Examining the Risk and Depth of Income Poverty for NI Households Using Administrative Data

September 2023

NICS
ECONOMIST PROFESSION

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Contents

1. Introduction

1.1 Background

There is a statutory obligation in the Northern Ireland Act 1998 for the Executive to "adopt a strategy setting out how it proposes to tackle poverty, social exclusion and patterns of deprivation based on objective need". In line with New Decade New Approach, the Department for Communities (DfC) is developing an Anti-Poverty Strategy that aims to address inequalities and obstacles that directly affect the everyday lives of the most vulnerable people in society and will bring focus to identifying and addressing the issues, barriers and disadvantages that undermine equality of opportunity.

As part of DfC's Economic and Social Research Programme, DfC published two reports: a scoping review of the literature on poverty in Northern Ireland (December 2021) and a study of the key sources of poverty data in Northern Ireland (June 2022). Following this, DfC committed to examine the risk and depth of income poverty for households in Northern Ireland using administrative data. It should be noted that the official poverty figures will still be sourced from the Family Resources Survey (FRS), however, utilising the administrative data in this way provides additional insights not available through survey data.

1.2 Aims of the Research

This report is the culmination of a research project which aims to address the following:

1) Using administrative data, identify how many households in NI belong within certain income groupings, including those in deep or shallow poverty, those at risk of poverty and those households most stable financially?
2) Using administrative data, examine the characteristics of these households e.g. by geographical area, and how do these differ across the various income groupings?
3) Consider how this analysis could be used to shape interventions that could be implemented to aid households in or at risk of falling into poverty?

In order to achieve this, the research project examines the risk and depth of income poverty within Northern Ireland households, using administrative data. Household income is considered to help identify those in different levels of poverty. The households in each of

the income groupings are then further examined to identify any similar characteristics present across groups.

Examples of characteristics considered include the number of individuals within the household, the benefit receipt within the household, level of work-related income and age breakdown of individuals within the household. These characteristics have also been considered alongside geographical identifiers such as the Local Government District (LGD) or the settlement type to identify areas where interventions may be most beneficial.

1.3 Poverty Overview

Relative and Absolute poverty are the official measures of income poverty used by government across the UK. The measures are derived from the FRS, a continuous household survey collecting information on a representative sample of approximately 20,000 private households in the UK, including 2,000 in NI. The FRS collects detailed information on respondents' income from all sources.

To allow income to be compared across different household sizes and compositions, a technique known as equivalisation is used to calculate an equivalised household income (EQI). Further information on equivalisation can be found in Annex A.

A household is deemed to be in relative poverty if the EQI is less than 60% of the UK median income for that year. For the 20/21 financial year this was calculated as £324 a week (before housing costs) or £16,875 for the year.

For this report, household income is derived from administrative data sources, including social security benefit data and HMRC employment records. An EQI is calculated using the same methodology as above and a household is deemed to be in relative poverty if the EQI falls below the threshold derived through the FRS. It must be noted that not all the income sources used to calculate household income in the FRS are present in the administrative data. As such, results from the two sources are not directly comparable (see Annex B for more detail).

Within this report the households within Northern Ireland are first separated into those below or above the poverty threshold, before being divided further into the following four categories:

1. Deep Poverty – Those households where the annual EQI is more than 25% below the relative poverty threshold. For the 20/21 financial year this is an EQI of less than £12,650.

2. Shallow Poverty/Just in Poverty – Those households where the annual EQI is up to 25% below the relative poverty threshold. For 20/21 this ranges from £12,650 to £16,875.

3. At Risk of Poverty – Those households where the annual EQI is up to 20% above the relative poverty threshold. In 20/21 this ranges from £16,875 to £20,250

4. Most Stable – Those households where the annual EQI is 20% or more higher than the relative poverty threshold. For the 20/21 financial year this is an EQI of more than £20,250.

These thresholds were chosen based on "Measuring Poverty 2020" by the Social Metrics Commission (found here) which considered households by poverty depth. The boundary lines for the deep poverty, shallow poverty and at risk groups have been chosen to allow for similarly sized cohorts of households.

1.4 High Level Poverty Analysis

Before considering the income groupings above, some high-level analysis of the administrative dataset is considered and compared with the Northern Ireland Poverty Bulletin (NIPB), which is derived from the FRS. It is found that for 20/21 there are 120,000 households in relative poverty, containing 270,000 individuals (of which 96,000 are children) based on the administrative data. When considering the income groupings, 55,000 households are in Deep Poverty, 66,000 in Shallow Poverty, 72,000 are At Risk and 541,000 are in the Most Stable group.

Figure 1.1: Household breakdown by income grouping
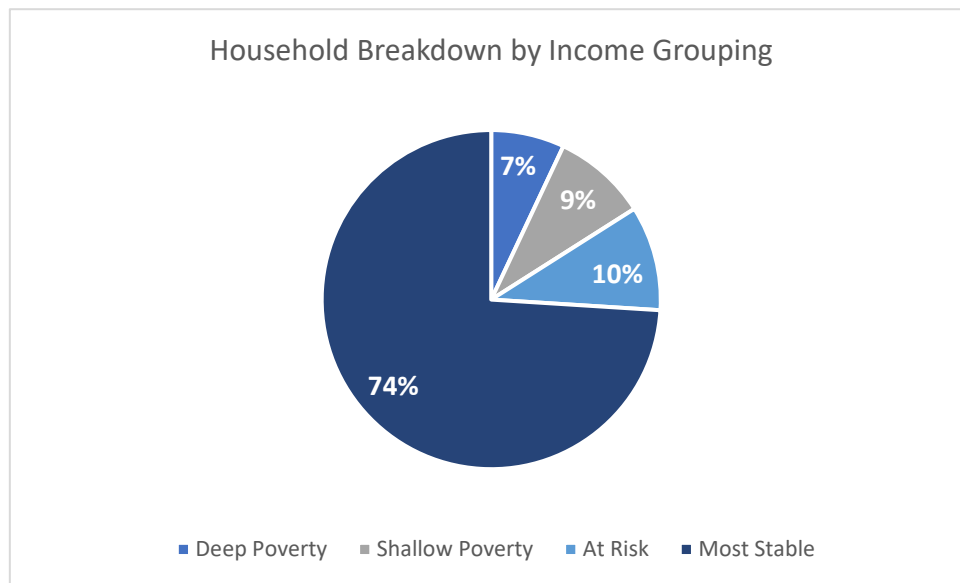
The NIPB reports that 17.0% of individuals are in relative poverty, broadly comparable to the administrative data estimate of 15.0%. For the 20/21 financial year the results of the NIPB were reduced due to limited sampling because of the Covid-19 pandemic. As such the number of households in poverty and the number of children in poverty cannot be compared.

Data Source	No. of individuals in relative poverty	Percentage of individuals
Admin Data 2020/21	270,000	15.0%
NIPB 2020/21	316,000	17.0%

Table 1.1: Numbers and proportion of individuals in relative poverty for 2020/21 financial year. The number of individuals in both instances is rounded to the nearest thousand.

It should be noted that moving forward, where poverty is referenced in this document it will relate to relative poverty, unless otherwise stated.

2. Household Size, Type and Age Breakdown

To begin the analysis the household size, type, and age of individuals within the household are all considered. The administrative data estimates that there are 238,000 one person households in Northern Ireland making it the biggest group. There are 203,000 two person households, 126,000 three person households, 96,000 four person households and 70,000 five (or more) person households.

2.1. Household Size

For household size analysis, the number of individuals within a given household is examined. No distinction is made between the individuals within the household, so a lone parent with one child is a two-person household, the same as a couple without children or two single individuals sharing a house. For households with five or more individuals present all are grouped together in the five-person household size.

