THE COST OF LATE INTERVENTION IN NORTHERN IRELAND

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Early intervention is about identifying and providing effective early support to children and young people who are at risk of poor outcomes. Early intervention approaches which have strong evidence of impact have the potential to reduce the likelihood of poor long-term outcomes for children, young people and families. While there is a clear moral case to reduce harm caused in early childhood, there are also significant fiscal benefits to doing so: intervening early has the potential to reduce costs to the public sector, before issues become entrenched and more expensive to deal with. Knowing how much is spent on late intervention – on acute care and other services after a problem has become more severe – can be a vital part of building the case for early action.

It is important to note that not all expenditure on late intervention can or should be prevented. For some children and young people, periods in residential care or time spent receiving specialist treatment for acute mental health problems will be the best solution. But many of these children and young people might have had a different journey if they and their families had received effective help earlier.

This report provides estimates of how much late intervention spending on children and young people costs the public sector in Northern Ireland annually. It builds on previous reports produced by the Early Intervention Foundation (EIF) on the costs of late intervention in England and Wales.[1]

The analysis provides transparency at a local level on the fiscal consequences of failing to intervene before issues become harder and costlier to resolve. This should help stimulate discussion, cooperation and new approaches to reducing the root causes of social problems.

Key findings

- The annual short-run cost to the public sector of late intervention in Northern Ireland is estimated at £536 million per year. This is equivalent to £288 for every Northern Ireland resident, or £1,166 per child.
- The largest drivers of spend include child protection and safeguarding, domestic violence, and youth economic inactivity. The greatest fiscal impacts are projected to fall on social services, health, and social security spending.
- Total cost and cost per head are particularly high in Belfast and Londonderry. This is associated with high levels of deprivation, which was also found to be a key driver of late intervention spending in England and Wales.
- Over the past six years in Northern Ireland there has been increased pressure on spending due to rises in the number of looked-after children, domestic violence incidents and cases of substance abuse among young people.
- However, there have been some off-setting trends, with falls in the number of young people who are not in employment education or training (NEET), young people involved in the youth justice service, and young people in mental health treatment.
- Spending on late intervention in Northern Ireland is roughly the same per head as in England. However, the drivers are different. While reported cases of domestic violence and spending on child protection are lower, there are high levels of youth unemployment and school absenteeism.

1 Chowdry & Fitzsimons (2016); Chowdry & Oppenheim (2015).

1. Introduction

The Early Intervention Foundation (EIF) is an independent charity and part of the What Works Network. Our mission is to ensure that effective early intervention is available and used to improve the lives of children and young people at risk of poor outcomes.

EIF aims to reduce the human and economic costs from failing to intervene at the right point, before problems become entrenched and difficult to reverse. To make the case for intervention it is vital to understand the fiscal consequences of not taking early action.

EIF has previously produced a series of reports on the costs to the public sector of late intervention in England and Wales,[2] and has been commissioned by the Early Intervention Transformation Programme to produce a comparable analysis for Northern Ireland, building on the same approach.

This report provides estimates of the annual, short-run fiscal cost of late intervention in Northern Ireland. By this, we mean:

- **short-run:** costs generally incurred when children and young people are age 0–18
- **fiscal costs:** costs incurred by the public sector, excluding the impact to individuals, businesses or wider society
- **late intervention:** costs incurred dealing with issues that are potentially preventable through early action.

Costs items are grouped under the following categories:

- domestic violence
- youth crime, including young people involved with the youth justice service (YJS) and antisocial behaviour
- school absence and exclusion
- child protection and safeguarding, including spending on children in need and in care
- child mental health problems, including self-harm and mental health-related hospital admissions
- youth substance misuse, including drug and alcohol admissions to hospital and specialist substance misuse treatment
- youth economic inactivity.

It is not possible or desirable to eliminate spending for all services under these headings and this report does not attempt to speculated on the amount that could be feasibly mitigated. However, the estimates illustrate a potential total 'fiscal prize' from early intervention: if children at risk can be helped early and their needs prevented from becoming irreversible, then they are less likely to require statutory interventions or acute services, freeing up resources and reducing pressure on public service provision.

2 Chowdry & Fitzsimons (2016); Chowdry & Oppenheim (2015).

2. Methodology

A full account of the methodology used, including sources, assumptions and detailed count and cost data, is provided in the appendix to this report.

In general, two methods are used to estimate the cost of late intervention:

- **Reported spend:** where reliable data is available for the actual spend reported by government or agencies on late intervention services (such as children's social services), this is used as the preferred approach.
- **Unit-cost:** Where spending or budgeted estimates do not exist, a bottom-up approach is used. This requires combining estimates of the average cost of providing a particular service per incidence with data on the total number of service users.

For both approaches, the latest year's data available has been used (generally reflecting activity in 2016/17). All costs are converted to 2017/18 prices to allow for comparison of expenditure on a consistent basis.

Several cost items have overlapping fiscal impacts. For example, some of the costs of antisocial behaviour are also captured in estimates for the total administration costs of the youth justice service. In these instances, double-counting is removed from the estimates of the total late spend.

It should be noted that the combined estimates for the total amount of late spending represent a conservative estimate of the cost of late intervention, for the following reasons:

- Costs incurred in adulthood due to issues that could have been mediated in childhood are not included. Although there are well-evidenced links between failures to intervene in childhood and sustained costs to the justice system, health and other public services in adulthood, it is challenging to attribute these impacts to specific interventions or opportunities missed.
- Estimates reflect the fiscal costs borne by public services only. There are many wider societal and economic consequences, such as lower school attainment and adverse labour market outcomes, that if quantified would significantly increase estimates of the overall consequences of not intervening.
- The cost items included cover only 12 social issues, and their inclusion has been driven largely by the availability of data. It is likely that there are other significant avoidable social issues that are not included, such as youth admissions to hospitals due to violence or neglect, which would lead to a higher estimate of public spending.
- Where there is uncertainty around the assumptions used, we have consistently erred on the side of caution, to avoid overestimation.

Due to the nature of the methodology and the sources of data and their related uncertainty, it is not possible to provide a range for these estimates.

3. Total cost of late intervention spending

Northern Ireland spends around £536 million a year on late intervention, the equivalent of £288 for every Northern Ireland resident per year, or £1,166 per child. This compares to a total of £20 billion spent on all services in 2015/16 (HMT, 2017: table 10.4). Table 1 breaks down the estimates of caseload and cost for each of the issue areas identified.

TABLE 1: COST OF LATE INTERVENTION AND CASELOAD BY ISSUE AREA (2017/18 PRICES)

Issue area	Total cost (£'000s)	Caseload
Domestic violence incidents	£165,315	29,166
Antisocial behaviour incidents	£7,750	21,561
Young people involved with the Youth Justice Service	£17,900	893*
Persistent absentees	£39,353	20,901
Permanent exclusions	£2,904	92
Child protection and safeguarding	£204,206	
Of which:		
Looked-after children		2,983
Children in need		22,737
Child protection plans		2,146
Child mental health hospital admissions	£5,608	133
Child self-harm hospital admissions	£191	352
Youth substance misuse hospital admissions	£145	233
Children in specialist substance misuse services	£611	713
Child alcohol hospital admissions	£301	248
Young people who are NEET	£133,606	26,000
Double-counting	*-£41,449*	
Total (less double counting)	**£536,442**	

Source: Authors' calculations, based on various sources referenced throughout this report.
* Note this figure reflects only those children involved with the youth justice service. As not all young offenders will be referred to youth justice services, the total number of young offenders is likely to considerably higher.

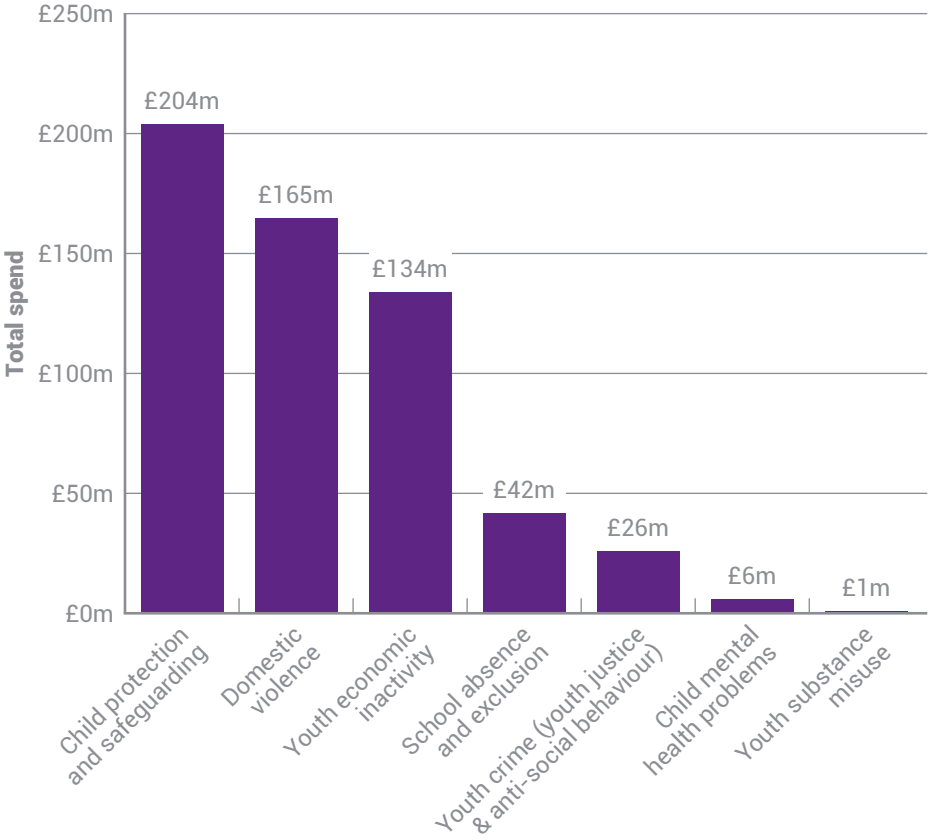
The largest areas of spend include:

- £204 million spent on child protection and safeguarding;
- £165 million spent on domestic violence;
- £134 million spent on 16–24-year-olds who are not in education, employment or training (NEET).

