

Youth Jobs Index

June 2017

Learning and Work Institute

Patron: HRH The Princess Royal | Chief Executive: Stephen Evans
A company limited by guarantee, registered in England and Wales
Registration No. 2603322 Registered Charity No. 1002775
Registered office: 21 De Montfort Street, Leicester, LE1 7GE

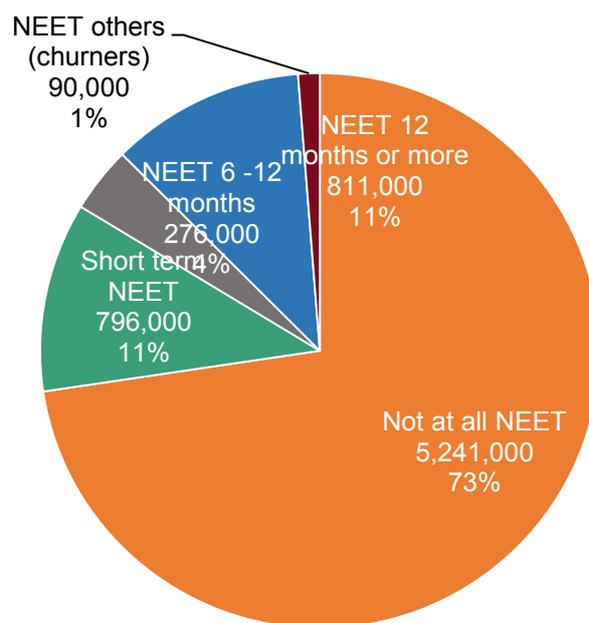


INDICATOR 1: PERCENTAGE OF YOUNG PEOPLE SPENDING UP TO SIX MONTHS NOT IN EDUCATION, EMPLOYMENT OR TRAINING (NEET)

This indicator is intended to go a little deeper than the headline figure of NEET numbers. Some young people may be more likely to be long-term NEET than others, and conversely some may be likely to be only short-term NEET. This poses issues for the metrics that are used to identify success. We need to be alert to issues of ‘creaming’ – assisting those most likely to move off NEET and ‘parking’ – providing lesser assistance to those least likely to move off NEET.

Figure 1 shows that 11% of the youth population spend under six months NEET, while 11% spend 12 months or more NEET. There are a small group identified as ‘others’. These are young people who are NEET some of the time, but not for long consecutive periods.

Figure 1: Proportion of young people by NEET duration



	Estimate	Low CI	High CI
Not at all NEET	5,241,000	5,086,000	5,395,000
Short term NEET	796,000	708,000	883,000
NEET 6 -12 months	276,000	245,487	306,166
NEET 12 months or more	811,000	711,000	912,000
NEET others (churners)	90,000	78,903	101,208

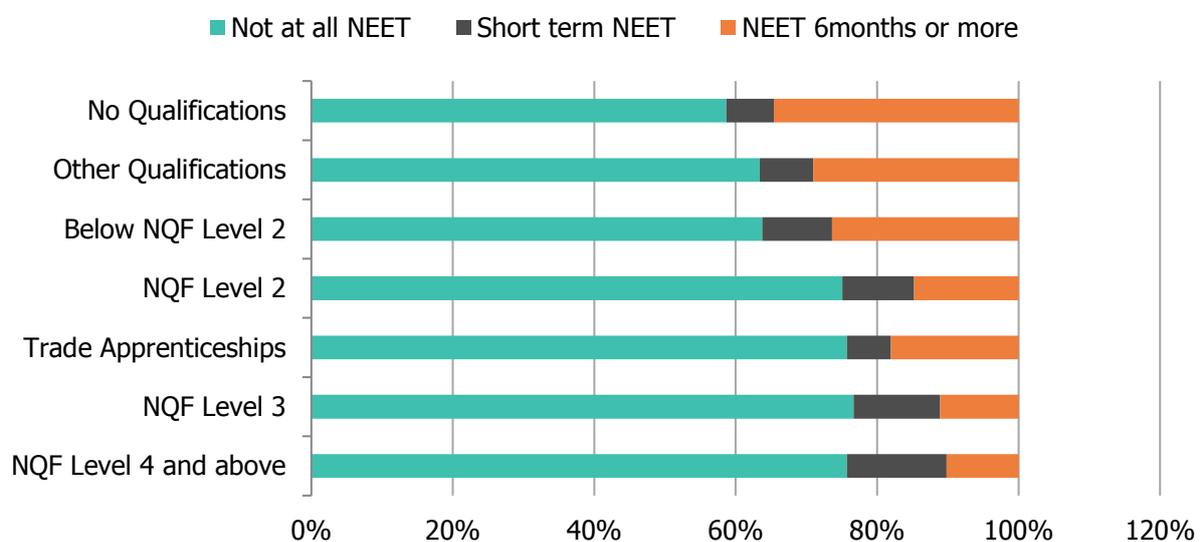
Source: LFS, ONS, L&W analysis

The calculation identifies those who were short term NEET at any time in the period they were interviewed for the Labour Force Survey.

Figure 2 breaks this down by qualification, showing the proportion of all young people with that qualification level who were not at all NEET (in the 15 months covered by LFS interviews), those who were under six months NEET and those who were over six months NEET.

Even for those with no qualifications, 59% (57% last year) did not spend any time NEET. A higher proportion, 64% (58% last year) of young people with qualifications below Level 2, were not observed as NEET.

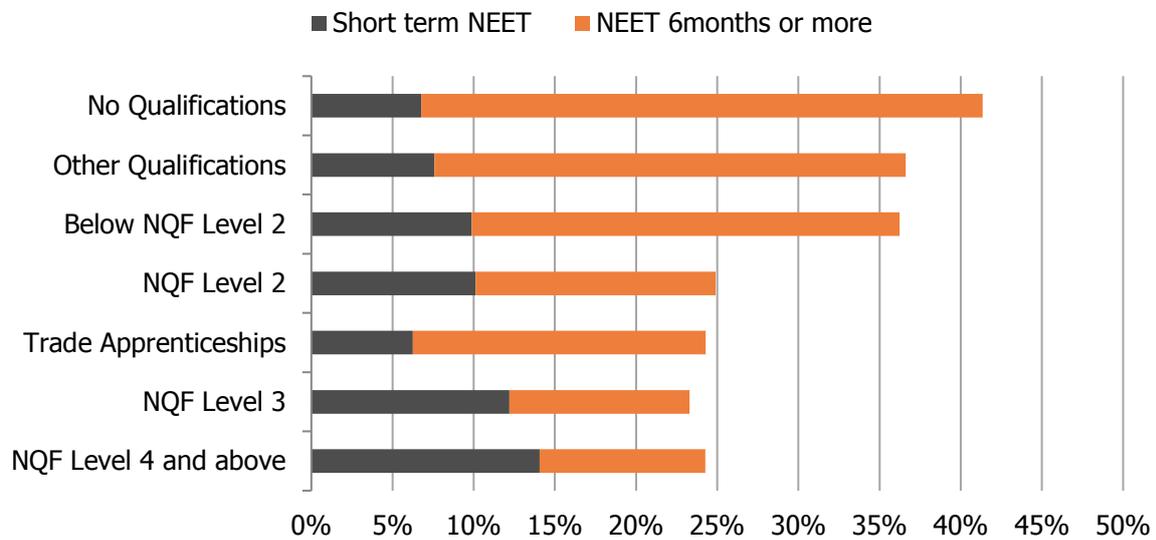
Figure 2: Proportion of young people by NEET duration and qualification level



Source: LFS, ONS, L&W analysis

Figure 3 breaks out the NEET proportions and shows the gaps between higher and lower qualification groups more clearly.

Figure 3: Proportion of young people by NEET duration and qualification level condensed



	Not at all NEET	Short term NEET	NEET 6 months or more
NQF Level 4 and above	964,000	179,000	130,000
NQF Level 3	1,548,000	246,000	224,000
NQF Level 2	1,605,000	216,000	316,000
Below NQF Level 2	524,000	81,000	217,000
No Qualifications	364,000	42,000	214,000

Source: LFS, ONS, L&W analysis

This shows that the proportions of young people in each qualification group who are short-term NEET do differ, with the higher qualified having higher proportions NEET. The big gaps, however, are in those longer term NEET.

While all long-term NEET started as short-term NEET, it is clear that the risks of becoming long-term NEET are much higher for those qualified below NQF Level 2 than for the higher qualified.