Figure 2.1: The prevalence of households in poverty by size
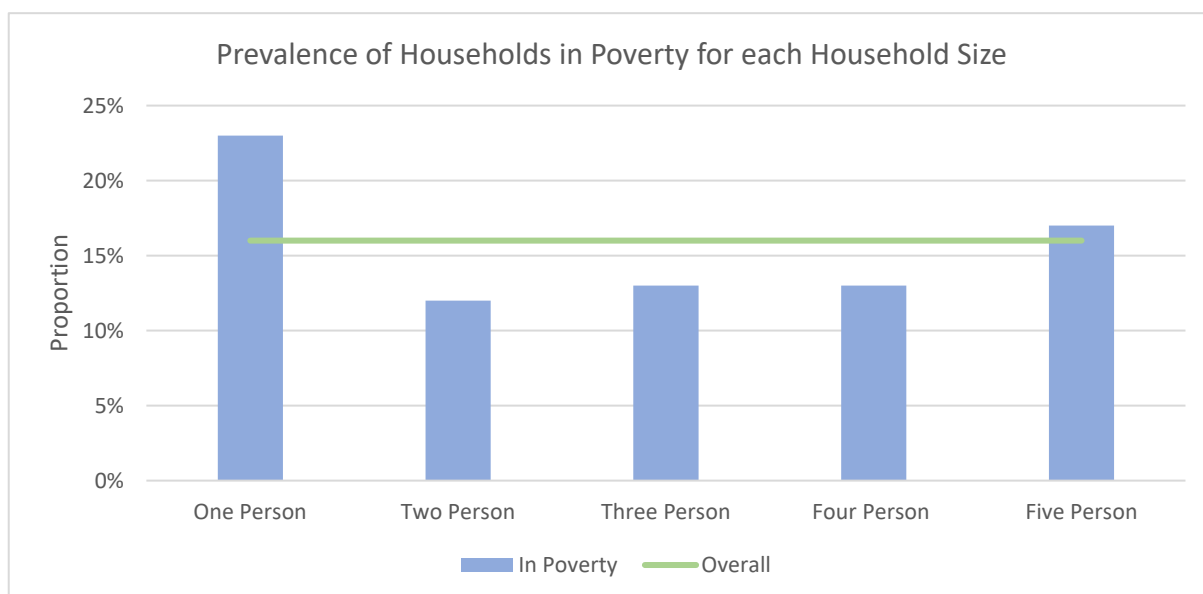
The prevalence of households in poverty is presented in Figure 2.1. Here the total number of households for each size is calculated and the proportion which fall below the relative poverty threshold is produced. It is shown that 16% of households overall (120,000) are in relative poverty. When considering the proportion by household size, one-person

households have the highest proportion in poverty (23%). Almost one in four single individual households are in relative poverty based on the data.

Two-person households have the smallest proportion in poverty at 12%, while three and four-person households have 13% and five-person households are marginally above the overall proportion at 17%.

Examining the composition of households in and not in poverty it can be seen in Figure 2.2 that for those households in poverty, almost half (46%) are single individual households. Overall, the proportion of single individual households is only 32% of the total number of households.

As the size of the household increases, the overall number of households decrease. This is also reflected in the composition of households in poverty, with two-person households comprising 20% of those in poverty and five-person (or more) households making up only 10%. There is a large disparity between one and two-person households when considering households in poverty, with one person households making up 46% of those in poverty and two person households at 20% - a difference of twenty-six percentage points between the two. For comparison the difference between one and two-person households overall is only four percentage points.

Figure 2.2: The composition of households in poverty, not in poverty and overall by size.
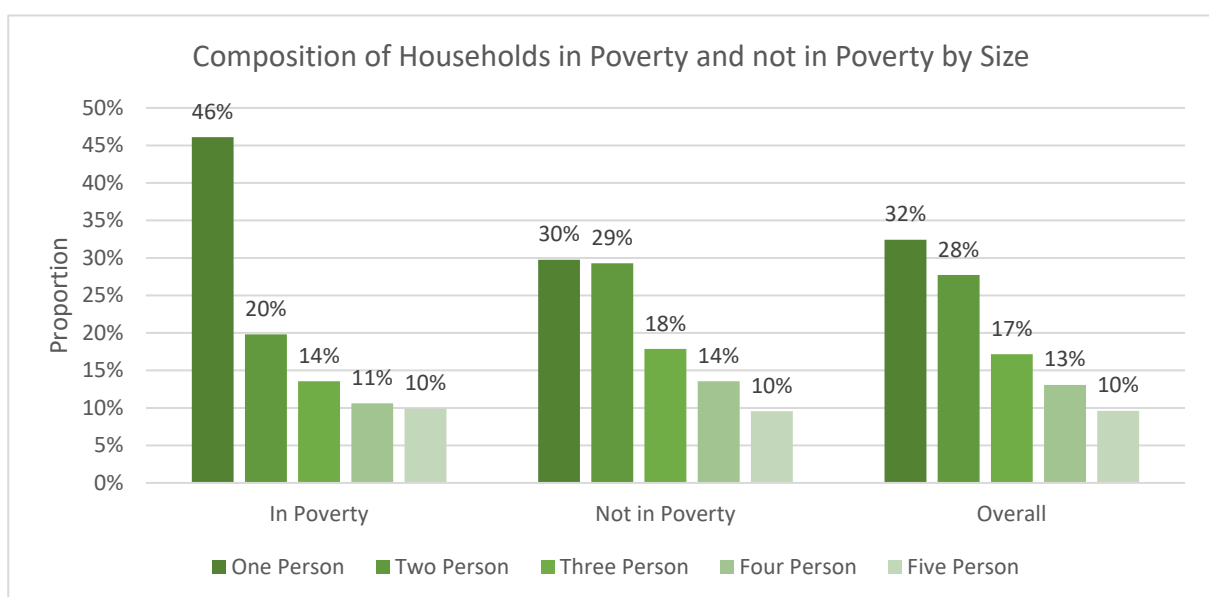
2.1.1 Income Groupings for Household Size Analysis

Having examined the prevalence and composition in and not in poverty by household size, the income groupings are now considered. When comparing the prevalence of each income grouping for the given household sizes in table 2.1, the one-person households again show a distinct change to the overall breakdown and the prevalence of the other household sizes. For one-person households 12% are in deep poverty, an increase of five percentage points compared to the overall figure of 7%. Furthermore 12% of one-person households are in shallow poverty, compared to 9% overall. This results in a substantial decrease for one-person households in the most stable group, with only 66%. This is five percentage points lower than the second lowest proportion, which sees 71% of five-person households in the most stable group.

Household Size	Deep Poverty	Shallow Poverty	At Risk	Most Stable
One Person	12%	12%	10%	66%
Two Person	5%	7%	9%	79%
Three Person	6%	7%	9%	78%
Four Person	5%	8%	10%	77%
Five Person	7%	10%	12%	71%
Overall	7%	9%	10%	74%

Table 2.1: The prevalence of households in each income grouping by size

Analysis of the composition of each group by size details that one-person households make up over half of the total households in deep poverty at 51%. This is nineteen percentage points higher than the overall proportion (as shown in Figure 2.2).

One-person households is the most common household type for the deep poverty, shallow poverty and at risk groupings with 51%, 42% and 34% respectively. In each of these groups the two-person households comprise the second biggest proportion at 17%, 22% and 26%. The significant difference between the two proportions demonstrates clearly that single individual households are more likely to fall into poverty or near the poverty threshold than any other household size.

Figure 2.3: The composition of households for each income grouping by size.
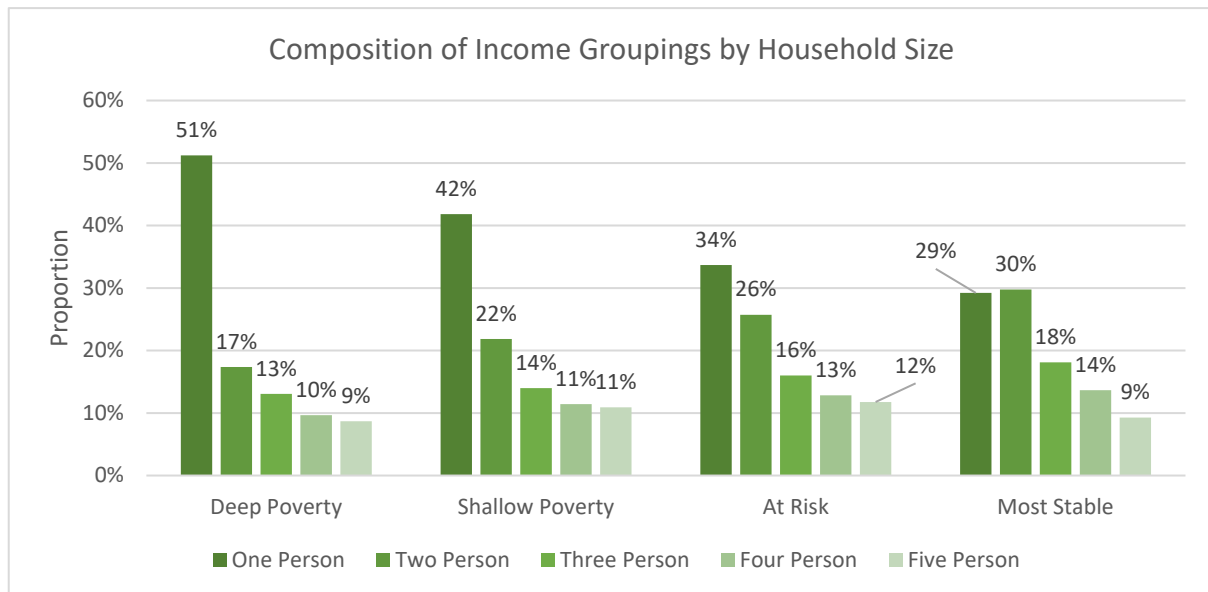
2.2. Household Type

Following the analysis of household size, the type of household is now considered. Throughout the analysis six household types are considered, these are:

A – One adult, no children

B – Two adults, no children

C – More than two adults, no children

D – One adult, with children

E – Two adults, with children

F – More than two adults, with children

When compared with household size, Type A is the same as one-person households, however the other types will allow for further analysis of given combinations, for example lone parent households (Type D). Type A households are the largest cohort with 238,000 (as noted above in Household Size). The other household types range in size from 51,000 (Type F) to 177,000 (Type B), with 100,000 households with more than two adults and no children (Type C), 62,000 lone parent households (Type D) and 106,000 households with two adults and children (Type E).