Spending on looked-after children is likely to be the most expensive single area of the child protection system, based on the unit costs[3] and caseloads of each item.

Figure 1 shows the total estimated late spend on each of the six issue areas. Child protection and safeguarding is the costliest issue (representing 35% of total late spend), followed by domestic violence (29%) and youth economic inactivity (23%).

FIGURE 1: COST OF LATE INTERVENTION IN NORTHERN IRELAND BY ISSUE (£m)

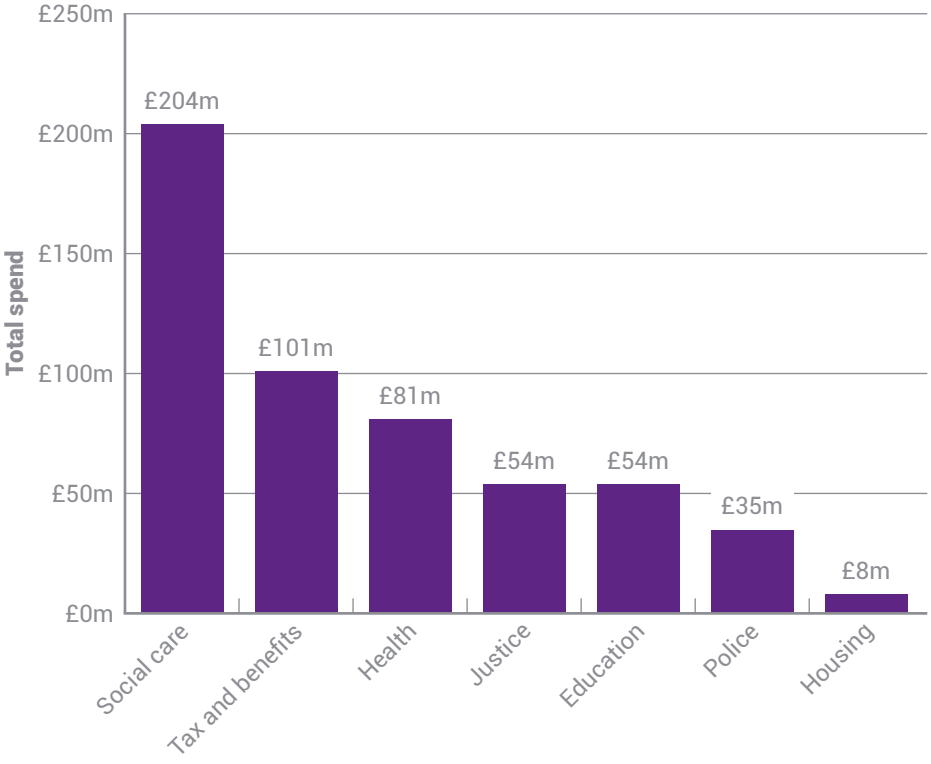


Source: EIF analysis

Figure 2 (over) shows the cost of late intervention by the area of public spending affected. The largest impact is on social care, followed by taxes and benefits. The high cost of health spending is driven by the fact that a significant proportion of domestic violence costs are incurred in healthcare.

3 Section 251 data (DfE, 2016a) shows total children in care of £3·8 billion, equivalent to £37,000 per child, compared to the cost of protection plans of £5,298 (Saiad-Tessier, 2014) and children in need of £1,416 (New Economy Manchester, 2015).

FIGURE 2: COST OF LATE INTERVENTION IN NORTHERN IRELAND BY SPENDING AREA (£m)



Source: EIF analysis

Table 2 (over) breaks down the late spend estimates further, subdividing each of the individual cost items by the area of public expenditure affected. For example, the £165 million cost of domestic violence is composed of:

- £74 million of healthcare costs
- £26 million of police costs
- £37 million of costs on organisations in the criminal justice system
- £20 million spent on social care
- £8 million on housing, including refuges and shelters.

The table demonstrates that several late intervention costs are shared across multiple areas of public expenditure and responsible bodies.

TABLE 2: PUBLIC SPENDING ON LATE INTERVENTION BY SERVICE AND COST ITEM, (£'000s, 2017/18 PRICES)

	Health	Police	Justice	Education	Social care	Housing	Tax & benefits	Total
Domestic violence	£73,893 (13%)	£26,199 (5%)	£36,679 (6%)		£20,261 (4%)	£8,282 (1%)		**£165,315 (29%)**
Antisocial behaviour		£7,750 (1%)						**£7,750 (1%)**
Young offenders		£967 (0.2%)	£16,933 (3%)					**£17,900 (3%)**
Persistent absentees	£1,355 (0.2%)	£5,525 (1%)	£5,525 (1%)	£18,400 (3%)	£8,548 (1%)			**£39,353 (7%)**
Permanent exclusions	£7 (0.0%)	£56 (0.0%)	£56 (0.0%)	£2,671 (0.5%)	£115 (0.0%)			**£2,904 (0.5%)**
Child protection & safeguarding					£204,206 (35%)			**£204,206 (35%)**
Admissions to hospital, of which:								
Child mental health	£5,608 (1%)							**£5,608 (1%)**
Child self-harm	£191 (0.0%)							**£191 (0.0%)**
Youth substance misuse	£145 (0.0%)							**£145 (0.0%)**
Alcohol misuse	£301 (0.1%)							**£301 (0.1%)**
Specialist substance misuse services	£611 (0.1%)							**£611 (0.1%)**
Young people who are NEET				£33,089 (6%)			£100,517 (17%)	**£133,606 (23%)**
Double-counting of costs	*-£1,363*	*-£5,581*	*-£5,581*		*-£28,925*			*-£41,449*
Net total	**£80,749 (15%)**	**£34,916 (7%)**	**£53,613 (10%)**	**£54,159 (10%)**	**£204,206 (38%)**	**£8,282 (2%)**	**£100,517 (19%)**	**£536,442**

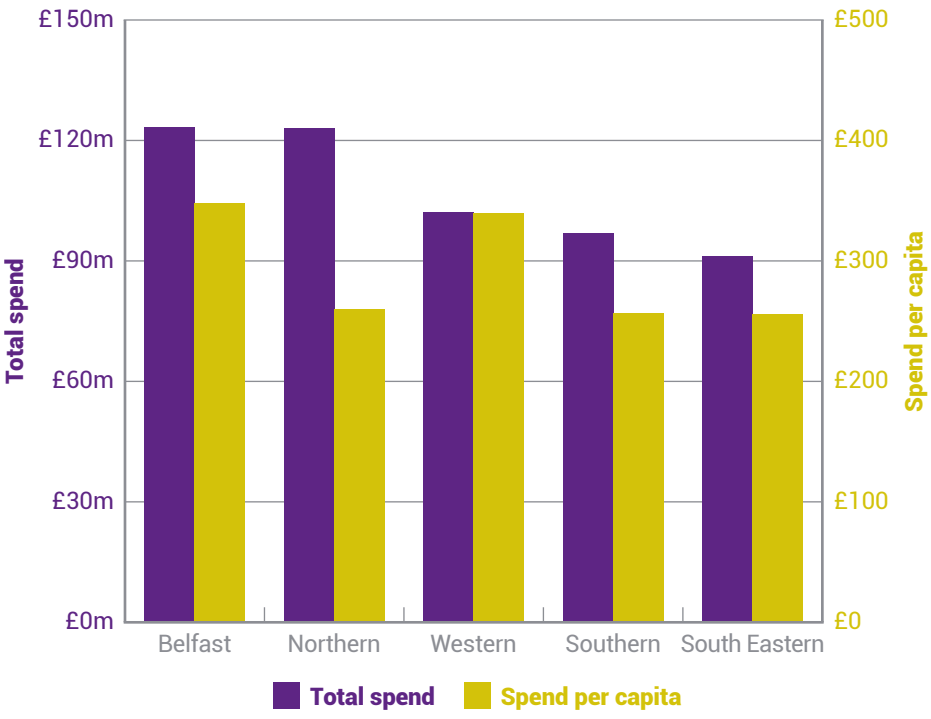
Source: Authors' calculations, based on various sources referenced throughout this report.

4. Variation in late intervention spending across local areas

This chapter presents estimates of the distribution of late intervention spending by local area, at the health and social care trust (HSCT) and local government district levels. It's important to note that many of the costs that have been attributed to individual areas will not directly fall within their control. For instance, the welfare costs that arise from young people who are NEET are determined by national decisions about welfare policy.

Figure 3 reports expenditure figures by individual health and social care trust (HSCT) areas. The chart shows that total spending is highest in the Belfast and Northern HSCTs, with spending in both HSCTs of around £124 million per year. However, in per-capita terms, Belfast HSCT spends the most on late intervention, and noticeably more than the Northern HSCT, by around £88 per person. The Southern and South Eastern HSCTs spend the least per person, both at around £256 per head.