INDICATOR 2: THE PROPORTION OF YOUNG PEOPLE THAT ARE LONG-TERM NEET

This Indicator measures the proportion of young people that have been outside education, employment or training for at least six months. There is strong evidence that spending a long time unemployed or inactive, particularly at a young age, can lead to long-term negative impacts on earnings, employment, health or wellbeing (so-called 'scarring').

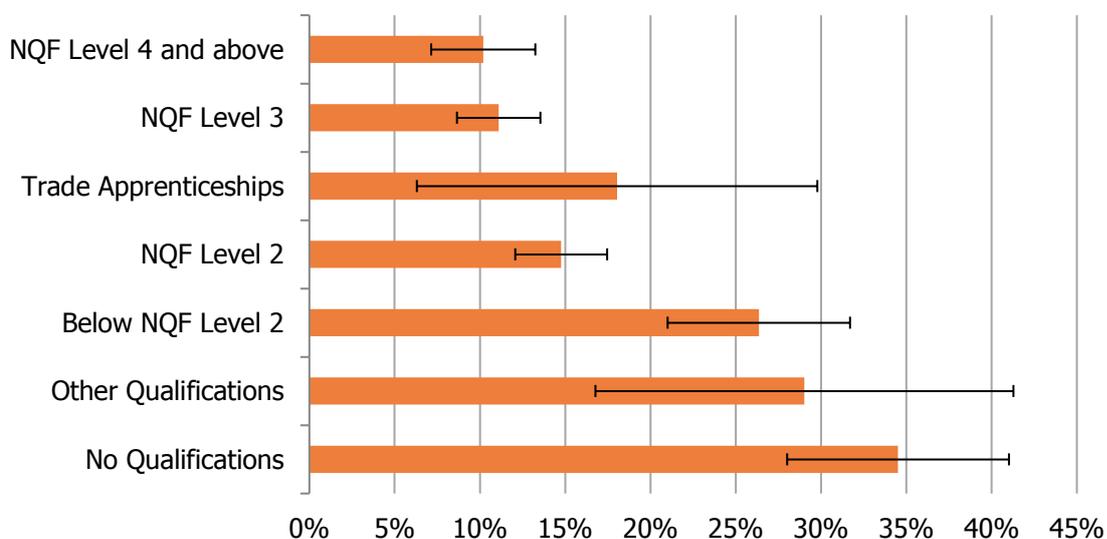
NEET SIX MONTHS OR MORE

Our measure is again based on the Labour Force Survey. We have defined as being NEET for six months or more those young people who are classed as being NEET in any two consecutive quarters out of the five quarters for which they are observed in the 5-quarter survey.

We estimate that, in the 8 consistent datasets used (finishing in the 3rd quarter of 2016), there were 1.18 million (1.29 last year) young people NEET for six months or more. The confidence interval is between 870 thousand and 1.48 million.

The risk of being NEET for six months or more varies strongly with qualification. The risk (that is, the percentage of young people with that qualification who were NEET for six months or more) varies from 10% (no change) for those with Level 4 and over qualifications, up to 35% (no change) for those with no qualifications. Figure 7 shows this.

Figure 4: Proportion of young people by qualification who are at risk of NEET for six months or more

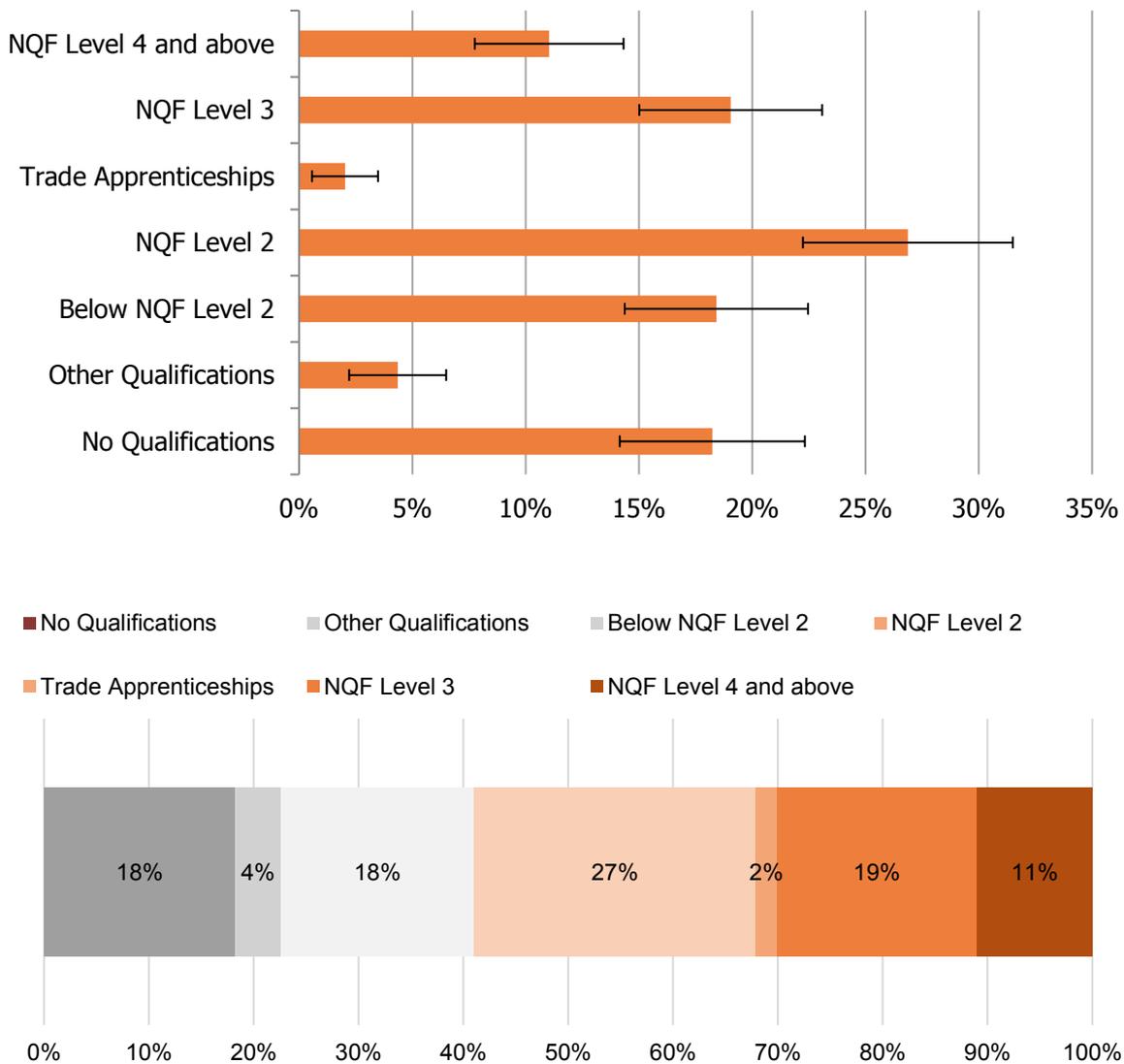


Source: LFS, ONS, L&W analysis

Figure 4 shows that those with Level 2 or above qualifications have a markedly lower chance of being NEET for six months or more than those with qualifications below this level. The smaller number of people with other qualifications (frequently overseas qualifications) look to have a high risk of NEET.

However, because the proportions of young people getting good qualifications has increased, the picture when you look at the balance of young people who are NEET six months by qualification looks very different.

Figure 5: Proportion of young people by qualification who are NEET for six months or more



Source: LFS, ONS, L&W analysis

Figure 5 shows that there are more young people NEET for six months or more with Level 2 qualifications than those with no qualifications, and also more young people with Level 3 qualifications who are NEET six months than those with no qualifications.

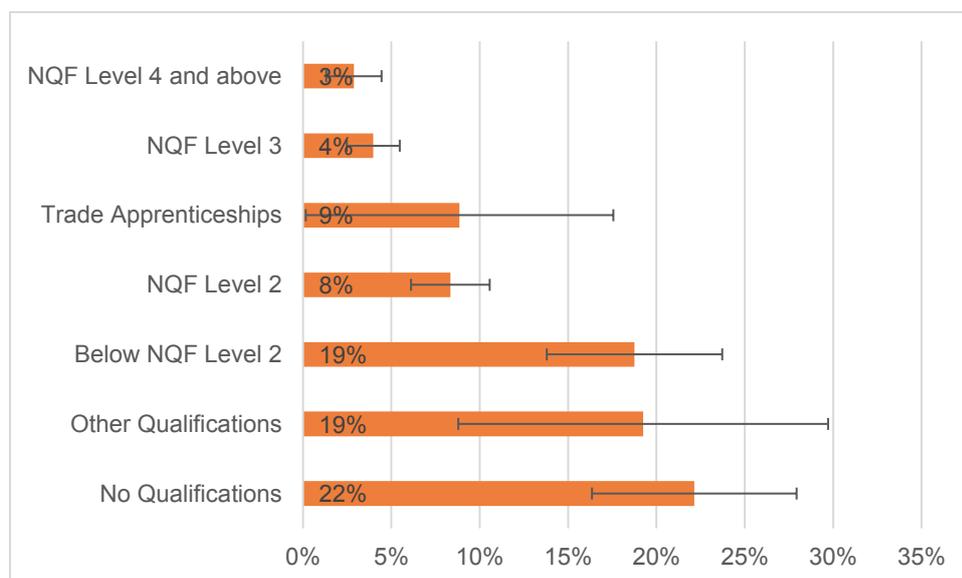
NEET TWELVE MONTHS OR MORE

We have defined as NEET for twelve months or more those who are classed as NEET for all five interviews, consecutively, observed in the 5-quarter LFS.