As in the previous section, the prevalence of households in and not in poverty is considered first, in Figure 2.4. As Type A households are single individual households and discussed earlier, they will not be the focus of this analysis. When prevalence is considered by household type this shows a wide range of values. For households with more than two adults and no children (Type C), only 4% are in poverty while for lone parent households (Type D), 37% are in poverty. This is fourteen percentage points higher than the second highest household type (Type A – Single Individual Households) and twenty-one percentage points higher than the overall proportion (16%).

Figure 2.4: The prevalence of households in poverty by type
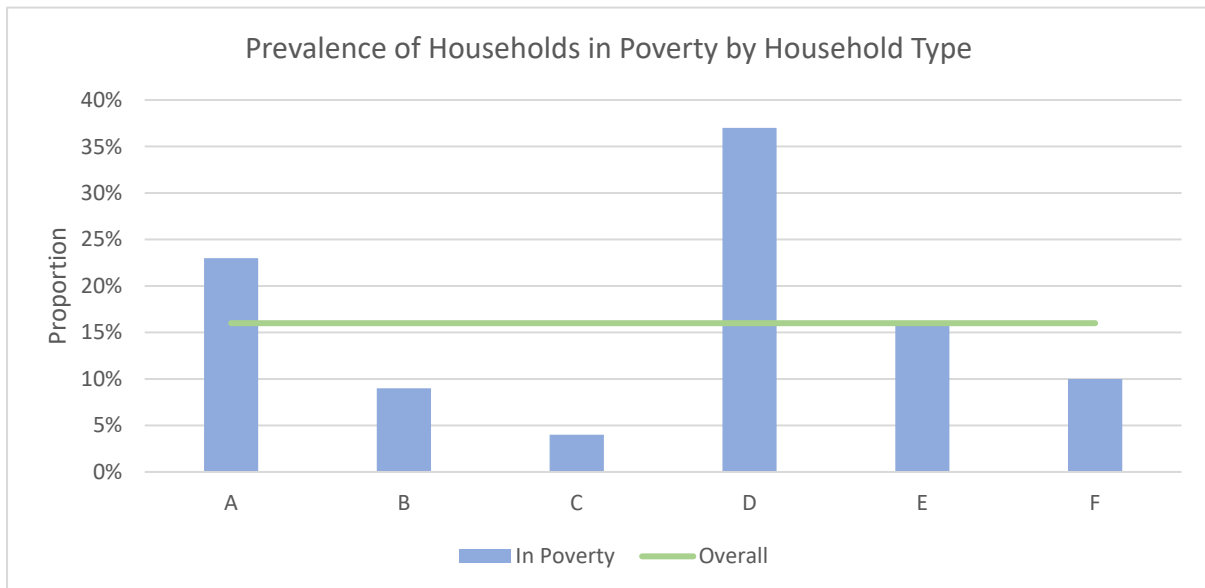
When analysing the composition, there is an evident difference between those with children and those without. For households in poverty, 19% are lone parent households (Type D). This is eleven percentage points higher than the overall proportion (8%). The reverse can be seen for Type C (more than two adults, no children) which makes up 14% of households overall and only 3% of those in poverty.

Figure 2.5: The composition of households in poverty, not in poverty and overall, by type

Composition of Households in Poverty and not in Poverty by Household Type
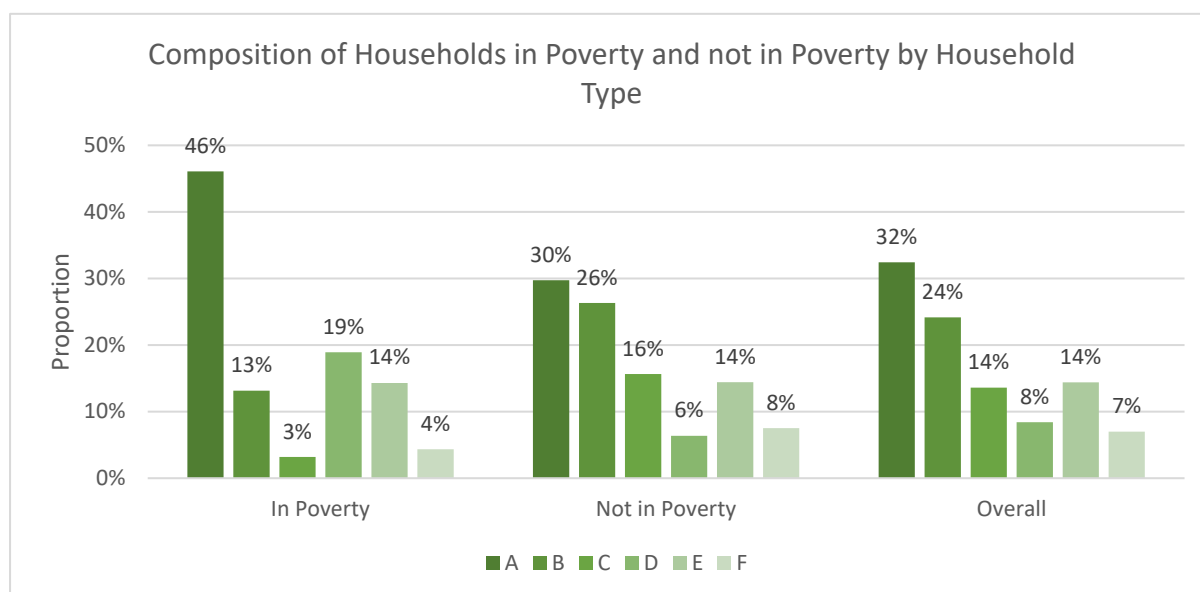
2.2.1. Income Groupings by Household Type

Examining further, the household type is evaluated for each of the income groupings. In Table 2.2 the prevalence of each income grouping is considered by Household Type. For households with multiple adults and no children (Types B and C), only 3% and 1% are in deep poverty, with a further 6% and 3% in shallow poverty respectively. Lone parent households (Type D) see the highest proportion in deep poverty with 18%. This is six percentage points higher than the second highest group (Type A – single individuals) and eleven percentage points higher than the overall proportion in deep poverty.

The starkest contrast can be seen between household types C (more than two adults, no children) and D (lone parents) when the most stable group is considered. For Type C, 92% of households are in the most stable group, which is forty-seven percentage points higher than the proportion of Type D which are identified as most stable (being 45%).

Household Type	Deep Poverty	Shallow Poverty	At Risk	Most Stable
A	12%	12%	10%	66%
B	3%	6%	8%	83%
C	1%	3%	4%	92%
D	18%	19%	18%	45%
E	6%	10%	12%	71%
F	3%	7%	10%	80%
Overall	7%	9%	10%	74%

Table 2.2: The prevalence of households for each income grouping by type.

Examining the composition of each income grouping, clear trends are evident across the groupings. For those households in deep poverty, 20% are lone parent households (Type D) with a further 15% being households of multiple adults with children (Types E and F). This means that 35% of households in deep poverty contain children. Similarly, 39% of households in shallow poverty contain children. In the at risk group 41% of households contain children while only 27% of the most stable group have children.

For households with multiple adults and no children (Types B and C) the proportions of those in deep and shallow poverty are much lower than those with children at 13% and 19% respectively. In addition, these households comprise 25% of those at risk, and 44% of the most stable group. While single individual households make up large proportions of the deep and shallow income groupings, the trends seen indicate that increasing the number of adults in a household helps stabilise the household against poverty, while the introduction of children to the household reduces stability.