FIGURE 3: TOTAL COST (£m) AND COST PER PERSON BY HEALTH AND SOCIAL CARE TRUST (HSCT) AREA



Source: EIF analysis

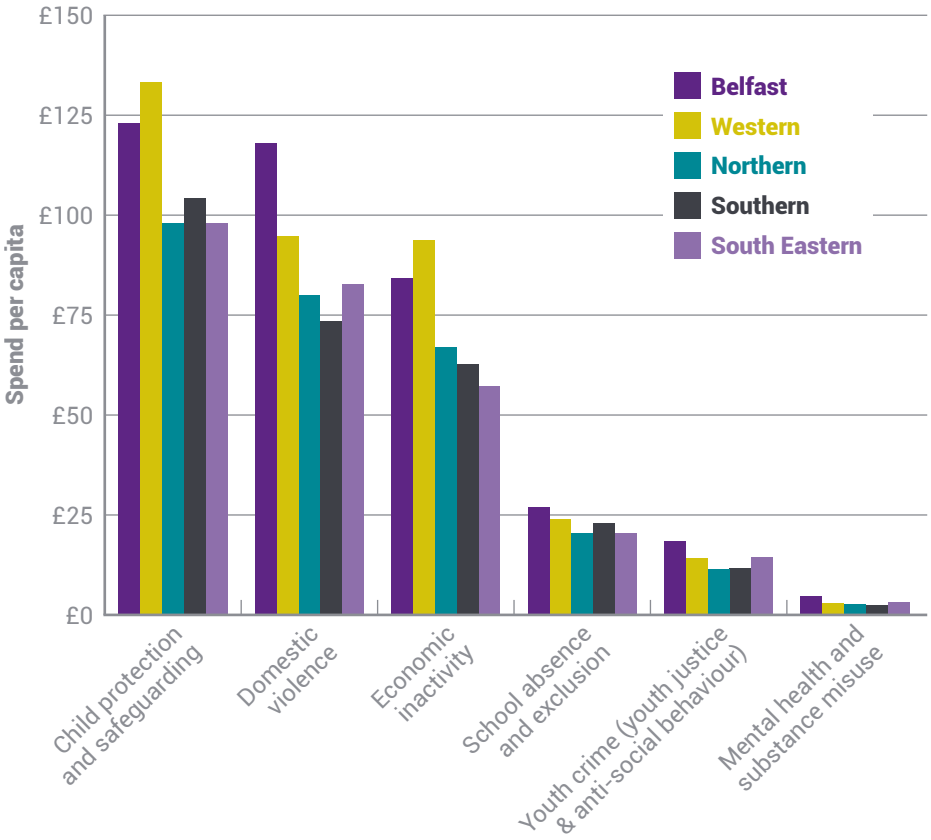
These differences in spend per head reflect an urban/rural split: Belfast and Derry, Northern Ireland's two largest cities, are in Belfast and Western HSCTs, and contain some of the most economically deprived areas in Northern Ireland.[4] EIF's previous

4 'A possible contributing factor to the higher rates in these regions could be that the Belfast and Western HSC Trusts contain Northern Ireland's two biggest cities, Belfast and Londonderry, and these two large urban areas contain some of the most deprived areas within Northern Ireland' (DoH 2016: 9).

reports on late intervention spending in England and Wales have demonstrated that elevated late spending is correlated with areas of high urban deprivation.

The balance of spend on each issue area is fairly similar in each HSCT, as figure 4 shows. There is only a small variation in the proportion of spend per head on each different issue. It should be noted that some of this may come down to the methodology for apportioning spend at a local level.[5]

FIGURE 4: COST PER PERSON BY ISSUE AND HEALTH AND SOCIAL CARE TRUST (HSCT) AREA



Source: EIF analysis

The difference in late spend per head by region is driven primarily by variation in caseload. Figure 5 (over) shows per-capita costs by local government district. The high spends in Belfast and in Derry and Strabane, where Londonderry is situated, show the effects of economic deprivation in these areas. The Northern Ireland Audit Office report (2014) on improving pupil attendance reported that low school attendance was a particularly acute problem in socially deprived areas, which is reflected in these estimates.

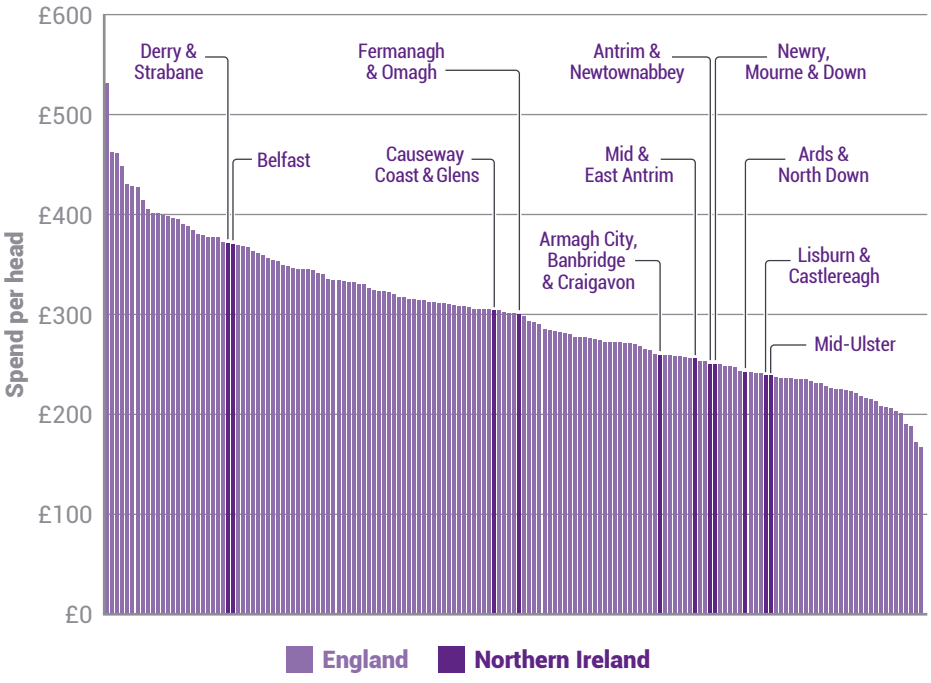
Figure 6 (over) compares the per-capita costs in the local authority districts in Northern Ireland to the costs in English local authorities. The England and Wales figures are based largely on the figures published in the 2016 EIF report (Chowdry & Fitzsimons, 2016), with some adjustments to the England and Wales figures to account for national-level changes in caseload, prices and differences in methodology between the two reports.

5 For more detail, please see the appendix to this report.

FIGURE 5: COST PER CAPITA BY LOCAL GOVERNMENT DISTRICT

Source: EIF analysis

FIGURE 6: COST PER CAPITA BY LOCAL GOVERNMENT AREA (NORTHERN IRELAND LOCAL GOVERNMENT DISTRICTS AND ENGLISH LOCAL AUTHORITIES)



Source: EIF analysis

The chart shows that in seven out of 11 districts in Northern Ireland, estimated spend per head is less than the median of English authorities. Belfast is similar in terms of employment deprivation to English local authorities such as Bolton, Newcastle upon Tyne and Wigan, where slightly less than one in 10 working-age adults receive unemployment, sickness, disability or caring allowances or benefits.[6] Similar English local authorities to Derry include South Tyneside, Halton and Blackburn with Darwen. Strabane has the highest level of employment deprivation, resembling Hartlepool in size and relative deprivation.

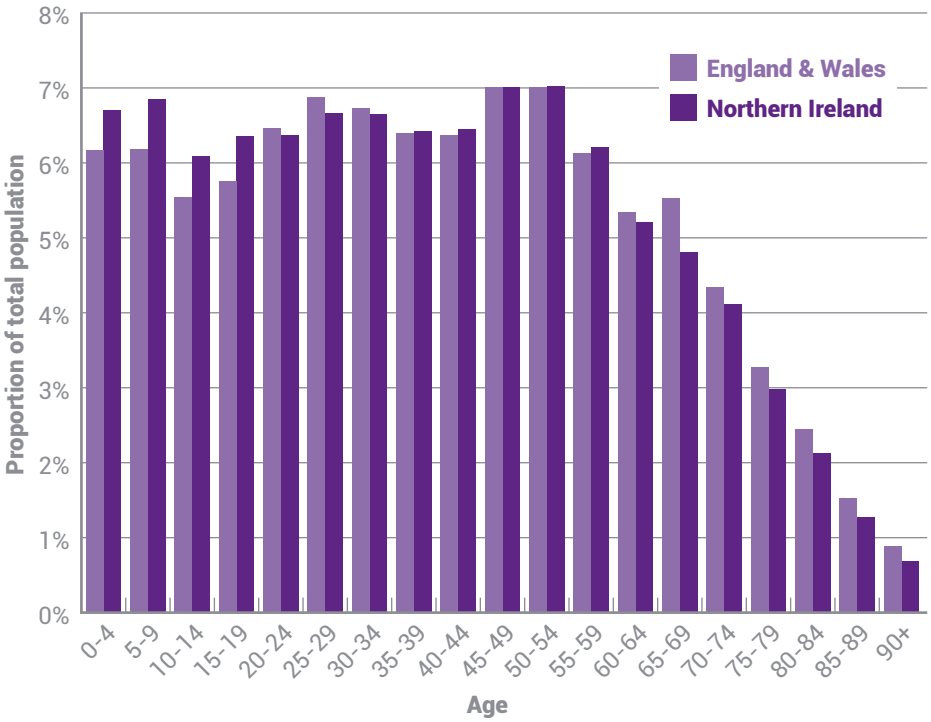
6 Indices of deprivation in Northern Ireland are only available at the district council area level, and were last calculated in 2010. Employment deprivation was the only multiple deprivation measure calculated in a similar way across England and Northern Ireland, and forms around a quarter of the multiple indices of deprivation in each country.