We estimate that, in the 8 consistent datasets used (finishing in the 3rd quarter of 2016), there were 811 thousand young people NEET twelve months or more. The confidence interval is between 711 thousand and 912 thousand.

The risk of being NEET for twelve months or more varies strongly with qualification. The risk varies from 3% for those with Level 4 and over qualifications, up to 22% for those with no qualifications. Figure 6 shows this.

Figure 6: Proportion of young people by qualification who are at RISK OF NEET for twelve months or more

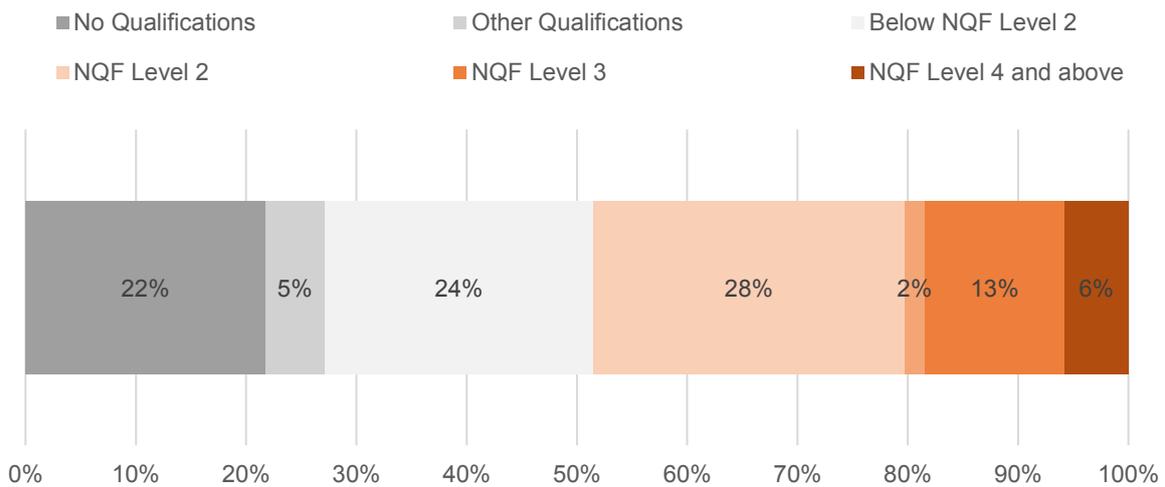
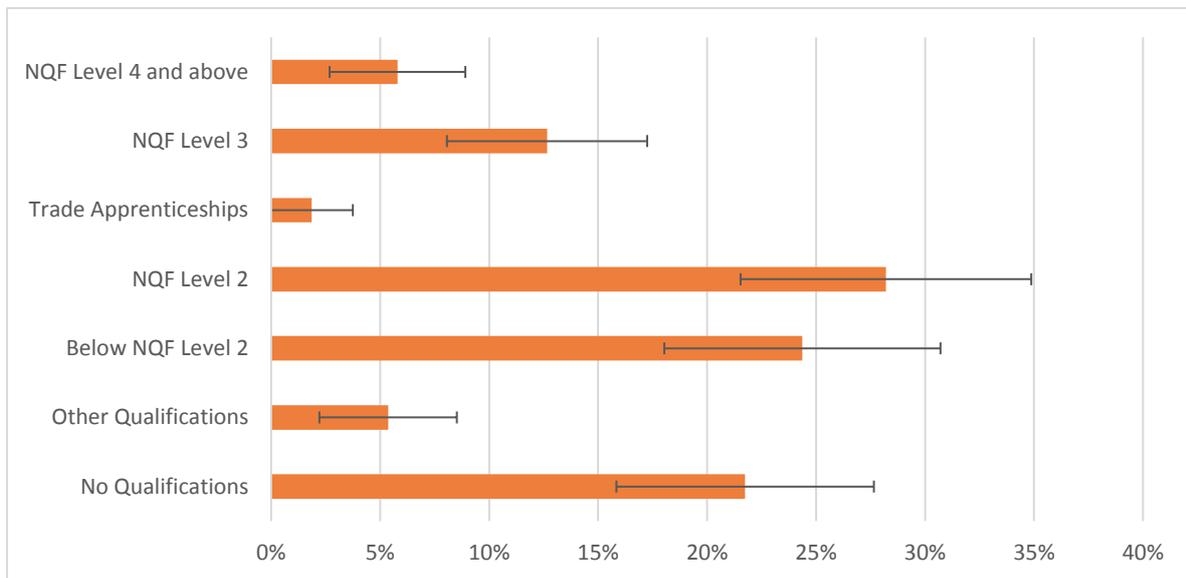


Source: LFS, ONS, L&W analysis

Figure 6 shows that those with Level 2 or above qualifications have a markedly lower chance of being NEET for twelve months or more than those with qualifications above this level.

However, because the proportions of young people getting good qualifications has increased, the picture when you look at the balance of young people who are NEET twelve months by qualification looks very different.

Figure 7: Proportion of young people by qualification who are NEET for twelve months or more



Source: LFS, ONS, L&W analysis

Figure 7 shows that there are many more young people NEET for twelve months or more with Level 2 qualifications than those with no qualifications.

INDICATOR 3: PERCENTAGE OF EMPLOYED YOUNG PEOPLE WHO ARE ‘UNDEREMPLOYED’

This indicator measures the number of young people who are over-qualified for their job, want more hours, are in temporary work but want permanent work, or are classed as employed but are on a government programme. This is important because it indicates where young people and the economy are not reaching their full potential – leading to lower productivity, lower output, and for young people lower incomes and wellbeing.

The overall estimates for young people who are underemployed are in Table 1.

Table 1: Underemployment by category

	Central	Low	High
Government scheme	31,000	26,000	36,000
Overqualified	1,565,000	1,531,000	1,600,000
Want more hours	536,000	515,000	557,000
Want permanent job	113,000	102,000	124,000
Total Underemployed	2,245,000	2,174,000	2,316,000
Total Underemployed 2016	2,239,000	2,170,000	2,307,000
Per cent of young people	31.2%	30.2%	32.2%
Per cent of young people 2016	30.9%	30.0%	31.8%

Source: LFS, ONS, L&W analysis

The total estimate is over 2 million, or more than a quarter of all young people. This is based on the average of the four Labour Force Survey datasets up to and including October-December 2016, and therefore represents the 2016 calendar year. There is an increase on last year’s figure, but the new value is within the confidence interval for last year’s estimate, so we cannot say whether the increase is a random variation or not.

