qualifiers achieving a highest level of qualification at NQF level 2 and below	46%	7
	% of FE qualifiers achieving a highest level of qualification at NQF level 2	7%	5
	Qualifiers from tertiary level education in either FE or HE as a % of the 20-24 year olds	12%	69
	% of HE qualifiers achieving a postgraduate qualification (NQF level 7-8)	23%	46
	% of HE qualifiers gaining qualifications in maths, computing, engineering & technology	13%	33
Skills stock	% of 16-64 population with low qualifications (below NQF level 2)	38%	35
	% of 16-64 population with high qualifications (NQF level 4+)	25%	41
	% of 16-34 population with low qualifications (below NQF level 2)	27%	34
	% of 16-34 population with high qualifications (NQF level 4+)	23%	49
Labour market and socio-economic indicators	Social security clients (client group analysis) as a % of the population (16-64)	31%	74
	Social security clients (client group analysis) as a % of the population (16-34)	21%	66
	Housing benefit claimants as a % of the population (16-64)	19%	74
	Housing benefit claimants as a % of the population (16-34)	13%	68
	% of households with no adults in employment	43%	76
	% of households with no adults in employment with dependent children	10%	74
	% of households with lone parents with dependent children	13%	74
	% of people employed who are either managers/senior officials or professionals	7%	55
	Employment rate (%, 16-74 population)	49%	76
	Unemployed who have never worked (% of unemployed)	22%	72

Source: NISRA, DfE, DE, 2011 Census, DfC, UUEPC

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Annex E12: Waterside (Derry City and Strabane)

Waterside		%	Rank
Skills flow	% of school leavers achieving 5 GCSE's (including English and maths)	69%	32
	% of school enrolments entitled to FSM	36%	63
	% of school leavers entitled to FSM achieving 5 GCSE's (including English and maths)	14%	52
	% of FE qualifiers achieving a highest level of qualification at NQF level 2 and below	43%	3
	% of FE qualifiers achieving a highest level of qualification at NQF level 2	6%	3
	Qualifiers from tertiary level education in either FE or HE as a % of the 20-24 year olds	17%	29
	% of HE qualifiers achieving a postgraduate qualification (NQF level 7-8)	21%	54
	% of HE qualifiers gaining qualifications in maths, computing, engineering & technology	11%	60
Skills stock	% of 16-64 population with low qualifications (below NQF level 2)	41%	46
	% of 16-64 population with high qualifications (NQF level 4+)	25%	36
	% of 16-34 population with low qualifications (below NQF level 2)	32%	56
	% of 16-34 population with high qualifications (NQF level 4+)	24%	41
Labour market and socio-economic indicators	Social security clients (client group analysis) as a % of the population (16-64)	28%	68
	Social security clients (client group analysis) as a % of the population (16-34)	26%	76
	Housing benefit claimants as a % of the population (16-64)	17%	70
	Housing benefit claimants as a % of the population (16-34)	17%	75
	% of households with no adults in employment	40%	70
	% of households with no adults in employment with dependent children	8%	66
	% of households with lone parents with dependent children	12%	71
	% of people employed who are either managers/senior officials or professionals	7%	59
	Employment rate (%, 16-74 population)	56%	69
	Unemployed who have never worked (% of unemployed)	20%	71

Source: NISRA, DfE, DE, 2011 Census, DfC, UUEPC

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Annex E13: Sperrin (Derry City and Strabane)

	Sperrin	%	Rank
Skills flow	% of school leavers achieving 5 GCSE's (including English and maths)	64%	60
	% of school enrolments entitled to FSM	37%	66
	% of school leavers entitled to FSM achieving 5 GCSE's (including English and maths)	17%	66
	% of FE qualifiers achieving a highest level of qualification at NQF level 2 and below	48%	9
	% of FE qualifiers achieving a highest level of qualification at NQF level 2	10%	20
	Qualifiers from tertiary level education in either FE or HE as a % of the 20-24 year olds	18%	20
	% of HE qualifiers achieving a postgraduate qualification (NQF level 7-8)	18%	70
	% of HE qualifiers gaining qualifications in maths, computing, engineering & technology	11%	50
Skills stock	% of 16-64 population with low qualifications (below NQF level 2)	48%	75
	% of 16-64 population with high qualifications (NQF level 4+)	19%	74
	% of 16-34 population with low qualifications (below NQF level 2)	34%	65
	% of 16-34 population with high qualifications (NQF level 4+)	21%	66
Labour market and socio-economic indicators	Social security clients (client group analysis) as a % of the population (16-64)	30%	72
	Social security clients (client group analysis) as a % of the population (16-34)	20%	62
	Housing benefit claimants as a % of the population (16-64)	14%	66
	Housing benefit claimants as a % of the population (16-34)	11%	61
	% of households with no adults in employment	41%	73
	% of households with no adults in employment with dependent children	8%	70
	% of households with lone parents with dependent children	10%	57
	% of people employed who are either managers/senior officials or professionals	7%	68
	Employment rate (%, 16-74 population)	53%	73
	Unemployed who have never worked (% of unemployed)	23%	74

Source: NISRA, DfE, DE, 2011 Census, DfC, UUEPC

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Annex E14: The Moor (Derry City and Strabane)

	The Moor	%	Rank
Skills flow	% of school leavers achieving 5 GCSE's (including English and maths)	59%	72
	% of school enrolments entitled to FSM	57%	78
	% of school leavers entitled to FSM achieving 5 GCSE's (including English and maths)	23%	77
	% of FE qualifiers achieving a highest level of qualification at NQF level 2 and below	49%	10
	% of FE qualifiers achieving a highest level of qualification at NQF level 2	14%	42
	Qualifiers from tertiary level education in either FE or HE as a % of the 20-24 year olds	15%	46
	% of HE qualifiers achieving a postgraduate qualification (NQF level 7-8)	14%	79
	% of HE qualifiers gaining qualifications in maths, computing, engineering & technology	14%	30
Skills stock	% of 16-64 population with low qualifications (below NQF level 2)	52%	78
	% of 16-64 population with high qualifications (NQF level 4+)	16%	77
	% of 16-34 population with low qualifications (below NQF level 2)	37%	76
	% of 16-34 population with high qualifications (NQF level 4+)	17%	78
Labour market and socio-economic indicators	Social security clients (client group analysis) as a % of the population (16-64)	46%	80
	Social security clients (client group analysis) as a % of the population (16-34)	31%	78
	Housing benefit claimants as a % of the population (16-64)	31%	80
	Housing benefit claimants as a % of the population (16-34)	21%	78
	% of households with no adults in employment	54%	80
	% of households with no adults in employment with dependent children	14%	79
	% of households with lone parents with dependent children	17%	75
	% of people employed who are either managers/senior officials or professionals	6%	77
	Employment rate (%, 16-74 population)	41%	80
	Unemployed who have never worked (% of unemployed)	27%	80

Source: NISRA, DfE, DE, 2011 Census, DfC, UUEPC

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End

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