5. Differences between Northern Ireland and England

This chapter compares the drivers of late intervention spending in Northern Ireland with those in England. We focus on differences in caseloads, which are the main reason for differences in spending.

However, there are also small demographic differences, in terms of age profile between countries. As figure 7 shows, the population of Northern Ireland is younger than that in England and Wales, with 26% of the population under the age of 20, as compared to 24% in England and Wales. To control for differences in population sizes, figures are expressed as a fraction of the relevant population.

FIGURE 7: DISTRIBUTION OF AGES IN NORTHERN IRELAND, COMPARED TO ENGLAND & WALES



Source: ONS Mid-Year Population Estimates[7]

Variation in measurement between countries cannot be controlled for entirely. This may occur due to differences in recording practices, data quality or reporting requirements. For example, the laws used to define crimes and child protection powers are different in Northern Ireland to the rest of the UK, although are similar in scope and intent[8] meaning comparison is not entirely invalid.

As noted in chapter 4, level of spending is highly correlated with local area deprivation. Northern Ireland has lower national output than England, with a GVA

7 https://www.ons.gov.uk/peoplepopulationandcommunity/populationandmigration/populationestimates/datasets/populationestimatesforukenglandandwalesscotlandandnorthernireland

8 For more information on comparability of child protection statistics, see DfE 2011.

per capita[9] of £18,584, compared to £26,159 in England (ONS, 2016). A greater proportion of children live in absolute and relative poverty (defined as living in households with income below a certain amount).[10] However, the percentage of children with low income and material deprivation (defined as being unable to afford certain items) has tended to be lower in Northern Ireland. This paints a somewhat mixed picture as to whether we'd expect relative deprivation to be driving higher spending overall in Northern Ireland compared with England.

TABLE 3: DIFFERENCES IN SELECTED INDICATORS BETWEEN NORTHERN IRELAND AND ENGLAND

Item	Rate or incidence in Northern Ireland compared with England
Domestic violence incidents	15.32 fewer per 1,000 people
Antisocial behaviour incidents	9.55 fewer per 1,000 people
Young people involved with the Youth Justice Service	0.96 fewer per 1,000 people
Percentage of pupils who are persistent absentees*	1.9 percentage points higher
Looked after children	1.62 fewer per 1,000 people
Children on the child protection register/on child protection plans**	0.62 more per 1,000 people
Children in need	17.70 more 1,000 young people
Child protection spending	£31,468 less per 1,000 people
16–24 NEET rate	1.7 percentage points more

Source: Authors' calculations, based on various sources referenced throughout this report.
* English statistics use a lower absence threshold to define persistent absenteeism. We have computed a statistic equivalent to the Northern Ireland figure, by using the percentage of enrolled pupils missing more than 15% of available half-days.
** The English figure is the number of children on child protection plans, whereas the Northern Ireland figure is the number on the child protection register.

To compare the English and Northern Ireland spend figures, the previously published analysis of late spending in England has been updated to reflect changes in prices and caseload since the most recent EIF publication in 2016 (Chowdry & Fitzsimons, 2016). Some other minor methodological changes have been made in order to make the figures comparable.

On a like-for-like basis, spend per capita in England, at £286 per head, is broadly comparable to spending in Northern Ireland, at £288 per person. However, this masks variation across the categories of spend. Figures per head are lower in Northern Ireland than England in the following areas:

- child protection spending and safeguarding
- numbers of looked-after children
- domestic violence
- youth crime, including antisocial behaviour and children involved with the Youth Justice Service.

9 GVA is a measure of aggregate income, similar to GDP, but used to capture regional economic performance.

10 See DWP 2017 and DfC 2017. The measures chosen are former UK targets set in the Child Poverty Act 2010.

Northern Ireland spends 1% of its budget on child protection and safeguarding compared to 1.6% in England (HMT, 2017: tables 10.1 and 10.4).[11] One explanation for lower spending on child protection is that looked-after children are more frequently placed with friends or relatives and are less likely to be placed in residential care in Northern Ireland than in England (DfE, 2016b; DoH 2016: table 3.7). Estimates suggest that residential care is considerably more expensive than foster care (Curtis & Burns, 2016).

The difference in recorded domestic violence incidence echoes similar findings in crime victimisation surveys, where Northern Ireland residents are less likely to report having been the victim of a crime in the past year than those in England. This holds across all types of crime (DoJ, 2017).

Caseloads per head are higher in Northern Ireland than England in the following areas:

- persistently absent pupils
- child protection plans and children in need
- young people who are NEET.

Pupil attendance at primary and post-primary schools in Northern Ireland has been lower than in England since 2010/11, and the gap in post-primary has been increasing. Pupil absence has however been consistently higher in Scotland and Wales than Northern Ireland (Northern Ireland Audit Office, 2014). In both England and Northern Ireland, attendance rates in special schools are lower than those in post-primary schools, which are lower than those in primary schools. The higher proportion of Northern Ireland's children educated at special schools may therefore be one contributing factor – 1.6% vs 1.2% of enrolments (DfE 2017: table 1.1).

The child protection caseload in Northern Ireland is different to that found in the rest of the UK. As noted by the NSPCC (Bentley et al., 2017) the reasons for child protection plans, registration and trends in Northern Ireland are dissimilar from the three other countries in the UK. These disparities suggest differences in practice and the context in which local authorities operate.

The NEET rate in Northern Ireland has been higher than in England and Wales since 2009, but close to the rate in Scotland. This may be due to Northern Ireland being particularly affected by the fallout from the financial crisis, as before 2009 it had a lower NEET rate than England (PwC, 2012).

The Northern Ireland estimates for NEET costs include spending on additional welfare support (tax credits and unemployment support) along with targeted support programmes, such as the educational maintenance allowance (EMA), Training for Success and Peace 4 United Youth.[12] Spending on these support programmes were included at the request of officials. Similar figures were not included in the England and Wales analysis, thus reducing the comparability between the headline estimates of spend per head.

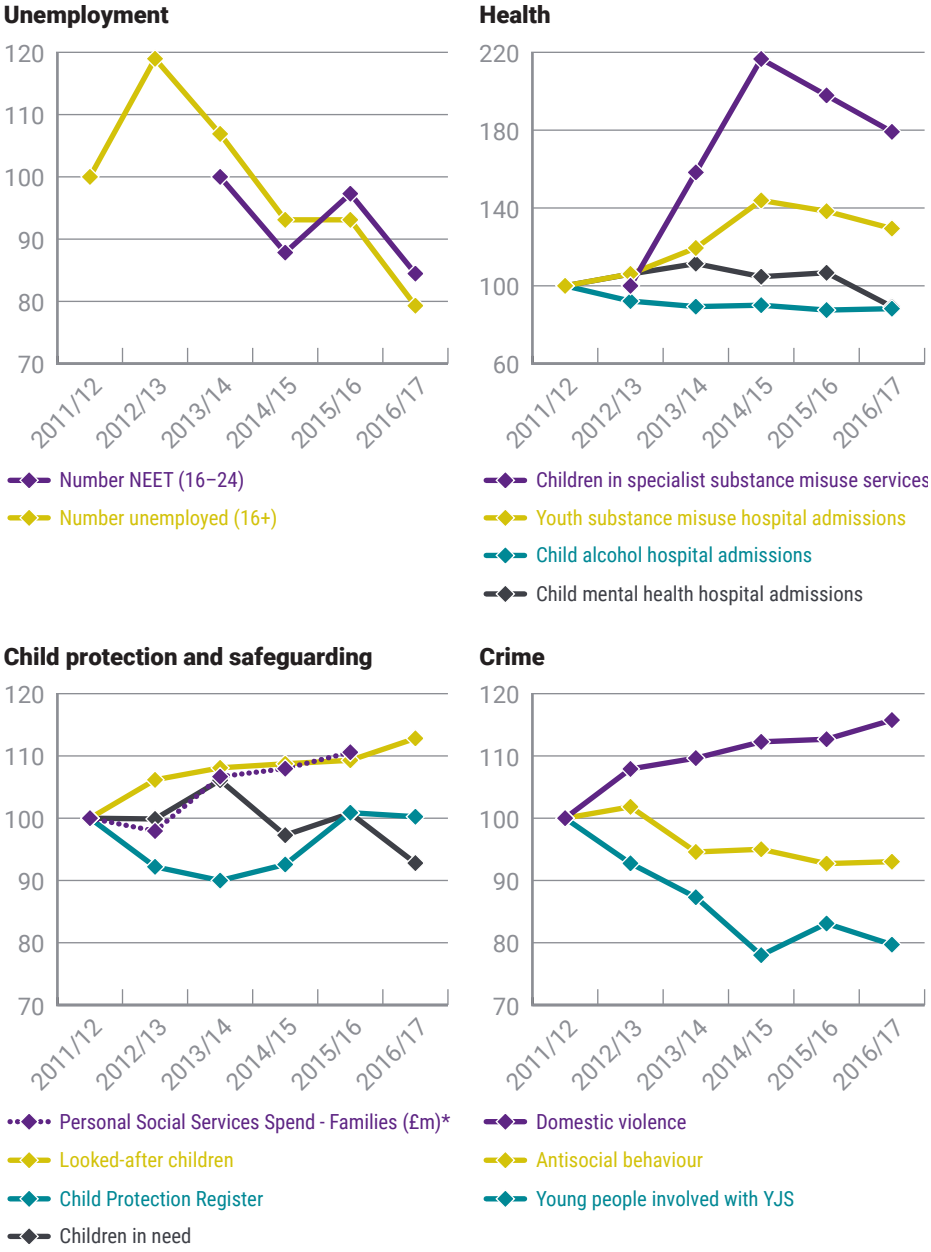
11 Spending on Family and Children Personal Social Services.