INDICATOR 4: OCCUPATION AND SECTOR OF EMPLOYED YOUNG PEOPLE WHO USED TO BE NEET

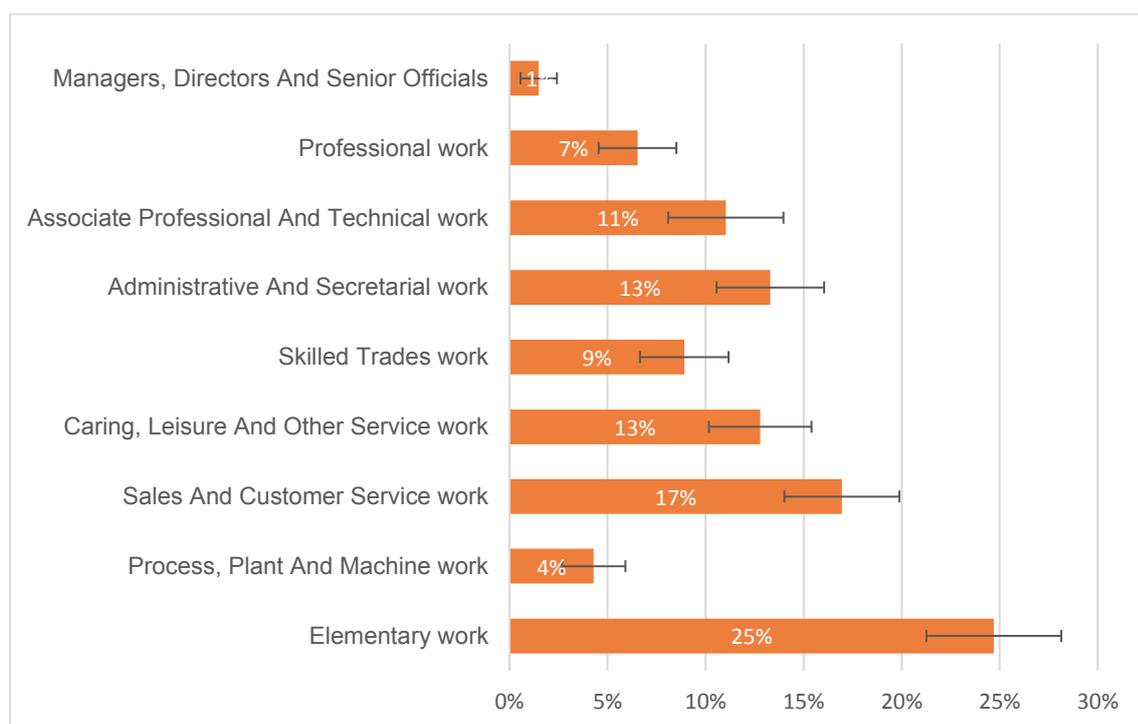
This indicator provides information on the jobs that young people who have been NEET are doing once they start work. It can help to identify where employer engagement activities are best targeted when attempting to reduce the impact of being NEET on young people.

Figure 8 shows the jobs that NEET young people enter when they start work. The total for the bars in the chart adds up to 100% of the NEET young people who started work.

These are young people who are NEET at all, so the chart includes those of all durations, including those who are NEET for three months or less. The width of the confidence intervals shows that it would be unwise to try to break this analysis down by the length of time young people were NEET, as the confidence intervals would widen substantially from an already wide set for any smaller group of young people.

Nearly half (42%) of job starts by young people who were NEET are in either elementary work or in sales and customer service work. We cannot reliably distinguish between the proportions going into jobs in caring and leisure jobs, administrative and secretarial, and associate professional and technical jobs.

Figure 8: Job starts by NEET young people by occupation

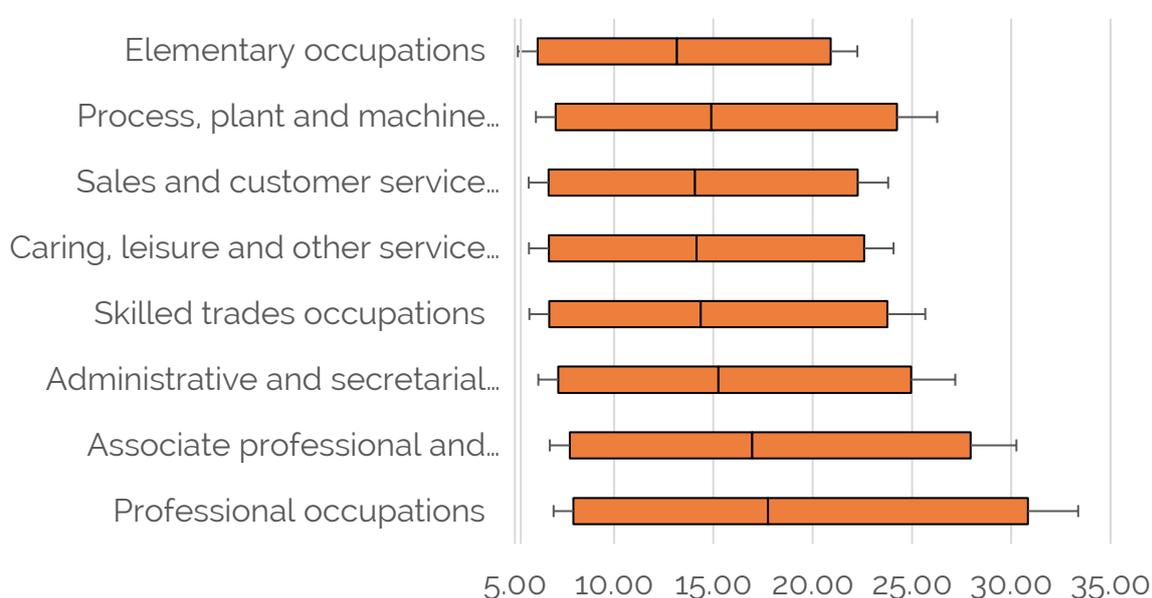


Source: LFS, ONS

We do not have earnings figures for the NEET young people entering these occupations, but we do have overall earnings figures for young people aged 18-21 in these groups. These are shown in Figure 9.

Figure 9 shows the ranges of hourly earnings for young people aged 18-21 who are employed in these occupation groups. At the time the earnings figures were being collected, the National Minimum Wage for 18-20 year olds was £5.30 (now £5.60) and for those 21-24 was £6.70 (now £7.05). In addition, there was an Apprenticeship rate of £3.30 an hour (now £3.50) for those 16-18 or older people in the first year of their apprenticeship.

Figure 9: Hourly earnings for 18-21 year olds by occupation, April 2016



Source: ONS Annual Survey of Hours and Earnings

Figure 9 shows as the central bars the earnings of the middle 50% of young people in that occupation. The central line is the median earnings above and below which 50% of young people in that occupation are found. The 'whiskers' to the left and right extend to the earnings level of the lowest 10% (left) and highest 10% (right). All the lowest 10% figures were at or above the 18-20 Minimum Wage, though in the case of Elementary occupations, this was just exactly on the £5.30 minimum wage. The lowest 25% (the left hand end of the central bar) was exactly on the 21-24 Minimum Wage for Sales and customer service occupations, caring leisure and other service occupations and for skilled trades. The 25% mark was below the adult National Minimum Wage for those in elementary occupations.

These figures show hourly pay, which enables a comparison with the National Minimum Wage. Weekly pay will depend on whether people are part time, and the hours worked.

Table 2 shows where these occupations fit within a sectoral classification. For example, 33% of NEETS who start work are in the sector that includes wholesale, retail, hotels and restaurants. There are 15% in sales occupations and 12% in elementary occupations. This latter group includes catering assistants, waiters, and bar staff as well as shelf-fillers in retail. The second largest group are caring occupations in public administration, education and health – and social care is the most likely destination in this case. There are a large number of occupation/industry cells in the table with negligible numbers of young people who had been NEET, but a wide spread of small numbers through the remainder of the table.

Table 2: Job starts by NEET young people by occupation and sector

	Production Industries	Construction	Wholesaling, Retailing, Hotels & Restaurants	Finance and Business Services	Public, Education, Health	Transport communications, other services	Total
Managers, Directors and Senior Officials	0%	0%	0%	0%	0%	0%	1%
Professional Jobs	0%	0%	1%	1%	3%	1%	6%
Associate Professional and Technical Jobs	1%	0%	0%	5%	2%	3%	11%
Administrative and Secretarial Jobs	1%	0%	1%	4%	2%	2%	11%
Skilled Trades Jobs	3%	3%	2%	1%	0%	1%	8%
Caring, Leisure and Other Service Jobs	0%	0%	0%	1%	9%	2%	13%
Sales and Customer Service Jobs	1%	0%	15%	2%	1%	1%	19%
Process, Plant and Machine Operatives	1%	0%	1%	0%	0%	1%	4%
Elementary Jobs	3%	3%	12%	3%	2%	4%	26%
Total	11%	7%	33%	15%	20%	14%	100%