Figure 2.6: The composition of households for each income grouping by type.
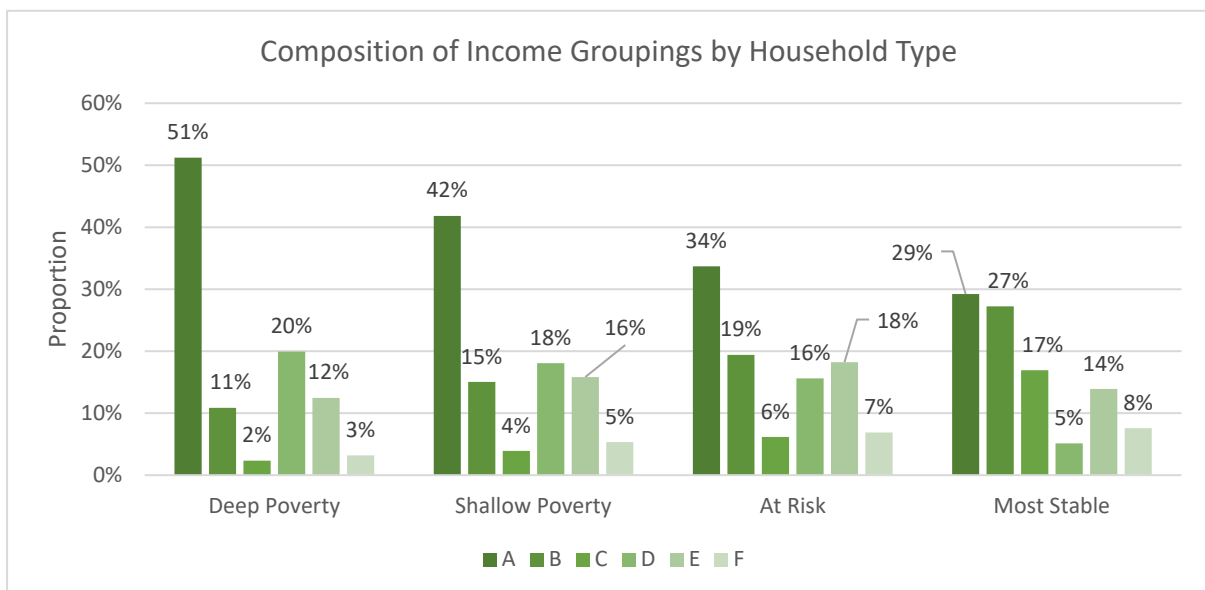
2.3. Age Breakdown

As the poverty breakdown is calculated at a household level, for the age breakdown statistics, the age of individuals within households in/not in poverty will be examined. The administrative data has no record of children of higher-earning families (who are not in receipt of Child Benefit). Due to reduced sample size, the FRS did not report on number of children in poverty for 20/21, however in previous years the administrative data demonstrated a higher proportion of children in poverty, due to the overall underestimation of the number of children. Age breakdown analysis will therefore not be conducted for this cohort.

Moving forward the age of individuals will be considered at working age and pension age, rather than more granular age bands. This will provide a clearer understanding of different poverty proportions for distinct cohorts of individuals, where clear differences can be identified. It is estimated that 1 million individuals on the administrative data are working age, with a further 300,000 being pension age. The administrative data contains several records where the age of an individual is not known. This accounts for approximately 1% of individuals at 9,000, however it will not be considered here due to the small number of instances - as such proportions may not sum to 100%.

In Figure 2.7 the overall proportion of adults in households in poverty is 13%, which is a reduction when compared to the proportion of households (16%). This is further evidence that households with multiple inhabitants are less often in poverty, as we have seen in the previous two sections.

Overall, working age individuals also see a 13% proportion in poverty, while pension age individuals have a reduced proportion in poverty of 9%. The working age proportion and overall proportion are approximately the same due to the large number of working age individuals compared to pension age.

Figure 2.7: The prevalence of adults in households in poverty by age
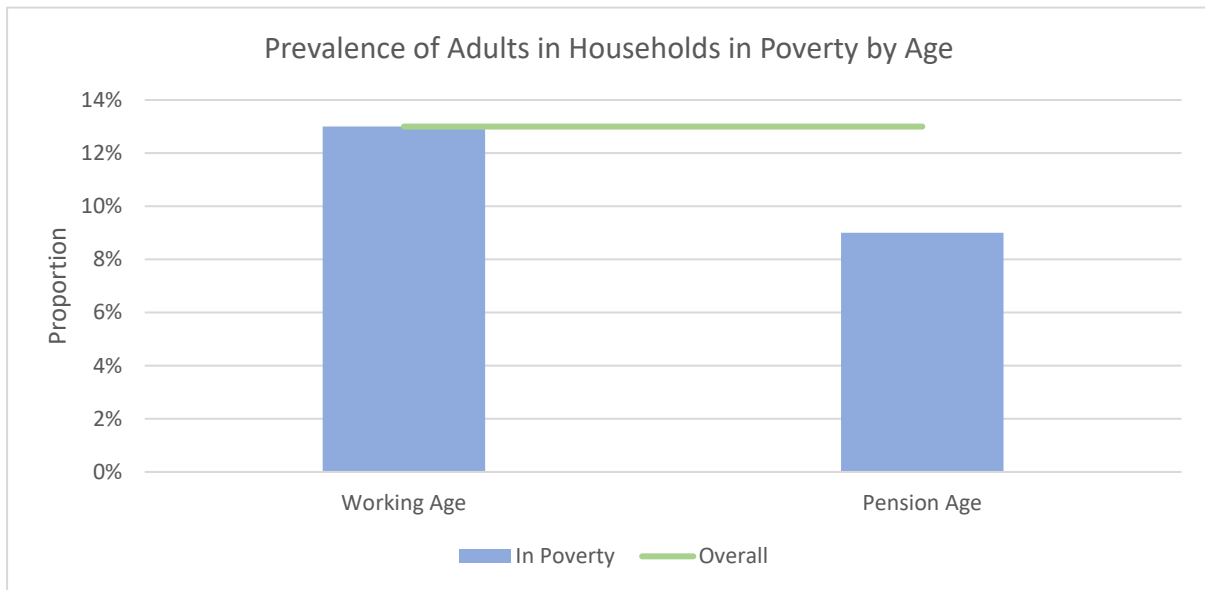
In Figure 2.8, the proportion of working age and pension age individuals in households in poverty and not in poverty are considered. 83% of individuals in poverty and 77% of individuals not in poverty are working age. Overall, the proportion of working age individuals is 78%. Considering pension age individuals, these comprise 21% of individuals overall (22% not in poverty) and 15% of those in poverty.

Figure 2.8: The composition of individuals in households in poverty, not in poverty and overall, by age.
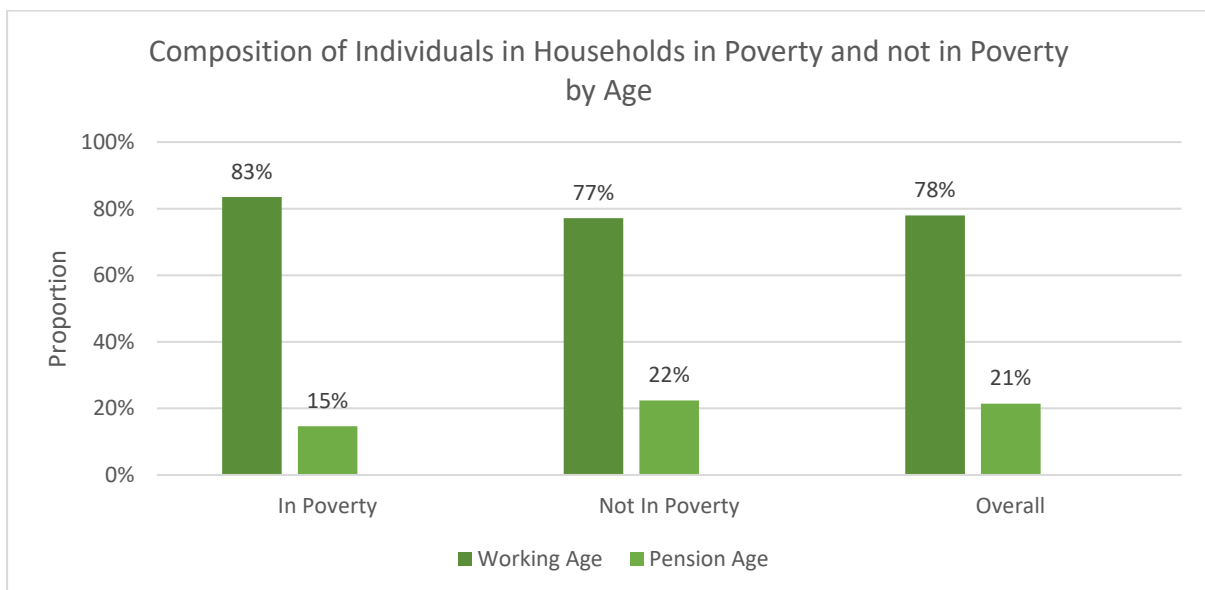
2.3.1. Income Groupings by Age