12 For more detail on these items, see the appendix to this report.

6. Trends in drivers of late intervention spending

This report does not provide a time series for the estimated spend on late intervention in Northern Ireland. However, this chapter includes descriptive analysis of how the main drivers of spending have changed over time. The data reflects either the total caseload related to a particular issue or the actual reported expenditure. All figures have been indexed to allow for comparison of trends over time.

FIGURE 8: TRENDS IN DRIVERS OF SPEND (INDEX 100 = 2011/12 OR THE EARLIEST DATA POINT)



Source: Authors' calculations, based on various sources referenced throughout this report.
* Total expenditure on Personal Social Services, Families and Children is taken from HMT 2017. The effects of inflation have been controlled for by applying HM Treasury GDP deflators.

Looking at unemployment, the number of young people who are NEET has fallen by 34% since 2014/15. This is consistent with the overall improvement in the economy following the financial crisis and the pattern of improvements in employment more generally.

In health, there was a significant increase in substance misuse admissions to hospital between 2012/13 and 2015/16. This is consistent with a sharp increase in young people using specialist substance misuse services, where numbers more than doubled over the same period. This later trend might partly be explained by increases in the number of organisations participating in the data collection, which grew by 24% between 2012 and 2014 (DHSSPS, 2014). However, there is evidence of an absolute increase in service use: for organisations which participated in both censuses, the number of clients increased by 30%. This suggests that even when controlling for the growth in respondents to the survey, there has been an absolute increase in the number of young people interacting with specialist substance misuse services.

The numbers of young people admitted to mental health units has fallen by 11% since 2011/12. This is noteworthy in the context of increased mental health awareness and service usage in England (Henderson et al., 2016; NHS Confederation, 2016; HSCIC, 2016). The underlying cause for this change in Northern Ireland warrants further exploration.

Looking at child protection and safeguarding, real-terms spending on child protection has grown at a faster rate than the overall caseload of children in need. This suggests that total spend per child in need has increased. One possible cause of this might be the growth in the number of looked-after children, which increased by 13% between the end of 2011/12 and 2016/17. As stated above, this may be the costlier component of the child protection system. The Department of Health note thath the growth in the number of looked-after children may be due to several factors linked to the economic climate, including low employment, high poverty and a reduction in support systems (DoH, 2016), leading to increased pressures on families and professional agencies.

In terms of domestic abuse, incidents have increased by 16% since 2011/12. Changes in measured domestic violence may represent improved reporting[13] rather than increased incidence. However, improvements in reporting may lead to increased spending by the relevant authorities, where this leads to increased engagement with the health, justice and social service provision, so may not give an unreliable picture of spend.

Finally, with respect to youth crime, numbers of antisocial behaviour incidents have fallen by 7%, and numbers of young people involved with the youth justice service by 20%. Again, it is difficult to know whether to attribute these changes to differences in policing and justice practices, or to underlying criminal behaviour. Total numbers of people prosecuted have been falling in Northern Ireland since 2010,[14] suggesting that estimates for youth-related crime fit with this broader trend.

13 In England and Wales, the reporting rate of physical and sexual assaults to police has risen since 2010 according to United Nations Office on Drugs and Crime (UNODC) statistics: https://data.unodc.org/. It also notes increased reporting of physical assaults to the police in Northern Ireland.

14 UNODC statistics: https://data.unodc.org/

7. Conclusions

This report has set out to estimate the short-run costs of late intervention spending in Northern Ireland. The report replicates, as far as possible, the methodology used by EIF in previous publications on the costs of late intervention spending in England and Wales. While there are also clear moral arguments for intervening to improve outcomes for children and families with signals of risk, this analysis highlights the significant impact to the public purse of failing to intervene early.

Some of the main findings include:

- Northern Ireland spends a total of £536 million per year on late intervention. This equates to £288 per head, or £1,166 per child.
- The largest contributors to these figures include child protection and safeguarding, domestic violence, and economic inactivity.
- The spend per head in Northern Ireland is similar to the estimated spend per head in England and Wales, although there is noticeable variation in some of the underlying drivers and recent trends.

It should be noted that these figures do not present an estimate of the total amount that can be feasibly saved: that is, cutting the incidence of some of these negative social outcomes by a certain fraction will not lead to a direct reduction in costs by the same amount. However, the overall fiscal prize is clearly large.

The fact that the costs of single issues fall across multiple agencies and areas of expenditure highlights the importance of collaboration between organisations. This often means that the agency investing early to improve outcomes won't be the only one to directly benefit from a reduction in service demand. This in turn underlines that decisions need to be taken with a focus on the collective benefits that can be achieved, not just the savings that accrue to those making the spending decision.

Late intervention issues are often related and cumulative. This is because children and young people often have multiple issues which reinforce each other. For example, crime, NEET status and substance abuse are correlated, as are domestic violence and child protection issues. Poor mental health and poverty are co-morbid with many other late intervention problems. Successful early intervention should tackle the root causes of these issues and consider the connections between the different issues which children and young people face.

Differences in methodology, data availability and quality makes it challenging to make strong recommendations on areas to investigate further. However, this report does highlight a number of differences in expenditure across Northern Ireland and England. Where there are findings of significant and unexplained variation in particular areas, these would be worth further exploration.

EIF has conducted work to assess the cost and effectiveness of more than 70 early intervention programmes, which is published via our online Guidebook.[15] We have also published practical guides, such as a guide for commissioners of services to tackle the effects of conflict between parents,[16] and a number of evidence reviews in particular areas of early intervention.[17] Evidence and tools such as this can be used to contribute to effective evidence-based commissioning of early intervention services in Northern Ireland.

15 See: http://guidebook.eif.org.uk/

16 See: http://www.eif.org.uk/publication/eif-commissioner-guide-reducing-the-impact-of-interparental-conflict-on-children/

17 See: http://www.eif.org.uk/publication/

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Appendix: Methodology

The appendix sets out the data sources and methodologies used throughout this report. The appendix begins with a short summary of the individual cost items and the approach taken, followed by an explanation of how cost estimates have been derived at the appropriate geographic level. It concludes with a detailed explanation for each of the individual cost items.

The methodology used is broadly consistent with the approach taken in EIF's previous reports on late spending in England and Wales (EIF 2016). Where the methodologies diverge, this is explained.

TABLE A1: SUMMARY OF SOURCES

Issue	Information used to calculate estimated fiscal cost	Source of data
Domestic violence	Reported cases of domestic violence	PSNI Domestic Abuse Statistics 2016-17
Youth crime (antisocial behaviour and involvement with the Youth Justice Service)	Reported antisocial behaviour incidents Young people in the Youth Justice Service (YJS) Annual cost of the youth justice service	PSNI Anti-Social Behaviour Statistics 2016-17 DoJ Youth Justice Agency Annual Workload Statistics 2016-17 Northern Ireland Audit Office (2017)
School absence and exclusion	Number of persistent absentees Number of permanent school exclusions Annual spending on Pupil Referral Units, Behavioural Support Teams, and Nurture Units	DE Pupil Attendance Statistical Bulletin 2015-16 DE Suspension and Expulsion Management Information 2015-16 Kemp et al. (2015)
Child protection and safeguarding	Spending on personal social services for children and families	HMT Public Expenditure Statistical Analyses 2017
Child mental health problems	Children admitted to hospital due to mental health Young people admitted to hospital due to self-harm	DoH Hospital Statistics: Inpatient and Day Case Activity Statistics, 2016/17 (Beechcroft) DoH: Hospital Inpatient System*
Youth substance misuse	Young people admitted to hospital due to substance misuse Children using specialist substance misuse treatment service Children admitted to hospital due to alcohol	DoH New Strategic Direction for Alcohol and Drugs Phase 2 Fourth Update Report – July 2016 DoH: Hospital Inpatient System*
Youth economic inactivity	16–24-year-olds who are NEET	NISRA Quarterly Supplement to the Labour Market Report Jan-March 2017

* Figures produced by the Information & Analysis Directorate, DoH NI, and supplied directly to the authors. They are not found elsewhere in the public domain.

Table A1 above summarises the data sources used in this report. Unit cost information is taken predominately from the New Economy Manchester Unit Cost Database (UCD), NHS and Healthcare Resource Group Reference Costs, NICE costing guidelines and other reports by academics and third-sector organisations. In addition, some figures on health and NEETs expenditure have been supplied directly to the authors by the relevant agencies. Spending figures are disaggregated at local government district (LGD) and health and social care trust (HSCT) levels. A variety of methods are used to apportion spending to the relevant level.

Method for apportioning spending

Where specific spending or volumes data is only available at the national level, figures are prorated based on the number of young people in each relevant geographic area or by weighting figures using a suitable proxy variable reflecting the local area incidence of a related issue. For example, total numbers of young people who are NEET are only published for the whole of Northern Ireland. Local area unemployment rates are used to split these national figures by LGD and HSCT.

Where data had to be apportioned from one lower level area to another, this was done via use of the 26 district council areas (DCAs); that is, all data is disaggregated to this level first and then summed to the relevant higher-level grouping. DCAs are coterminous with the HSCTs and broadly coterminous with the 11 LGDs.[18]

For information available at the HSCT level, this was attributed to the DCAs on the basis of their youth population (0–18-year-olds) as a fraction of the population in each HSCT. This imputed figure per DCA was then summed across all the DCAs in each LGD to give an estimate of the figure per LGD. For six LGDs, the sum of their related DCA populations was not equal to the LGD populations, as some DCAs are split between two LGDs. For these LGDs, the caseload is redistributed using the differences between the actual and imputed total population and the caseload per head in each LGD.