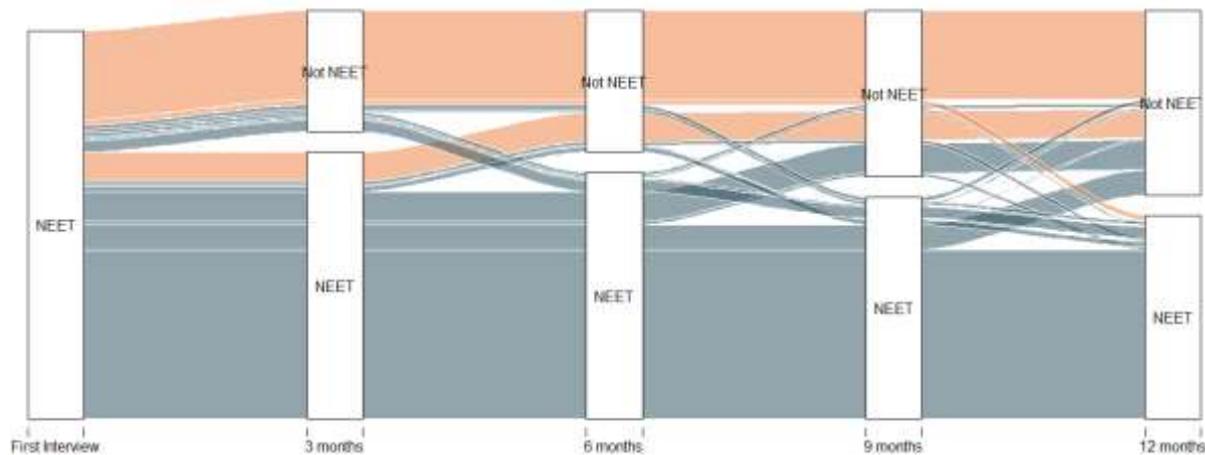
Source: LFS, ONS, L&W analysis

This table is broadly similar to one we have constructed for all young people in work. The major differences are that those who have been NEET are more likely to work in elementary occupations (26% rather than 22% for all young people), less likely to work in skilled trades (8% rather than 10%) and less likely to work in wholesaling, retailing, hotels and restaurants (33% rather than 37%). Within the table, virtually all differences round to 1% or lower. The largest one is that NEET young people are more likely to move into elementary jobs in construction (such as construction labouring), with 3% of jobs rather than the 1% overall.

INDICATOR 5: SUSTAINMENT OF EXITS FROM BEING NEET

Figure 10 shows the patterns of moves for NEET young people between being NEET and not NEET.

Figure 10: NEET young people tracked over a full year



Source: LFS, ONS, L&W analysis

NEET young people start in Figure 10 at the left, with 100% being NEET. Each subsequent interview shows an increase in the proportion who are not NEET. Each group of movers between states is tracked through between interviews, so we can see the extent of moves at each stage. Most of the small flows are based on very small numbers of survey responses, so in the other charts in this report we show confidence intervals around aggregated patterns. However, showing that churn and movements exist (or can exist) can be important as well as estimating the size of the movements.

The chart highlights (in orange) those who we are able to say had sustained a move out of being NEET for six months or more. The chart shows that there are quite large flows out of being NEET at each interview we can observe, although we cannot verify whether they have sustained for six months.

It also shows that flows from not being NEET back into being NEET are fairly small, although they do exist.

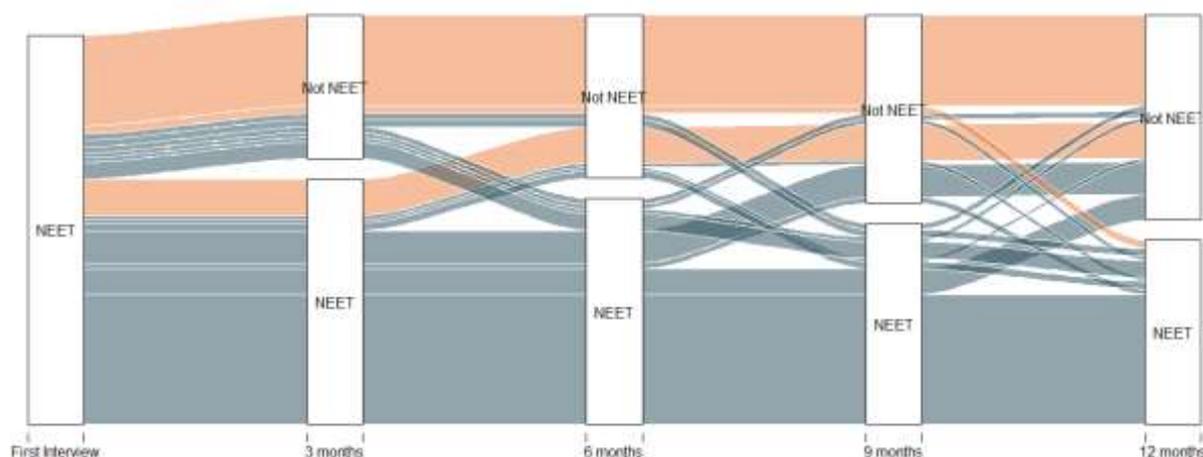
These patterns vary by whether people were initially ILO unemployed, that is, looking for work and also available to start work, or not, and classed as economically inactive.

Figure 11 shows the pattern for those who were unemployed at first – this is 46% of the total group.

Firstly the proportion who move out of NEET over the year is higher – while 48% were not NEET after one year overall, for those who were unemployed, the proportion is 53%.

Secondly, the ‘churn’ between the NEET and not NEET states is higher than for all NEET young people. The individual flows have very wide confidence intervals, but cumulatively we can say that unemployed young people who move out of NEET (and in most cases these are moves into work) have quite a high risk of moving back out of work. There is a small number that have three quarterly interviews not being NEET, but with a gap in the middle, and so appear blue in the chart.

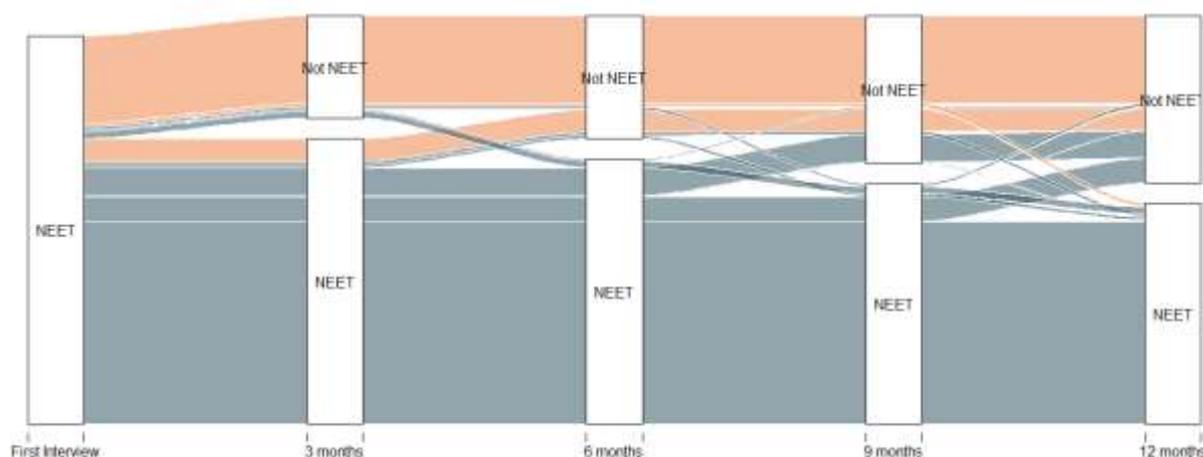
Figure 11: Unemployed NEET young people tracked for a full year



Source: LFS, ONS, L&W analysis

The patterns for the economically inactive (those who don't meet both criteria for being unemployed, for whatever reason) are the opposite of the differences between the overall group and the unemployed. The proportion who are NEET at the end of one year is higher (57% against 43% not NEET) compared to the overall group (and much higher than the unemployed. Against that, churn is less evident, while there is, in each quarter, a considerable flow from NEET to not NEET status.

Figure 12: Inactive NEET young people tracked for a full year



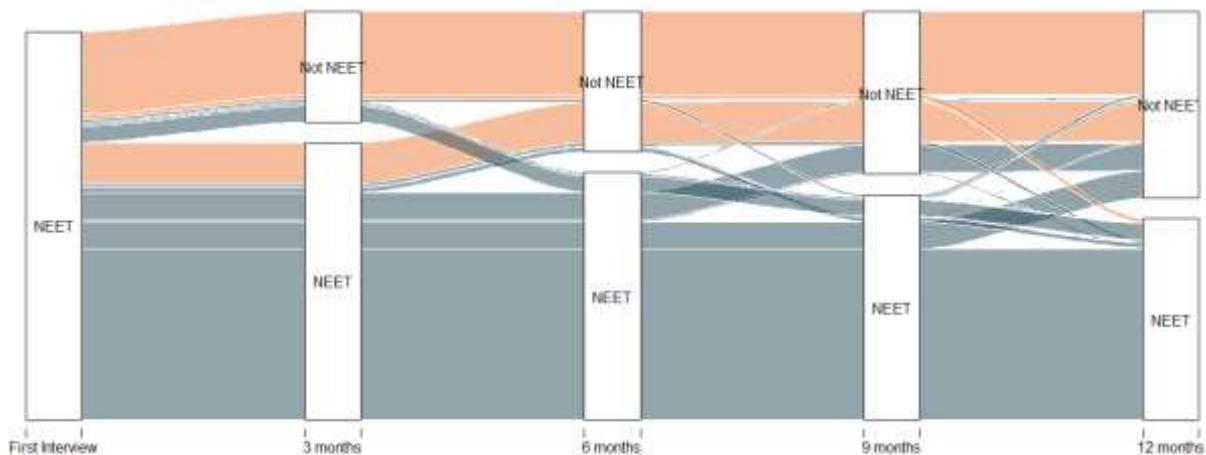
Source: LFS, ONS, L&W analysis

These patterns are reflected in the patterns by gender, because while young women are only slightly more likely to be NEET than young men (54% are women, 46% men), young women are very much more likely to be inactive than are young men. Nearly 2/3 of the inactive are young women (66%), while young men are 60% of the unemployed.