Beginning with the prevalence of each income grouping as in Table 2.3, the pension age cohort shows significant differences to the working age group and overall figures. Only 2% of the pension age cohort is in deep poverty. This is less than half the prevalence of deep poverty within the working age group, which is 6%. The shallow poverty and at risk groups are consistent across the age groups, with the only other difference being in the prevalence of the most stable group. 83% of the pension age group is in the most stable category, an increase of five percentage points compared to the working age group (78%).
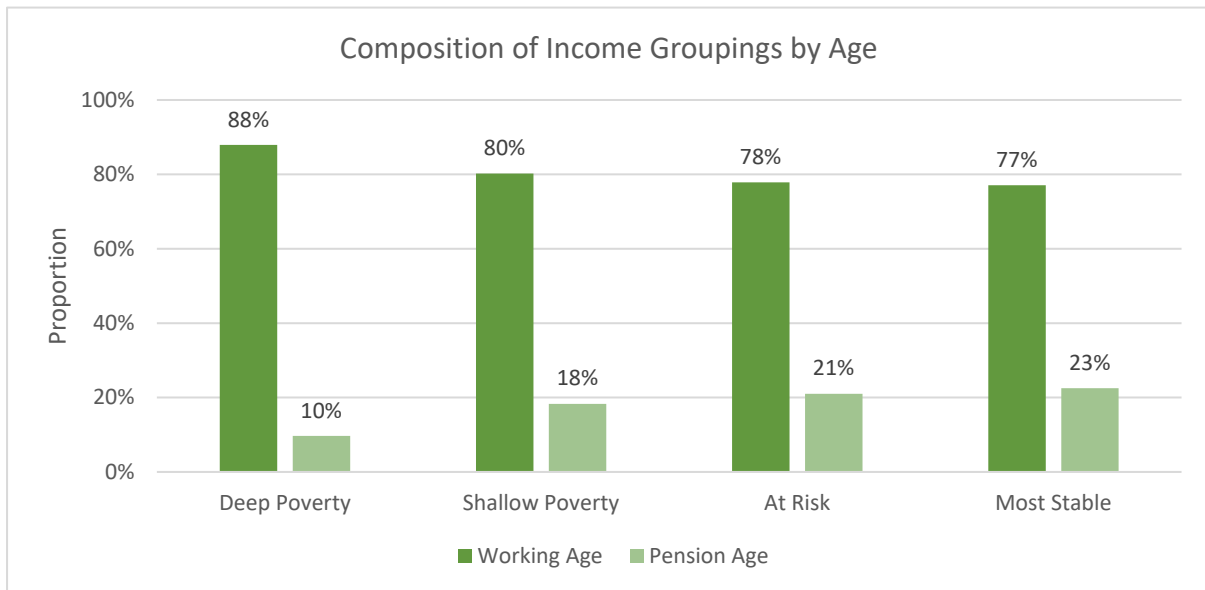
Age Group	Deep Poverty	Shallow Poverty	At Risk	Most Stable
Working Age	6%	7%	9%	78%
Pension Age	2%	6%	9%	83%
Overall	5%	7%	9%	79%

Table 2.3: Prevalence of different income groupings for each age group of individuals.

Examining the composition of the different income groupings in Figure 2.9, the proportion of working age and pension age individuals in each are considered. For the shallow poverty, at risk and most stable groups there are slight variations in composition with working age individuals making up 80%, 78% and 77% respectively. This is in line with the overall proportion seen earlier of 78% of individuals being working age. The deep income grouping shows a larger difference, being ten percentage points higher than the overall proportion, with working age individuals making up 88% of those in deep poverty.

One possible explanation for this is the minimum guaranteed amount of state pension. Considering the total pension age population and the caseload for state pension, it is approximated that over 95% of pension age individuals receive state pension, which would provide enough financial support to ensure they are not in deep poverty in most cases.

Figure 2.9: Composition of different income groupings by age of individuals.

Composition of Income Groupings by Age

Legend: ■ Working Age ■ Pension Age

| Income Grouping	Working Age	Pension Age
Deep Poverty	88%	10%
Shallow Poverty	80%	18%
At Risk	78%	21%
Most Stable	77%	23%

2.4. Lone Parent Analysis

Further to Section 2.2 additional analysis was conducted to investigate lone parent households. In this section demographic variables are considered for the lone parent cohort to identify any trends. There are 62,000 lone parent households (Household Type D) detailed within the administrative data and of these households 37% (23,000) are below the poverty threshold with a further 18% (11,000) in the at risk category. The proportion of lone parent households in poverty is twenty-one percentage points greater than the overall proportion of households (16%) and the at risk group is a further eight percentage points higher than the overall proportion (10%).

Beginning the analysis with sex type it is found that 94% (58,000) of lone parents identified within the administrative data are female. When considering the households in poverty, again 94% of the lone parents are female compared to 93% of those not in poverty.

Additional analysis was conducted considering the age of the lone parents. Considering the prevalence of households in poverty by the age group of the lone parents in Figure 2.10 the under 30 cohort has 44% of households in poverty and is the only group above the overall proportion of 37%. The prevalence of households in poverty amongst the other groupings is comparable with the overall proportion at 36%, 34% and 37% for the 30-39, 40-49 and 50 and Over groups respectively.

Figure 2.10: Prevalence of lone parent households in poverty by age of lone parent.
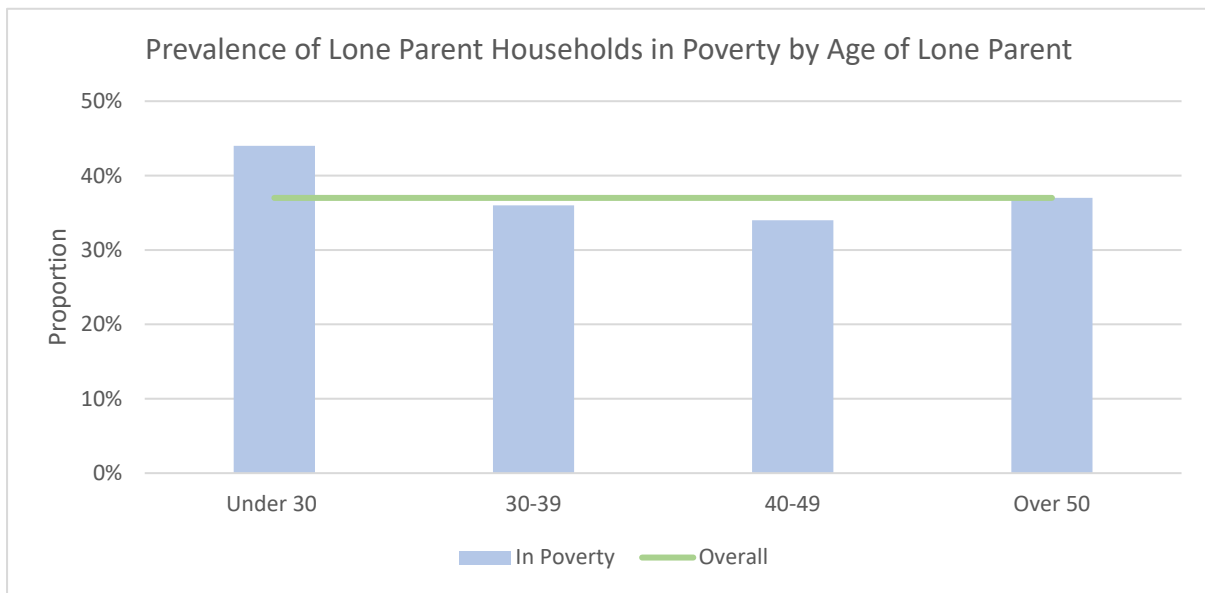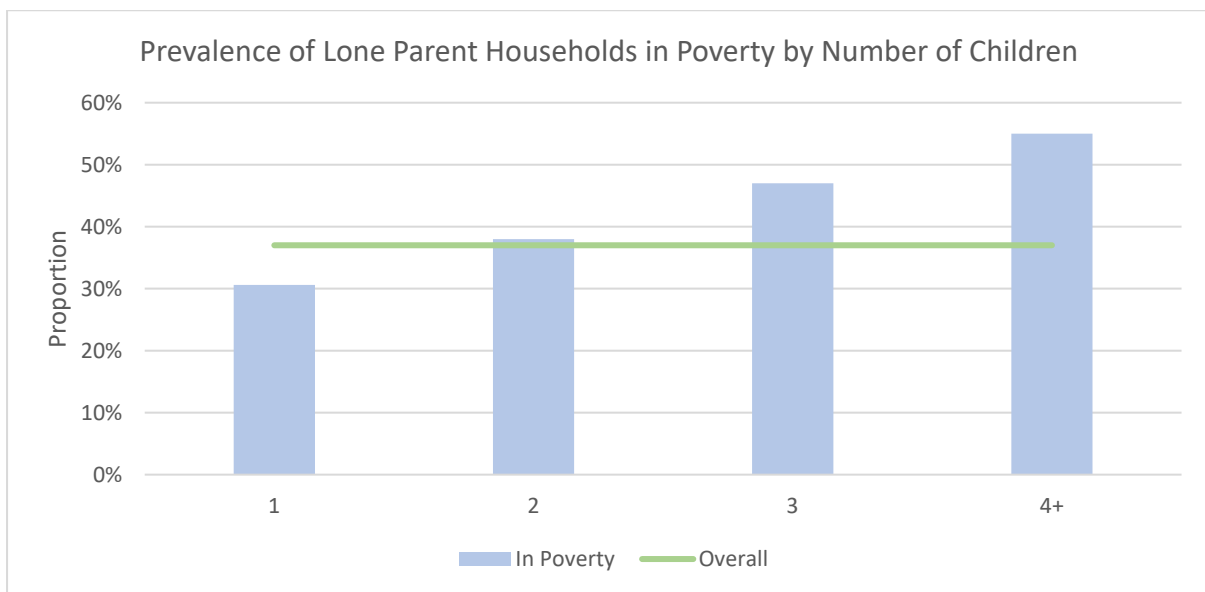

Considering the composition of lone parent households in poverty and not in poverty as shown in Figure 2.11 the overall proportions are mainly consistent between age groups. The main difference is a six percentage point difference for the under 30 group which makes up 21% of lone parent households in poverty and only 15% of those not in poverty.