The individual unit costs and total spend figures are collated from various sources and are reported in different prices years. To make all figures consistent and control for the variation in price growth across the intervening years, all estimates have been uprated to 2017/18 prices using HM Treasury GDP deflators.[19]

The cost of child injury (such as admissions to A&E) has not been included in this report, in contrast to EIF's previous analysis of late spend in England and Wales. Although some of the occurrences of child injury could be mitigated through appropriate early intervention – for instance, injury that resulted from child neglect – admissions to hospitals are not recorded at this level. We no longer feel it is appropriate to include the full cost of child injury within the definition of late spending, where many of these admissions would likely not be preventable through early intervention. Figures supplied by DoH from the Hospital Inpatient System indicate that the cost of child injury was around £7m in 2016/17. This is small in comparison to the other items included, therefore its exclusion will not affect the overall conclusions reached.

18 https://en.wikipedia.org/wiki/Reform_of_local_government_in_Northern_Ireland

19 https://www.gov.uk/government/statistics/gdp-deflators-at-market-prices-and-money-gdp-june-2017-quarterly-national-accounts-june-2017

TABLE A2: DATA AVAILABILITY AND METHODS OF IMPUTATION

Item	Level of data	Method of imputation to local areas
Domestic violence incidents	LGD	Population-based
Antisocial behaviour incidents	LGD	Population-based
Young offenders	LGD	Population-based
Persistent absentees	NI	Number of school half-days missed, by LGD
Permanent exclusions	NI	Number of school half-days missed, by LGD
Child protection and safeguarding	NI	Based on share of looked after children and children in need
Child mental health hospital admissions	HSCT & LGD	None required
Child self-harm hospital admissions	HSCT & LGD	None required
Youth substance misuse hospital admissions	HSCT	Population-based
Children in specialist substance misuse services	HSCT & LGD	None required
Child alcohol hospital admissions	HSCT & LGD	None required
NEETs	NI	Unemployment rate by LGD

Methodology used for individual cost items

Domestic violence

Domestic violence is a somewhat different issue to the other cost items included in this analysis. The associated late intervention spend is not due to children and young people, nor is it attached to them: most of the costs relate to the perpetrator and victim, both of whom are generally adults. Ultimately, domestic violence – specifically instances where a child is present – was included and costed because it is a problem to which children and young people are exposed that leads to significant fiscal cost and is a significant detriment to wellbeing. Addressing domestic violence is an important part of early intervention with families, and the subject has been a priority issue for EIF and was included in our analysis of late intervention spend in England and Wales. Nevertheless, the inclusion in this analysis of domestic violence cases is a matter of judgment.

Domestic violence figures were taken from latest PSNI domestic abuse statistics,[20] which report the number of reported incidents with a domestic abuse motivation by LGD. This was imputed to DCAs on the basis of their total population as a fraction of that in the LGD, and from there to HSCTs.

20 https://www.psni.police.uk/inside-psni/Statistics/domestic-abuse-statistics/

Unit costs

The unit costs of domestic violence are taken from Walby (2009). Walby provides a breakdown of the total cost of domestic violence in England, based largely on Home Office estimates[21] of the total costs of crime and how they affect different public services. This report uses the Walby figures uprated to 2017/18 prices.

In addition, two items are estimated separately using up-to-date information for social services costs and housing and refuges.

Social services

Children are more likely to be taken into care or looked after where they have been exposed to domestic violence. To estimate the unit cost of extra social service spend resulting from domestic violence, data from English local authorities' section 251 returns for 2015/16 are used.[22] We start by taking the total cost of looked-after children and half the spend on Safeguarding Children and Young People's Services. This assumption is based on advice from New Economy Manchester's Unit Cost Database (UCD[23]). The unit cost of children in need case management is taken from DfE (2010), as reported in the UCD. The fraction of children in need or looked-after for reasons of abuse and neglect at 31 March 2016 is then applied to the annual spend to work out the annual spend for reasons of abuse or neglect.

Walby's method of attributing this spend to domestic violence is followed: first, by multiplying by 40% to represent the co-occurrence of domestic violence and abuse and neglect; and second, by multiplying this figure by 50%, to reflect a conservative estimate of how much of that workload might be driven by domestic violence. This was then divided by the number of domestic violence incidents in England and Wales in 2015/16 and uprated to 2017/18 prices to form a cost of social services per incident of domestic violence.

Housing and refuges

In the absence of better data, we have used the cost of refuges from Walby (2004) and divided it by the number of reported domestic violence incidents in 2008 to form a unit cost. For housing costs, we followed the method of Walby and used the costs of the homelessness budget, housing benefit and discretionary housing payments in Northern Ireland for 2015/16 as found on the Housing Executive's website.[24] The number of homeless people accepted as having full duty applicant status – where the Housing Executive has a statutory duty to rehouse the applicant under the Housing (NI) Order 1988 – was divided by the number of housing benefit claimants. This fraction was multiplied by the spend on housing benefit and discretionary housing payments. This figure, and the homelessness budget, was then multiplied by the percentage of full duty applicants made homeless due to domestic violence to give an estimate of housing costs due to domestic violence. This was divided by the number of domestic violence incidents in Northern Ireland during 2015/16, added to the refuge cost, and uprated to 2017/18 prices to form a unit cost of housing and refuges per incident of domestic violence.

21 For more detail see Home Office, *The economic and social costs of crime*: http://webarchive.nationalarchives.gov.uk/20110218140137/http:/rds.homeoffice.gov.uk/rds/pdfs/hors217.pdf

22 https://www.gov.uk/government/statistics/la-and-school-expenditure-2015-to-2016-financial-year

23 http://www.neweconomymanchester.com/our-work/research-evaluation-cost-benefit-analysis/cost-benefit-analysis/unit-cost-database

24 https://www.nihe.gov.uk/homelessness_information and https://www.nihe.gov.uk/index/about/key_issues/housing_benefit.htm

Assignment to spending areas

To assign costs to areas of spending, the criminal justice (excluding police) and civil legal costs were assigned to the Ministry of Justice budget, while the police cost was assigned to the police budget. All of the healthcare costs were assigned to the healthcare budget. Housing and refuge and social services cost were assigned to local government budgets.

TABLE A3: ESTIMATED FISCAL COSTS OF DOMESTIC VIOLENCE

	Total costs		Unit costs (2017/18 prices)
	2001	2008	
Criminal justice	£1,017m	£1,215m	£1,864
Of which police	*£490m*	*£585m*	*£898*
Health	£1,382m	£1,651m	£2,534
Social services	£228m	£272m	£695
Housing and refuges	£130m	£155m	£284
Civil legal services	£159m	£190m	£291
Total	**£2,916m**	**£3,483m**	**£5,668**

Authors' calculations, except 2001 figures based on Walby (2004).

An adjustment to the local government cost was necessary to avoid double-counting when adding the domestic violence cost to the costs of other issues. The cost of social services is likely to be picked up in the costs of the child protection system used elsewhere in this analysis. Therefore, while the social services cost of domestic violence includes this component, it is removed when adding the overall costs of social services to avoid double-counting. The remaining cost to social services of domestic violence is for housing and refuge services, as per table A3 above.

Antisocial behaviour

Latest estimates on antisocial incidents are reported by Police Service of Northern Ireland (PSNI)[25] by LGD. Attribution from LGD to DCA and HSCT was done on the basis of population totals. England and Wales statistics[26] show that a third of Anti-Social Behaviour Orders were issued to people under the age of 18 between 1999 and 2003. Therefore, it's assumed only a third of the caseload in Northern Ireland is attributable to young people before the age of 18.

The estimated unit cost of a reported antisocial behaviour (ASB) incident was obtained from the NEM Unit Cost Database (UCD). This contained an estimate of £35 for incidents requiring no further action and £500 for incidents requiring further action, both in 2002/03 prices. The average of both figures was used, which is £359 in 2017/18 prices after applying HM Treasury GDP deflators. In line with the UCD, the cost is assumed to be borne entirely by the police.

25 https://www.psni.police.uk/inside-psni/Statistics/anti-social-behaviour-statistics/

26 https://www.gov.uk/government/statistics/anti-social-behaviour-order-statistics-england-and-wales-2013

Young people involved with the Youth Justice Service

Latest estimates of number of young people involved with the youth justice service were taken from Department of Justice (DoJ) statistics.[27] Figures were available by young offenders' LGD of residence and costs were calculated at this level. Naturally, several elements of costs – such as custody – fall disproportionately in certain areas (where young offender institutions are located), and so this is therefore a simplifying assumption. Aggregation to HSCT was done on the basis of population.

TABLE A4: ESTIMATED COSTS OF YOUTH OFFENDING

	Total cost	Estimated unit cost
Justice - Courts	£2m	£2,170
Justice - YJA	£15m	£16,835
Justice - Total	**£17m**	**£19,005**
Policing	£1m	£1,085

A recent report published by the Northern Ireland Audit Office[28] found the total amount spent on the Youth Justice Agency (YJA) was £17.4m in 2015/16, split between custodial services (£6.9m), the Youth Justice Service (£6.4m) and corporate services (£4.1m). As the overall budget for the YJA has been falling, it would not be appropriate to uprate these figures to 2017/18 prices. Instead, officials at the DoJ have provided latest estimates for YJA budgets in 2017/18 of £15m.