However, after one year, the proportions NEET and not NEET are almost identical between young men and young women. The major difference is that young men show continued patterns of churn, while this is less apparent for young women.

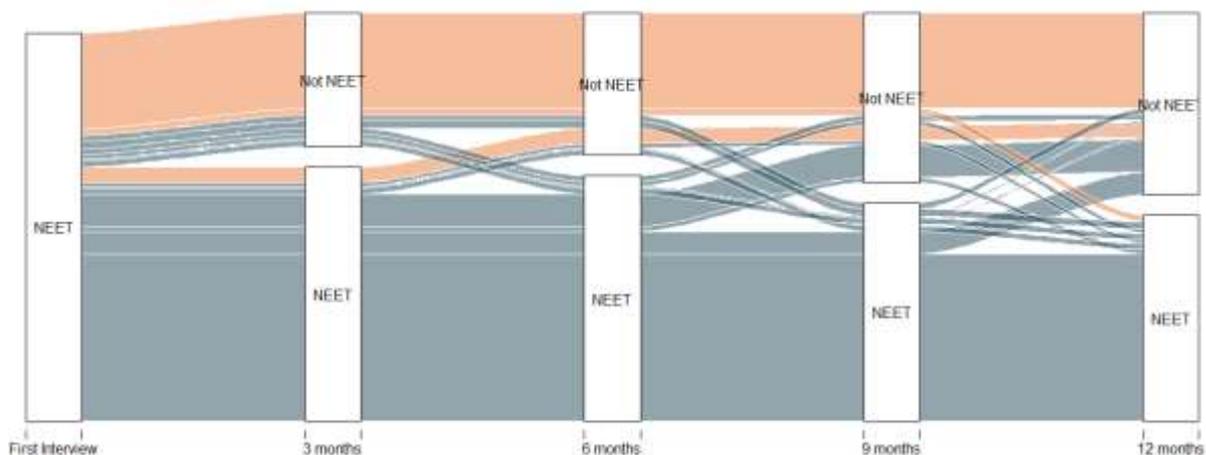
While the totals are very similar, the proportions who sustain exit from NEET are greater for young women. 33% of NEET young women achieved six months not NEET, compared to 30% of NEET young men. This difference, however, is not statistically significant, being within the confidence intervals.

Figure 13: Female NEET young people tracked for a full year



Source: LFS, ONS, L&W analysis

Figure 14: Male NEET young people tracked for a full year



Source: LFS, ONS, L&W analysis

Figure 15 shows the extent to which young people who were NEET, and stop being NEET, remain in either education or employment. This matters because it indicates the extent to which young people who enter employment or learning are able to stay there. There is evidence that some young people can ‘cycle’ between being in and out of NEET, which again can have longer-term consequences for their earnings, employment, health and wellbeing.

We use the Labour Force Survey to measure NEET sustainment. To do so, we identify those who were NEET at the first out of 5 quarterly interviews, and follow them through the remaining 4 interviews. Those who sustained nine months or more were not NEET in any further interview. Those who sustained six months or more were NEET in the first interview and not NEET in either of the three next interviews.

The chart shows those who exited NEET either by the first subsequent quarterly interview or by the second – so we can observe the next three interviews.

The first set of columns below shows the proportion of young people who were NEET in the first quarter of measurement but who were no longer NEET in the second quarter (i.e. not NEET after three months) and those who left NEET before the third interview.. The second set of columns then shows the proportion who were still not NEET in the third quarter (i.e. had sustained their exit from NEET for six months). Subsequent bars then show the proportion still not NEET after nine months.

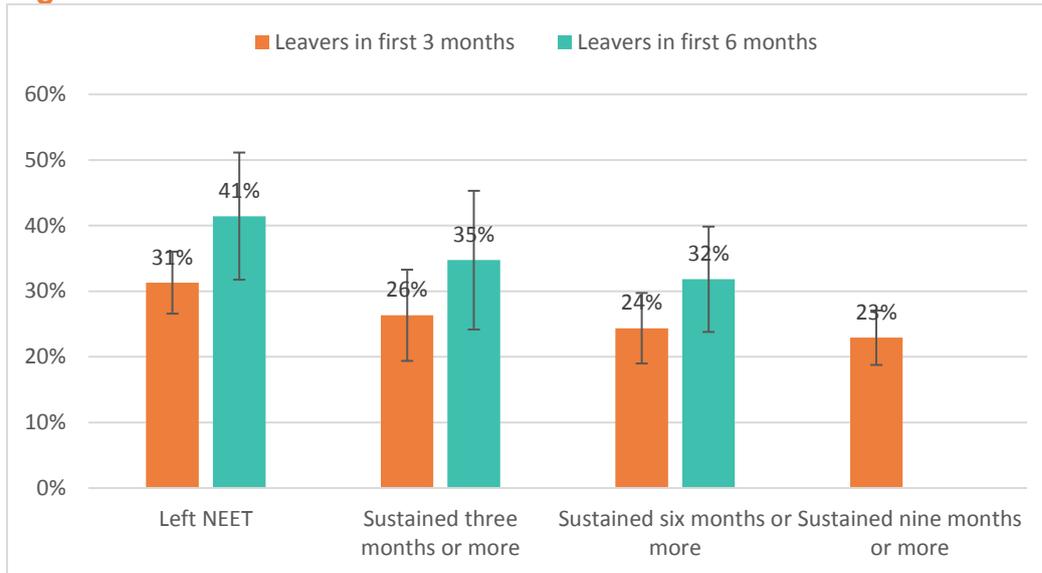
Within each group of columns, the left hand column shows those who left NEET in the first three months after being observed NEET, and the second column includes all those who left NEET in either the first three months or the second three-month period.

The error bars show the confidence interval around the estimates shown.

Overall, 70% of the young people who sustained one year or more having left NEET moved to employment. By deduction, the remaining 30% moved to education only. This does not preclude those who left to employment being in education as well. In particular, apprenticeships include both employment (usually full-time) and education (usually part-time). The contrary pattern of full-time education combined with part-time employment in shops, bars, etc. is also common among young people.

Most of those who left NEET to other destinations than employment and remained not NEET for a year were classed as economically inactive – but 7% of them were seeking work. Seeking work can be, and frequently is, combined with education, so these were likely to be in education and either seeking a job when they finished their course or a part-time job to help finances while they were studying.

Figure 15: Exits from NEET and sustainment



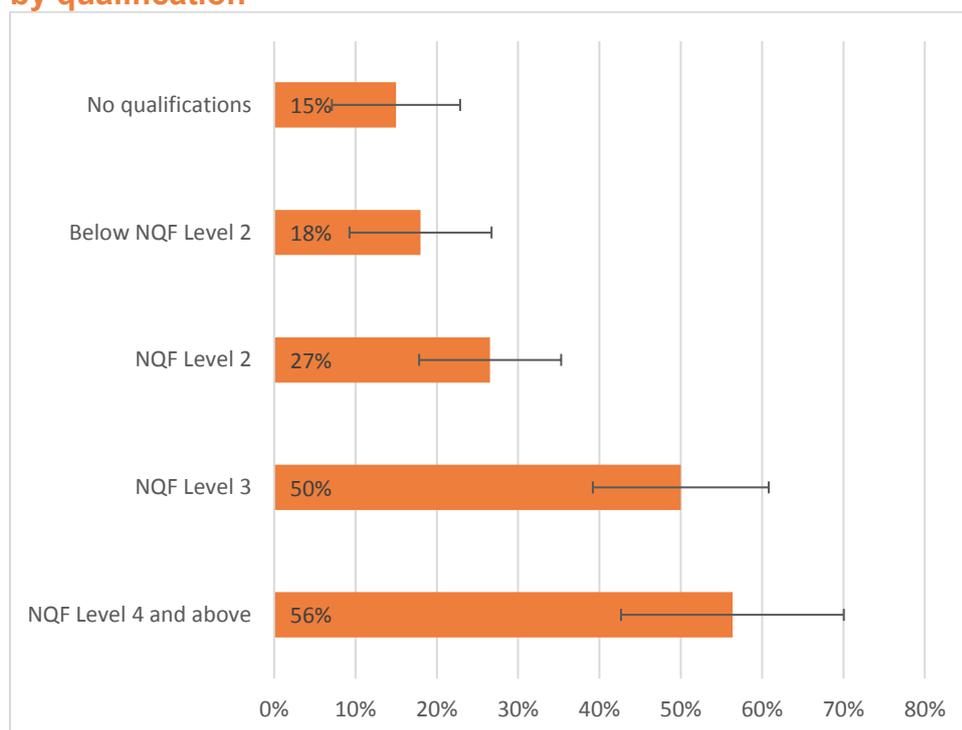
The error bars show the confidence we have in the estimates.