Figure 2.11: Composition of lone parent households in poverty by age of lone parent
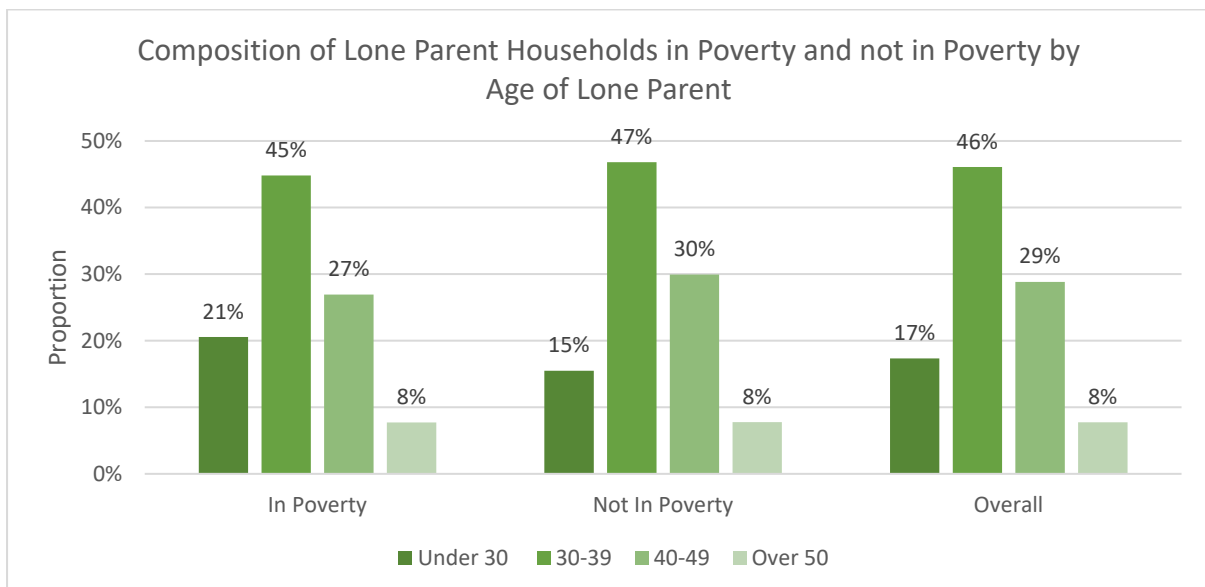
Finally, the number of children present in the lone parent households is examined. Figure 2.12 demonstrates the proportion of lone parent households in poverty for different numbers of children. As the number of children increases, the proportion of households in poverty also increases. For one child households the proportion is 31%; the proportion of households in poverty is 38%, 47% and 55% for lone parent households with two, three and four (or more) children respectively.

Figure 2.12: Prevalence of lone parent households in poverty by number of children

The composition of lone parent households is evaluated in Figure 2.13. For those households in poverty, 35% have one child. This is seven percentage points lower than the overall proportion of one child lone parent households and twelve percentage points lower than the proportion of households not in poverty. For households with more than one child the proportion in poverty is higher than the overall proportion as well as the proportion not in poverty. Two children households make up 40% of lone parent households in poverty, 38% of those out of poverty and 39% overall. Three children households show a more substantial discrepancy, comprising 18% of lone parent households in poverty and only 12% of those out of poverty.

Figure 2.13: Composition of lone parent households in poverty by number of children

Composition of Lone Parent Households in Poverty and not in Poverty by Number of Children
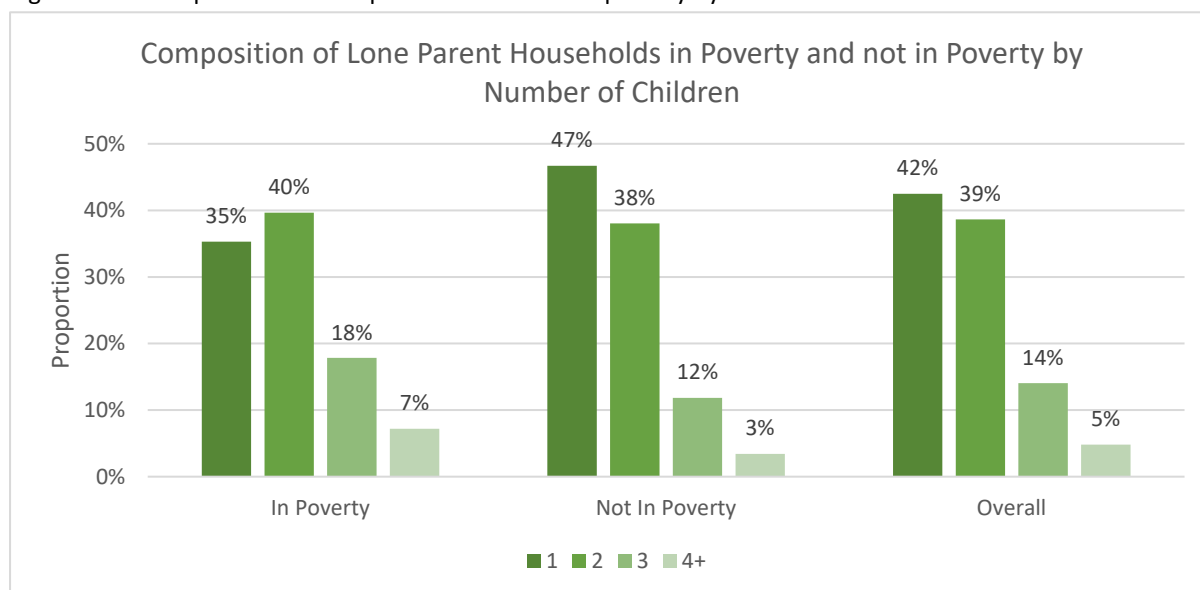
Key Takeaways

- Of those households in poverty, 46% are single individual households, while only 32% of the overall number of households are single individual households. When considered at the income grouping level, 51% of households in deep poverty are single individual as are 42% of households in shallow poverty.

- 83% of Pension Age individuals live in households which are within the most stable income grouping. Only 2% are in deep poverty, with 6% in shallow poverty and a further 9% at risk of poverty.

- Increasing the number of adults in a household reduces the proportion of households in poverty. For single adult households without children 23% are in poverty. This drops to 9% for couples without children and 4% for more than two adult households without children.

- 37% of lone parent households are in poverty, this is twenty-one percentage points higher than the overall proportion of households in poverty.

- As the number of children increases, the proportion of lone parent households in poverty rises from 31% for one child, to 38% with two, 47% with three and finally 55% for lone parent households with four or more children.

- When considered by income grouping, only 45% of lone parent households are most stable, 18% are in deep poverty, 19% are in shallow poverty and a further 18% are at risk of poverty.

22

3. Geographical Analysis

In this section the geographical breakdown of the different income cohorts is considered, both at the Local Government District (LGD) level and at a settlement type level. This will aid in the examination of any areas within Northern Ireland where poverty is more prevalent. As with the age breakdown before there are records in the administrative data where the LGD and settlement type are unknown and so the proportions may not sum to 100%.

3.1. Analysis at Local Government District Level

Beginning with the prevalence of households in poverty the range across LGDs is 13% in Lisburn and Castlereagh (7,300 households) to 20% of households in Fermanagh and Omagh (8,700 households). The overall proportion of households in poverty is 16%.