These figures do not include the costs to the courts or policing in dealing with young offenders. The costs for these elements were taken from a report by the National Audit Office[29] and were based on the direct staff costs in England. Applying the relevant price adjustments, this equates to an average of £2,170 for court costs and £1,085 for policing, per young offender in the justice system. These unit costs are combined with the number of young people interacting with the Youth Justice Service, as set out above.

It should be noted these estimates reflect only those children involved with the Youth Justice Service. As not all young offenders will be referred to youth justice services, the total number of young offenders is likely to be considerably higher than this. Therefore, these wider costs on the justice system and policing are not captured in these estimates.

Persistent absentees

Volumes

The number of persistent absentees in Northern Ireland is taken from the Pupil Attendance 2015/16 Statistical Bulletin and School Enrolments Summary Data.[30] The first dataset gives the fraction of students missing more than 15% of total half days according to the school type. This threshold was chosen as schools tend to consider referring pupils to the Education Welfare Service for non-attendance if their absence rate is 15% or more (DoE, 2017) and a significant part of the unit cost

27 https://www.justice-ni.gov.uk/publications/r-s-bulletin-282017-youth-justice-agency-annual-workload-statistics-201617

28 https://www.niauditoffice.gov.uk/sites/niao/files/media-files/174770%20NIAO%20Managing%20children%20who%20offend_Fnl%20LowRs_5.pdf

29 Figure 12: https://www.nao.org.uk/wp-content/uploads/2010/12/1011663_technical_paper.pdf

30 https://www.education-ni.gov.uk/publications/pupil-attendance-201516-statistical-bulletin

relates to provision of Educational Welfare Services. These rates were multiplied by the number of enrolments at each school type to give the number of persistent absentees in Northern Ireland.

To allocate this population to LGDs, we used school-level data[31] on the number of enrolments and unauthorised absence rate in each school (that is, the percentage of possible half-day sessions missed due to unauthorised absence). This provides an estimate for the number of total half-days missed due to unauthorised absence per school. These were aggregated by LGD, and each LGD was apportioned a fraction of the total number of persistent absentees in proportion to the number of half-days missed in that LGD.

Unit costs

The unit cost for persistent absentees is taken from Brookes et al. (2007). Table A5 shows the unit-cost estimates used for this analysis.

TABLE A5: ASSUMED UNIT COSTS ASSOCIATED WITH A PERSISTENTLY ABSENT PUPIL (2017/18 PRICES)

	Unit cost
Justice	£264
Police	£264
Health	£65
Social services	£409
Education	£880
Total	**£1,883**

Brookes et al. (2007) provide a single £529 unit cost associated with crime, reflecting a joint cost for police and criminal justice services. For the purposes of this analysis, it was therefore assumed to be split equally between the justice and police budgets.

Many of these cost elements overlap with other costs elsewhere in the analysis. The crime cost is likely to overlap with the cost of antisocial behaviour incidents and of young people in the criminal justice system. In addition, the health cost reflects substance misuse and mental health problems among pupils who are persistently absent, both of which are likely to be picked up in the costs of the relevant hospital admissions. The social services cost is based on the costs of foster and residential care, which is counted elsewhere. Therefore, to avoid double-counting, only the education cost of persistent absenteeism is retained when these estimates are added to the aggregate total.

Permanent exclusions

The total number of permanent exclusions per year is only available for Northern Ireland at the national level.[32] Most pupils will be excluded for more than a year, so using the number of school exclusions from a single year will underestimate the annual fiscal cost. Using the average age of excluded children in England (12 years

31 Derived by the authors from Department of Education data: https://www.education-ni.gov.uk/publications/school-enrolments-school-level-data-201617

32 https://www.education-ni.gov.uk/publications/suspension-and-expulsion-management-information-201516

old[33]), we assume that the annual caseload of permanently excluded children in Northern Ireland are those who were excluded within the past four years (up to the point they could have left school at 16). This suggests that the system bears the cost of 92 permanently excluded children per year. It should be noted that the most common key stage of excluded children reported in Northern Ireland is slightly older than that in England for three of the past four years, so it is possible this is an overestimate.

The cost of alternative provision for excluded children was calculated using Kemp et al. (2015), who report that in 2012/13, £2.4m was spent on Pupil Referral Units, Behaviour Support Teams and Nurture Units in Northern Ireland – institutions for assisting or teaching pupils with conduct problems. This was inflated to 2017/18 prices.

There are wider costs from permanent exclusions – such children are more likely to be in trouble with the police or require support from the local authority. These wider costs of pupil exclusion are taken from Brookes et al. (2007) and uprated to 2017/18 prices. Table A6 presents the unit cost estimates that were used. To allocate the cost to LGDs, the method used for persistent absentees was followed.

TABLE A6: ASSUMED UNIT COSTS ASSOCIATED WITH A PERMANENTLY EXCLUDED PUPIL (2017/18 PRICES)

	Unit cost	Source
Justice	£605	Brookes et al. (2007)
Police	£605	Brookes et al. (2007)
Health	£79	Brookes et al. (2007)
Social services	£1,251	Brookes et al. (2007)
Education	£29,030	Kemp et al. (2015)
Total	**£31,571**	

Most of the wider costs presented in table A6 are likely to overlap with other costs calculated elsewhere in the analysis: the police and justice costs may be covered by the analysis of antisocial behaviour and young offenders, the health cost relates to substance misuse and mental health problems, and the local government cost relates to use of social services. As a result, to avoid double-counting, when the cost of permanently excluded pupils is combined with other costs, only the cost of alternative provision is retained.

Child protection and safeguarding

Social services costs are taken from HM Treasury's Public Expenditure Statistical Analyses 2017[34] tables: specifically, spending on family and children of which personal social services. Figures show £197m was spent on these services in Northern Ireland 2015/16. This was inflated to £204m in 2017/18 prices. These figures include total spending on children in need, on the child protection register and in care.

To assign these national level figures to local areas, data from children's social care statistics Northern Ireland 2016/17[35] was used, which outlines the numbers

33 Table 2: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/630645/SFR35_2017_main_tables.xlsx

34 https://www.gov.uk/government/statistics/public-expenditure-statistical-analyses-2017

35 https://www.health-ni.gov.uk/publications/childrens-social-care-statistics-northern-ireland-201617

of looked after children and children in need in Northern Ireland. We used the average of the share of looked after children and the share of children in need referrals in each HSCT to represent the relative caseload in each area, and multiplied this by the total spend for the spend in each local area. By construction, this equals the total spend on social services. The implicit assumption here is that the average spend per child does not differ by local area.

In 2016/17, £1.9m[36] was given to schools through the common funding formula to provide direct support to looked-after children, with the aim of raising their educational attainment. This amounts to approximately £1,000 per looked-after child. Schools have delegated authority to plan and use this resource based on the needs of their children. Because the funding is used for both preventative and intervention support and as no breakdown is available, this has not been reflected in the estimates of late spend.

Child mental health hospital admissions

Data on child admissions to mental health units were taken from DoH inpatient and day case activity statistics 2016/17,[37] specifically total impatient admissions to the Beechcroft unit in Belfast. DoH officials have advised that Beechcroft is the only hospital in Northern Ireland that children are admitted to for mental health problems. While on occasion they may be admitted to adult mental health wards, this is not common. The latest figures show 133 admissions to Beechcroft as inpatients in 2016/17. The total caseload information was attributed to HSCT and LGD level on the basis of total youth population by area. This is naturally a simplifying assumption as we do not have data on the areas of the country from which children were admitted.

The unit cost applied to these admissions was obtained from the study by Tulloch et al. (2008) into inpatient child and adolescent mental health service care in England. Their estimate of an average admission cost of £33,817 was uprated to £42,176 in 2017/18 prices. This cost is assumed to fall fully on healthcare budgets.

Child self-harm hospital admissions

Data on the number and costs of children admitted to hospital due to self-harm has been provided by DoH.[38] Table A7 below details the number of inpatient day-case admissions to hospital during 2016/17 for those aged 17 and under with a diagnosis of self-harm (ICD-10 codes X60–X84) and their associated costs. The figures reflect children admitted to acute hospitals due to self-harm by HSCT residency (figures have also been supplied at LGD level). Data on the number of admissions is taken from the Hospital Inpatient System (HIS). Cost figures have been sourced from the Northern Ireland 2015/16 reference cost returns. To estimate the costs for 2016/17 a Northern Ireland uplift factor of 1.031 has been applied. These are uprated in the report to 2017/18 prices using HMT deflators.

36 Supplied directly to the authors.

37 https://www.health-ni.gov.uk/sites/default/files/publications/health/hs-inpatient-day-case-stats-16-17_0.pdf

38 Supplied directly to the authors.

TABLE A7: COST OF HOSPITAL ADMISSIONS DUE TO SELF-HARM, BY HEALTH AND SOCIAL CARE TRUST (HSCT) AREA

Trust of residence	Cost (2016/17 prices)	Admissions
Belfast	£43,088	80
Northern	£48,906	86
South Eastern	£30,796	61
Southern	£28,921	59
Western	£35,338	65
Unknown	£470	1
Total	**£187,519**	**352**

It should be noted that the number of admissions due to self-harm will not represent the true extent of those requiring treatment for self-harm, as patients seen within emergency care departments and primary care settings are not included in this figure.

Youth substance misuse hospital admissions

Data on the number and costs of children admitted to hospital due to substance misuse has been provided by DoH.[39] The table below details the number of inpatient/day case admission to hospital during 2016/17 for those aged 17 and under with a diagnosis of substance misuse (ICD-10 codes F11–F16, F19, X40–X44, X85, Y10–Y14) and their associated costs. ICD-10 codes X60–X64 have been excluded to eliminate double counting with the estimates for self-harm.