	Percentages of NEET young people leaving NEET in first 3 months	Percentages of NEET young people leaving NEET in first 6 months
Left NEET	31%	41%
Sustained three months or more	26%	35%
Sustained 6 months or more	24%	32%
Sustained 9 months or more	23%	

Source: LFS, ONS, L&W analysis

Figure 16 breaks down by qualification the patterns of six-month sustainment for the group who were NEET. This includes those who leave NEET in either the first or second three month period.

Figure 16: Proportion of NEETS who sustain not NEET for six months or more by qualification



	Initial exits from NEET	Sustained six months or more	Gap
NQF Level 4 and above	122,000	114,000	8,000
NQF Level 3	185,000	167,000	18,000
NQF Level 2	72,000	62,000	10,000
Below NQF Level 2	59,000	42,000	17,000
No Qualifications	66,000	34,000	32,000

Source: LFS, ONS, L&W analysis

The bars show the proportion of those who were NEET in the qualification group who were NEET at the first interview who left NEET and sustained EET for six months or more decline with lower levels of qualification.

The chart shows that there are large differences by qualification in the proportions who successfully exit NEET. However, the confidence intervals show that the strongest findings are that those with qualifications at level 3 and above are likely to sustain exits from NEET. The confidence intervals overlap for the three groups with lower qualification levels. We have excluded from the chart those qualifications with so few young people at either interview point that we could not estimate the percentages.

These figures are based on the Labour Force Survey 5-quarter longitudinal databases, and we have pooled eight of these to provide enough respondents to make these estimates. Therefore, these figures relate to families or individuals first

interviewed from July to September 2013 to July to September 2015, and the subsequent five interviews, with the last interviews taking place in July to September 2016.

NOTES AND GLOSSARY

Economically inactive

These are people who are not in work, but who do not satisfy all the criteria for ILO unemployment (wanting a job, seeking in the last four weeks and available to start in the next two), such as those in retirement and those who are not actively seeking work.

NEET

Aged 16 to 24 and not in education or employment

Risk of NEET

The Risk of (being or becoming) NEET is measured as the proportion of young people **with that characteristic** who are NEET. Therefore, the risk of being NEET for young people with no qualifications is the number of young people with no qualifications who are NEET divided by the number of young people with no qualifications. As this group is relatively small, they can have a high risk of being NEET while they are a relatively small proportion of NEET young people.

Over-qualification

The methods used for defining over qualification are a combination of ONS methods used in their publications on the graduate labour market, and those used by BIS for their similar publication. The ONS publication defines qualifications and occupations as graduate, upper middle (A Level or equivalent), Lower middle (GCSE A-C or equivalent), with the remainder below that. ONS restricts graduate occupations to managerial and professional occupations, while the BIS equivalent includes also associate professional jobs. We have followed BIS in this classification. The appropriate occupations for other classification levels follow the ONS method. Everybody working in elementary occupations who has a qualification at GCSE A-C or above is classified as overqualified. The same applies to those with 'other qualifications' which includes overseas qualifications and qualifications such as Large Goods Vehicle licences (and no other UK qualifications). These are only counted as overqualified if working in elementary occupations.

Sustainment

Sustainment is measured by the length of time a young person (who has been NEET) remains in employment or education after leaving NEET.

For Indicator 8 we identify those who were NEET at the first out of 5 quarterly interviews, and follow them through the remaining 4 interviews. Those who sustained one year or more were not NEET in any further interview. Those who sustained six

months or more were NEET in the first interview and not NEET in either of the two next interviews.

Underemployment

Underemployment is defined hierarchically - if young people are in a government employment and training programme, they are assigned to that category. Then, if they are not in that category and are working and want longer hours, they are assigned to that category. Then, if they are not already classified as underemployed and are working in a temporary job because they could not get a permanent job, they are assigned to "Want Perm job". The final grouping is those who are overqualified for the job they are doing. Young people are not classified into this group if they have been in any of the previous classifications.

Unemployed

Jobless people who want to work, are available to work and are actively seeking employment.

Youth population – In this analysis, we have used the age range from 16 to 24 in the Labour Force Survey analysis. This has increasingly become the age range used for NEET since 2010.

Qualification Levels

The National Qualifications Framework, known as NQF, sets out the level at which a qualification can be recognised in Northern Ireland, England and Wales.

Qualifications in the NQF are grouped together according to their difficulty. They are given a level from entry level to level 8. The levels are based on the standards of knowledge, skill and competence needed for each qualification. Qualifications at the same level can be very different in terms of content and the length of time they take to complete.

In the Labour Force Survey, all qualifications at Levels Four and above are grouped together. Entry Level and Level One are also grouped together as 'qualifications below Level 2'. The Labour Force Survey also records 'Other qualifications' where people have a qualification that cannot be classified into the NQF. There are two broad groups of these: firstly, occupational licences such as Large Goods Vehicle driving licences, and secondly, overseas qualifications that they have not been able to classify (given they have limited resource for classification of an almost infinite variety of qualifications). The 'Other qualification' group is only used where there is no NQF classifiable qualification, which is preferred in all cases.

NQF level	Examples of qualifications	What they give you
Entry	<ul style="list-style-type: none"> • Entry level certificates • Essential skills at entry level 	<ul style="list-style-type: none"> • basic knowledge and skills • ability to apply learning in everyday situations • not geared towards specific occupations
One	<ul style="list-style-type: none"> • GCSE grades D-G • BTEC introductory diplomas and certificates • OCR Nationals • Key Skills level 1 • NVQs • Essential Skills 	<ul style="list-style-type: none"> • basic knowledge and skills • ability to apply learning with guidance or supervision • may be linked to job competence
Two	<ul style="list-style-type: none"> • GCSE grades A*- C • BTEC first diplomas and certificates • OCR Nationals • Key Skills level 2 • NVQs • Essential Skills 	<ul style="list-style-type: none"> • good knowledge and understanding of a subject • ability to perform variety of tasks with some guidance or supervision • appropriate for many job roles
Three	<ul style="list-style-type: none"> • A levels • Advanced Extension Awards • GCE in applied subjects • International Baccalaureate • Key Skills level 3 • NVQs • BTEC diplomas, certificates and awards • BTEC Nationals • OCR Nationals 	<ul style="list-style-type: none"> • ability to gain or apply a range of knowledge, skills and understanding at a detailed level • appropriate if you plan to go to university, work independently or (in some cases) supervise and train others in their field of work
Four	<ul style="list-style-type: none"> • Key Skills level 4 • NVQs • BTEC Professional diplomas, certificates and awards 	<ul style="list-style-type: none"> • specialist learning, involving detailed analysis of a high level of information and knowledge in an area of work or study • appropriate for people working in technical and professional jobs, and/or managing and developing others
Five	<ul style="list-style-type: none"> • HNCs and HNDs • NVQs • BTEC Professional diplomas, certificates and awards 	<ul style="list-style-type: none"> • ability to increase the depth of knowledge and understanding of an area of work or study, so you can respond to complex problems and situations • involves high level of work expertise and competence in managing and training others • appropriate for people working as higher grade technicians, professionals or managers
Six	<ul style="list-style-type: none"> • National Diploma in Professional Production Skills 	<ul style="list-style-type: none"> • a specialist, high-level knowledge of an area of work or study, to enable you to use your own ideas and research in response to complex problems and situations

NQF level	Examples of qualifications	What they give you
	<ul style="list-style-type: none"> BTEC Advanced Professional diplomas, certificates and awards 	<ul style="list-style-type: none"> appropriate for people working as knowledge-based professionals or in professional management positions
Seven	<ul style="list-style-type: none"> Diploma in Translation BTEC Advanced Professional diplomas, certificates and awards 	<ul style="list-style-type: none"> highly developed and complex levels of knowledge, enabling you to develop original responses to complicated and unpredictable problems and situations appropriate for senior professionals and managers
Eight	<ul style="list-style-type: none"> specialist awards 	<ul style="list-style-type: none"> opportunity to develop new and creative approaches that extend or redefine existing knowledge or professional practice appropriate for leading experts or practitioners in a particular field

Confidence interval

The LFS survey data is used to make inferences about the whole population. When data obtained from a sample is used in this way, there is an element of sampling error, or uncertainty, about the sample estimate. Sampling errors relate to the fact that the chosen sample is only one of a very large number of samples which may have been chosen, each giving rise to different sample estimates. All LFS based population estimates are subject to sampling error, or uncertainty, since they are based on a sample of individuals rather than the whole population.