Figure 3.1: Prevalence of households in poverty at LGD level
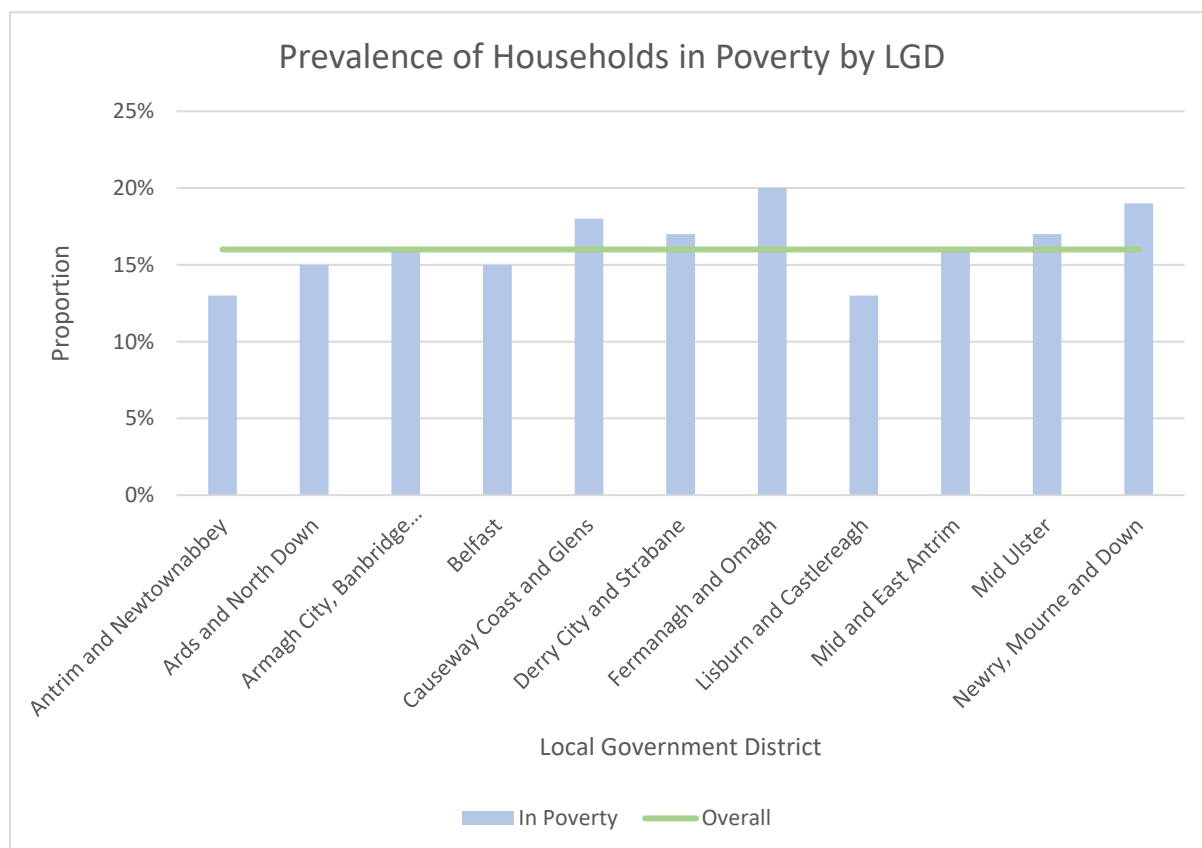
When considering the composition of households in poverty and not in poverty, as shown in Table 3.1 the proportions are consistent across the two groups and comparable with the overall proportion of households. The largest difference is seen for Lisburn and Castlereagh, where the overall proportion of households is 8% and the proportion of households in poverty is 6%.

Local Government District	In Poverty	Overall
Antrim and Newtownabbey	6%	8%
Ards and North Down	8%	9%
Armagh City, Banbridge and Craigavon	11%	11%
Belfast	18%	19%
Causeway Coast and Glens	8%	7%
Derry City and Strabane	8%	8%
Fermanagh and Omagh	7%	6%
Lisburn and Castlereagh	6%	8%
Mid and East Antrim	7%	8%
Mid Ulster	7%	7%
Newry, Mourne and Down	10%	9%

Table 3.1: Composition of households in poverty and not in poverty by LGD.

3.1.1 Income Groupings by LGD

Considering the prevalence of income groupings within each LGD a small level of variation is evident. When considering deep poverty, shallow poverty and at risk cohorts the proportion in Fermanagh and Omagh is highest overall with 10%, 10% and 11% for the three respectively. Only 69% of households in Fermanagh and Omagh are in the Most Stable group which is a significantly lower proportion than the Lisburn and Castlereagh households in the most stable cohort, at 79%. When the most stable cohort is disregarded the discrepancies across the LGDs are reduced to between one and four percentage points.

Local Government District	Deep Poverty	Shallow Poverty	At Risk	Most Stable
Antrim and Newtownabbey	6%	8%	9%	78%
Ards and North Down	7%	8%	10%	75%
Armagh City, Banbridge and Craigavon	7%	9%	10%	74%
Belfast	7%	8%	9%	76%
Causeway Coast and Glens	8%	11%	11%	70%
Derry City and Strabane	7%	9%	10%	73%
Fermanagh and Omagh	10%	10%	11%	69%
Lisburn and Castlereagh	6%	7%	8%	79%
Mid and East Antrim	7%	9%	10%	74%
Mid Ulster	7%	10%	10%	73%
Newry, Mourne and Down	9%	10%	10%	70%
Overall	7%	9%	10%	74%

Table 3.2: Prevalence of the income groupings for each LGD

The composition of each of the income groupings is consistent across the different LGDs, as previously seen for those in and not in poverty. Across the different groupings the largest difference is three percentage points, for the Belfast and Newry, Mourne and Down areas.

Local Government District	Deep Poverty	Shallow Poverty	At Risk	Most Stable
Antrim and Newtownabbey	6%	7%	7%	8%
Ards and North Down	8%	8%	9%	9%
Armagh City, Banbridge and Craigavon	11%	11%	11%	11%
Belfast	17%	18%	18%	20%
Causeway Coast and Glens	8%	9%	8%	7%
Derry City and Strabane	8%	8%	8%	8%
Fermanagh and Omagh	8%	7%	7%	6%
Lisburn and Castlereagh	6%	6%	6%	8%
Mid and East Antrim	7%	7%	8%	8%
Mid Ulster	7%	7%	7%	7%
Newry, Mourne and Down	11%	10%	9%	8%

Table 3.3: Composition of the income groupings by LGD.

3.2. Settlement Type Analysis

When the prevalence of households in poverty is considered, the proportion of urban households in poverty is less than the rural proportion by three percentage points, with 15% of urban households in poverty and 18% of rural households.

Figure 3.2: Prevalence of households in and not in poverty by settlement type
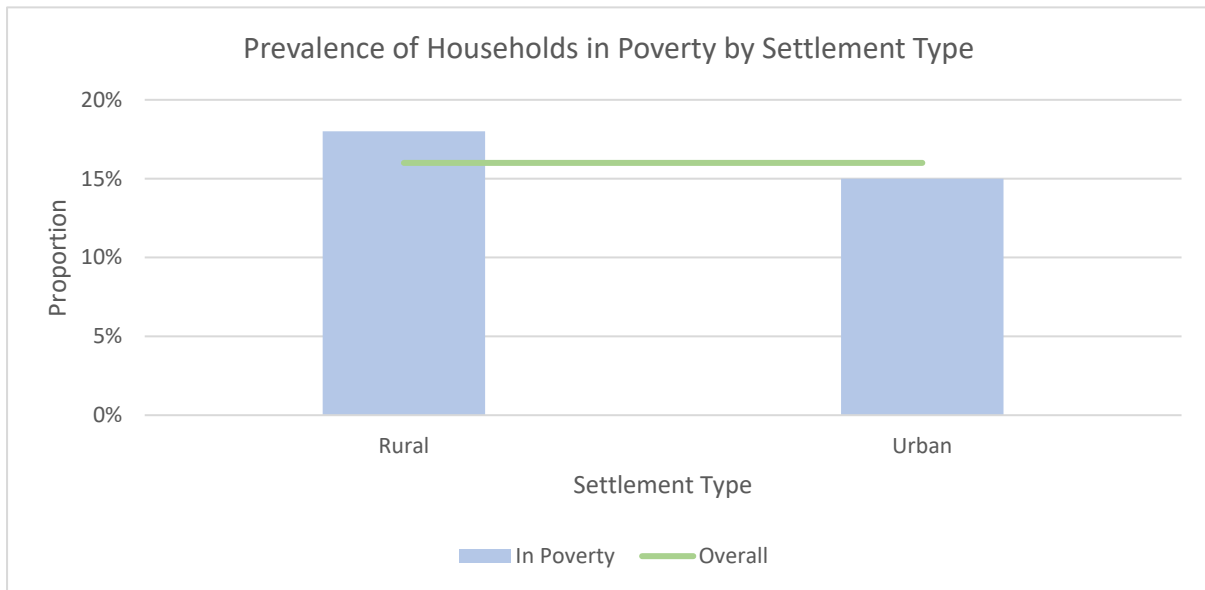
When considering the composition of households in poverty, 59% (71,000) are in urban areas while 39% (46,000) are in rural areas. The urban proportion is seven percentage points higher for the not in poverty cohort at 66%, while the rural proportion is five percentage points lower at 34%.