The figures reflect children admitted to hospitals due to substance misuse by HSCT residency (figures have also been supplied at LGD level). Data on the number of admissions is taken from the Hospital Inpatient System (HIS). Cost figures have been sourced from the Northern Ireland 2015/16 reference cost returns. To estimate the costs for 2016/17 a Northern Ireland uplift factor of 1.031 has been applied. These are uprated in the report to 2017/18 prices using HMT deflators.

TABLE A8: HOSPITAL ADMISSIONS DUE TO SUBSTANCE MISUSE BY HEALTH AND SOCIAL CARE TRUST (HSCT) AREA

Trust of residence	Cost (2016/17 prices)	Admissions
Belfast	£42,263	53
Northern	£31,985	57
South Eastern	£21,420	36
Southern	£29,940	54
Western	£13,642	27
Unknown	£3,452	6
Total	**£142,703**	**233**

It should be noted that the total number of admissions above does not relate to individuals. An individual may be admitted to hospital more than once during the

39 Supplied directly to the authors.

year and as such will be counted separately each time. It is also worth noting that the number of admissions due to substance misuse will not represent the true extent of those requiring treatment for substance misuse, as patients seen within emergency care departments without admission to hospital and within primary care settings are not captured.

Children in specialist substance misuse services

Figures for the number of under-18s presenting to substance misuse treatment services were available by HSCT using DoH data.[40] These figures detailed whether the young person was in treatment for drug misuse, alcohol misuse, or both. It should be noted that these figures are a snapshot of the number of young people in treatment on 1 March – the annual caseload is certainly higher than this. However, given that data is not available on the annual caseload, we made a conservative estimate that the annual caseload was equivalent to the numbers in treatment on census day. This was 95 in treatment for alcohol only, 324 for drugs only, and 294 for both alcohol and drug misuse. These figures were imputed to LGDs based on their population.

Unit costs were obtained for England using NHS Reference Costs 2015.[41] Tables A9 and A10 show the costs of the selected treatments.

TABLE A9: ASSUMED COSTS FOR ALCOHOL MISUSE TREATMENT (2015/16)

	Activity	Unit cost	Total cost
Alcohol Services, Adult, Admitted Patient	35,676	£401	£14,318,206
Alcohol Services, Adult, Community Contacts	442,165	£94	£41,536,980
Alcohol Services, Adult, Outpatient Attendances	101,136	£92	£9,293,387
Alcohol Services, Children and Adolescents, Community Contacts	520	£429	£223,090

TABLE A10: ASSUMED COSTS FOR DRUG MISUSE TREATMENT (2015/16)

	Activity	Unit cost	Total cost
Drug Services, Adult, Admitted Patient	13,478	£470	£6,337,446
Drug Services, Adult, Community Contacts	673,061	£115	£77,328,062
Drug Services, Adult, Outpatient Attendances	295,760	£101	£30,007,891
Drug Services, Children and Adolescents, Community Contacts	6,998	£201	£1,409,290

40 https://www.health-ni.gov.uk/publications/census-drug-and-alcohol-treatment-services-northern-ireland-2017

41 https://www.gov.uk/government/publications/nhs-reference-costs-2015-to-2016

The weighted average cost of an episode of alcohol treatment was £113, and the cost of an episode of drug treatment was £116. The typical user of substance misuse treatment services will need more than one treatment episode in a year. Therefore, we calculated the number of adults and young people in treatment in England 2015/16 using data from the National Drug Treatment Monitoring System, and divided the number of episodes from the reference costs by this figure. This indicated an average number of five episodes per user. This was multiplied by the average cost per episode to give an average cost per user. This was £618 for a young person in drug misuse treatment and £600 for a young person in alcohol misuse treatment. Those in treatment for both drug and alcohol misuse were treated as costing the sum of the two unit costs. These costs were assumed to fall entirely within the health budget.

Child alcohol hospital admissions

Data on the number and costs of children admitted to hospital due to alcohol has been provided by DoH.[42] Table A11 below details the number of inpatient day-case admissions to hospital during 2016/17 for those aged 17 and under due to alcohol (ICD-10 codes F10, G312, G621, I426, K292, K70, K73, K74, K860, X45 and Y15) and their associated costs. ICD-10 code X65 has been excluded to eliminate double counting with the self-harm estimates.

The figures reflect children admitted to hospitals due to alcohol by HSCT residency (figures have also been supplied at LGD level). Data on the number of admissions is taken from the Hospital Inpatient System (HIS). Cost figures have been sourced from the Northern Ireland 2015/16 reference cost returns. To estimate the costs for 2016/17 a Northern Ireland uplift factor of 1.031 has been applied. These are uprated in the report to 2017/18 prices using HMT deflators.

TABLE A11: HOSPITAL ADMISSIONS DUE TO ALCOHOL BY HEALTH AND SOCIAL CARE TRUST (HSCT) AREA

Trust of residence	Cost (2016/17 prices)	Admissions
Belfast	£84,870	42
Northern	£100,922	77
South Eastern	£27,055	29
Southern	£25,688	37
Western	£54,773	58
Unknown	£3,262	5
Total	**£296,572**	**248**

As with the figures for substance misuse, the totals quoted above reflect individual admissions not the total number of individuals, who may be admitted more than once during the year. Similarly, the costs of treatment within emergency care departments and primary care settings are not included.

42 Supplied directly to the authors.

Young people not in employment education or training (NEET)

Volumes

Data on the number of young people who are NEET in Northern Ireland is taken from the Quarterly Supplement to the NISRA Labour Market Report.[43] The average number of young people NEET between the ages of 16 and 24 are taken as the average quarterly rate from Q3 2016 to Q2 2017, yielding an annual average caseload of 26,000 young people who are NEETs.

The unit cost of being NEET varies considerable by age, due largely to the additional welfare benefits available to older people. No data was available for a more granular breakdown by age in Northern Ireland. Therefore, it has been assumed the age distribution of the NEET population in Northern Ireland is the same as that in England, where 9.8% of young people NEET are aged 16–17.[44] Applied to the Northern Ireland totals, this yields NEET estimates of 23,444 young people aged 18–24 and 2,556 aged 16–17.

The costs of young people who are NEET and aged 18–24 are included in these estimates to maintain consistency with EIF's previous analysis for England and Wales. There is a case to be made that young people that are consistently NEET at older ages represent a legacy of the failure to intervene, during their earlier childhood, with strong links to educational under achievement and periods of being in care. However, strictly speaking, they fall outside the age range for this report.

Unit costs

The unit cost of these individuals was taken from he ACEVO Commission on Youth Unemployment (2012), which provides a unit cost of £535 per 16–17-year-old per year, and £4,257 per 18–24-year-old per year.[45] This is the net cost to government of out-of-work benefits. One adjustment is made to reported figures, to remove spend on child tax credits. This was done as it is not known whether NEET parents would still receive child tax credits if they moved into work (that is, some might otherwise be in low-paying jobs where they receive the maximum amount of child tax credit support). We make the conservative assumption that any move into work would not significant mitigate the amount of child tax credit paid. This gives a net cost, in 2017/18 prices, of £4,235 per 18–24-year-old NEET, and £484 per 16–17-year-old NEET.

It should be noted that the ACEVO report was written before substantial changes to the benefits system, such as the benefit cap and the introduction of universal credit, which could change the benefit costs of NEETs relative to historic estimates. It has not been possible to make suitable adjustments to reflect these changes.

Targeted support and NEET programmes

In addition to the tax and benefit pressures created by none participation in education and the labour market, countries in the UK typically provide targeted support to help ensure vulnerable and low-skilled young people are able remain in education post-16 and to secure pathways into the labour market, thus preventing them from becoming NEET.

43 https://www.nisra.gov.uk/sites/nisra.gov.uk/files/publications/Quarterly-Supplement-to-the-Labour-Market-Report-April-June-2017.pdf

44 www.gov.uk/government/statistics/neet-statistics-quarterly-brief-january-to-march-2017

45 https://www.acevo.org.uk/sites/default/files/ACEVO%20Youth%20Unemployment%20full%20publication.pdf

In EIF's previous analysis of spending in England and Wales, these discretionary elements of expenditure were not included. This was a matter of judgment but it was felt that as this expenditure is typically preventative, it did not fall within the definition of late intervention expenditure being used. Furthermore, as these interventions often address more than one policy aim (that is, raising the skills of young people leaving compulsory education with few qualifications), it is not possible to attribute these fully to the cost of being NEET.

However, at the request of officials at the Department for the Economy (DFE), Northern Ireland expenditure on targeted support to young people who are NEET has been included. These figures have been provided directly to the authors and reflect the most recent year for which data is available. These are broadly consistent with the figures published in the DFE 2015 report, *Pathways to Success*.[46]

TABLE A12: TARGETED NEET SUPPORT PROGRAMMES AND EXPENDITURE

Programme/Source of funding	Expenditure
European Social Fund - NEETs	£5.9m
European Social Fund - CFSP	£2.2m
Training for Success (including EMA)	£10.0m
Peace 4 United Youth Programme	£8.0m
Further Education Funding (entry L0 & L1)	£7.0m
Total	**£33.1m**

Inclusion of these figures reduces the comparability between the estimates for Northern Ireland and England. However, as this expenditure represents only around 6% of the total £536m estimate for late intervention expenditure in Northern Ireland its inclusion does not invalidate the overall comparison.

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