Using statistical theory it is possible to say how precise a population estimate is by constructing a confidence interval around it to show the range of values which the true population value lies (i.e. the value that would have been found if the entire population had been surveyed) in the absence of bias. Confidence intervals based on LFS sample estimates are presented as 95% confidence intervals. What this means in practice is that in 19 samples out of 20 we would expect the true value to lie within the 95% confidence intervals constructed.

Broad sector definitions (used in Table 2)

Production Industries	A Agriculture, forestry and fishing
	B Mining and quarrying
	C Manufacturing
	D Electricity, gas, air cond supply
	E Water supply, sewerage, waste
Construction	F Construction
Wholesaling, Retailing, Hotels & Restaurants	G Wholesale, retail, repair of vehicles
	I Accommodation and food services
Finance and Business Services	K Financial and insurance activities

	L Real estate activities
	M Prof, scientific, technical activ.
	N Admin and support services
Public, Education, Health	O Public admin and defence
	P Education
	Q Health and social work
Transport communications, other services	H Transport and storage
	J Information and communication
	R Arts, entertainment and recreation
	S Other service activities
	T Households as employers
	U Extraterritorial organisations

Occupation Major Group definitions

General nature of qualifications, training and experience for occupations in SOC2010 major groups

Major group	General nature of qualifications, training and experience for occupations in the major group
Managers, directors and senior officials	A significant amount of knowledge and experience of the production processes and service requirements associated with the efficient functioning of organisations and businesses.
Professional occupations	A degree or equivalent qualification, with some occupations requiring postgraduate qualifications and/or a formal period of experience-related training.
Associate professional and technical occupations	An associated high-level vocational qualification, often involving a substantial period of full-time training or further study. Some additional task-related training is usually provided through a formal period of induction.
Administrative and secretarial occupations	A good standard of general education. Certain occupations will require further additional vocational training to a well-defined standard (e.g. office skills).
Skilled trades occupations	A substantial period of training, often provided by means of a work based training programme.
Caring, leisure and other service occupations	A good standard of general education. Certain occupations will require further additional vocational training, often provided by means of a work-based training programme.
Sales and customer service occupations	A general education and a programme of work-based training related to Sales procedures. Some occupations require additional specific technical knowledge but are included in this major group because the primary task involves selling.
Process, plant and machine operatives	The knowledge and experience necessary to operate vehicles and other mobile and stationary machinery, to operate and monitor industrial plant and equipment, to assemble products from component parts according to strict rules and procedures and subject assembled parts to routine tests. Most occupations in this major group will specify a minimum standard of competence for associated tasks and will have a related period of formal training.
Elementary occupations	Occupations classified at this level will usually require a minimum general level of education (that is, that which is acquired by the end of the period of compulsory education). Some occupations at this level will also have short

	periods of work-related training in areas such as health and safety, food hygiene, and customer service requirements.
--	---

National Minimum Wage

At the time the earnings figures were being collected for Figure 12, the National Minimum Wage for 18-20 year olds was £5.30 (now £5.60) and for those 21 to 24 was £6.70 (now £7.05). In addition, there was an Apprenticeship rate of £3.30 an hour (now £3.50) for those 16-18 or older people in the first year of their apprenticeship. The National Living Wage applies to over-25s only.

Data sources

Indicator 4 and 8

Labour Force Survey (**LFS**) from the Office for National Statistics (**ONS**).

The Labour Force Survey (LFS) is a unique source of information using international definitions of employment and unemployment and economic inactivity, together with a wide range of related topics such as occupation, training, hours of work and personal characteristics of household members aged 16 years and over. It is used to inform social, economic and employment policy.

The LFS was first conducted biennially from 1973-1983. Between 1984 and 1991 the survey was carried out annually and consisted of a quarterly survey conducted throughout the year and a 'boost' survey in the spring quarter (data were then collected seasonally). From 1992 quarterly data were made available, with a quarterly sample size approximately equivalent to that of the previous annual data. The survey then became known as the Quarterly Labour Force Survey (QLFS). From December 1994

Indicator 7 (Figure 12)

The Annual Survey of Hours and Earnings (ASHE) is the most comprehensive source of earnings information in the UK. It provides information about the levels, distribution and make-up of earnings and hours paid for employees by sex and full-time/part-time working. ASHE is the official source of estimates for the number of jobs paid below the National Minimum Wage.

ASHE is based on a 1% sample of employee jobs taken from HM Revenue and Customs (HMRC) Pay As You Earn (PAYE) records. Information on earnings and hours is obtained from employers and treated confidentially. ASHE does not cover the self-employed nor does it cover employees not paid during the reference period.

LFS Time periods

The Labour Force Survey is a sample survey which is collected on a panel basis. Each survey participant is interviewed on five quarterly intervals, over a period of 15 months. Therefore, the survey can be, and is, cut in a number of different ways.

The analysis of underemployment (Indicator 6) is derived from the 'quarterly' dataset that uses all the interviews collected in a given quarter.

Indicator 7 – the jobs that NEET young people move into – comes from the 2-quarter dataset. This dataset includes all those who have two consecutive interviews. It therefore includes 4/5 of the sample in the quarterly dataset.

The remaining indicators use the 5-quarter dataset. The number of respondents in this dataset is 1/5 of the numbers in the quarterly dataset (at maximum – some do not complete the interview schedule).

Each of these datasets is weighted by the Office for National Statistics up to the size of the population. This means that, while each respondent in the quarterly survey may be grossed up by a factor of 500 or so, when one uses the 5-quarter dataset the average weighting is more like 4,000 per respondent. Additionally, NEET young people are among the least likely people to respond to the survey. Therefore, weights for NEET young people can be up to or exceed double the average.

We have pooled datasets to increase the robustness of the estimates given. The error bars indicate the precision of the estimates, and take into account the number of respondents accounting for each result and the weightings used by ONS to gross up those estimates to the population. There are still risks of successive estimates in this index showing large changes due solely to variations within the achieved sample for the Labour Force Survey rather than to underlying change. There are trade-offs between the number of datasets used and the policy relevance of the data published. Using more datasets enables greater precision and smaller error bars, but means that the estimates are less current. The longest grouping we use is when we use the 5-quarter datasets, because there are such small numbers of NEET young people included in these datasets. We have based our analysis in this case on eight successive datasets, which each cover 12 full months. Therefore, while the latest interview in the 8 datasets took place in July-September 2016, the first interview would be in July-September 2015.

Indicators 4-7: based on the average of four Labour Force Survey datasets up to and including October-December 2016, and therefore represents the 2016 calendar year.

Indicator 8: Used Labour Force Survey 5-quarter longitudinal databases, and we have pooled eight of these to provide enough respondents to make these estimates. Therefore, these figures relate to families or individuals first interviewed from July to September 2013 to July to September 2015, and the subsequent five interviews

Methodology

Each LFS dataset was transformed into a common form, so that changes made by ONS were adjusted to a common standard. For example, the qualification variables were changed by ONS to reflect a major change to the qualifications landscape in Scotland.

The resulting common-form datasets were then added together to produce a single dataset which we then analysed.

Error bars

Presenting confidence intervals is good practice. These are risk metrics showing the interval that we are 95% confident the true figure is within.

Media outlets may be less willing to deal with risk metrics, so presentation of these could be placed in footnotes or annexes if desired. However, for managing your charities with metrics, it may be sensible to re-run the analyses with more datasets to narrow the error bars. However, then we run into the issue of the economy being distinctly different (and the chances of NEET young people exiting lower). These are trade-offs.