Figure 3.3: Composition of households in poverty and not in poverty by settlement type.
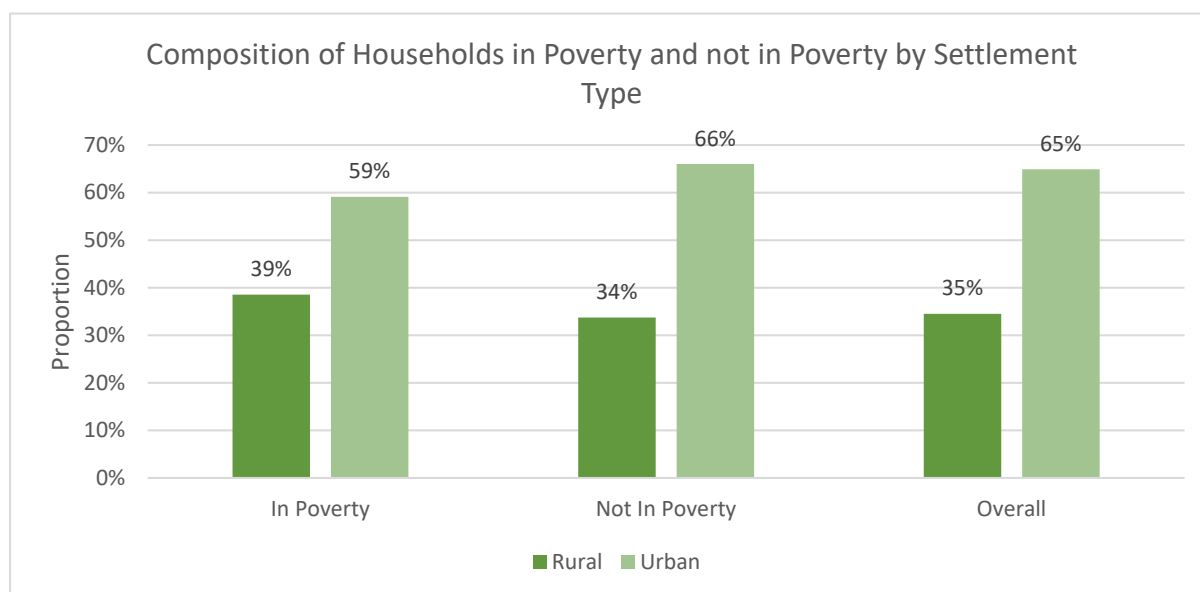
## 3.2.1 Income Groupings by Settlement Type

When examining the prevalence of the income groupings by settlement type, there is no substantial difference in the proportions. The largest difference is a three percentage point difference between the most stable and the deep income groupings for the rural and urban settlement types. For the rural households, 9% are in deep poverty and 72% in the most stable while for urban households 6% are in deep poverty and 75% are most stable.

Settlement Type	Deep Poverty	Shallow Poverty	At Risk	Most Stable
Urban	6%	9%	10%	75%
Rural	9%	10%	10%	72%
Overall	7%	9%	10%	74%

Table 3.4: Prevalence of households for each income grouping by settlement type.

When considering the composition of the income groupings, households in urban areas show a gradual increase in the proportions moving from deep poverty to most stable, with only 56% of deep poverty households being in urban areas, compared to 66% in the most stable group. Households in rural areas show a gradual decrease moving from deep poverty to most stable, with 40% of deep poverty households in rural areas and 34% of the most stable households.

Figure 3.4: Composition of households for each income grouping by settlement type.
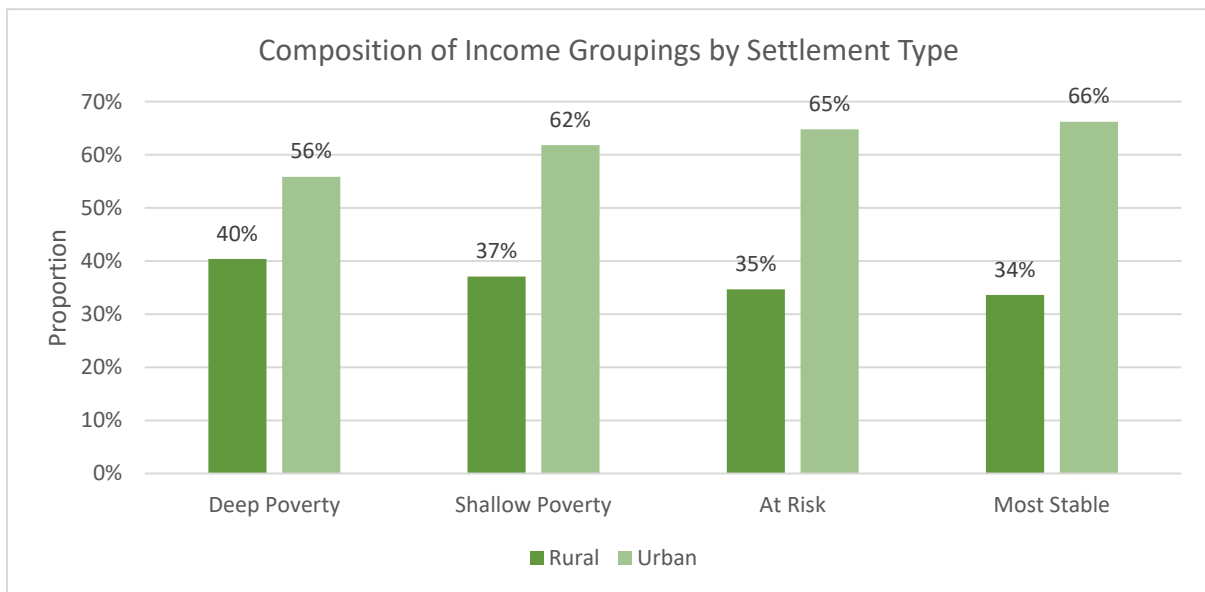
3.3. Poverty analysis at Super Output Area (SOA) Level

The proportion of households in poverty is now considered at the SOA level. SOAs were developed by NISRA to improve on the reporting of small-area statistics. This analysis will supplement the above work on the poverty proportions at the LGD level. To begin, the analysis of the entirety of Northern Ireland is considered at an SOA level, as shown in Figure 3.5.

Figure 3.5: Map displaying the proportion of households in poverty at the SOA level for Northern Ireland
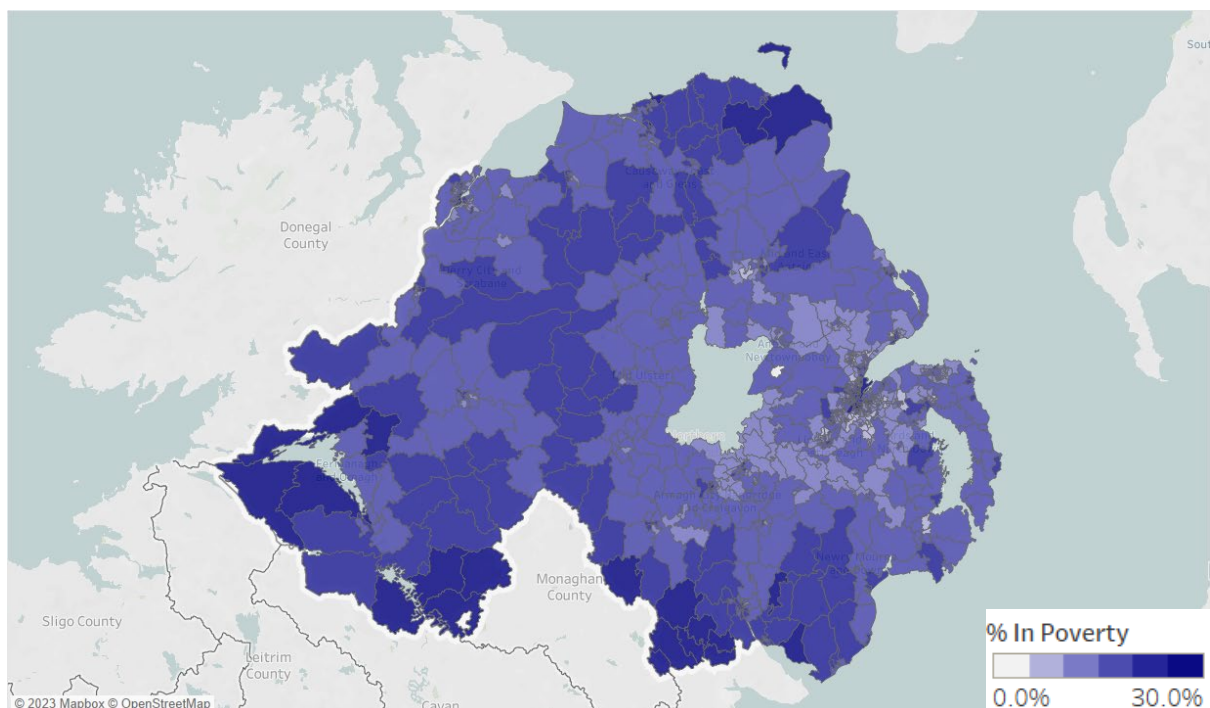
In Figure 3.5 a colour gradient is used to demonstrate the differences in poverty proportions for each SOA. This in turn allows for the identification of areas which may benefit from some level of intervention at a more granular scale than at LGD level. The proportion of households in poverty ranges from 6% to 39% at the SOA level, and 99% of the SOAs fall within the 0 - 30% range used in the colour gradient above.

Above, it is shown that there are higher proportions of households in poverty towards the west of Northern Ireland, with particularly high levels in poverty around some border SOAs. In order to fully examine the levels of poverty it is beneficial to consider the SOAs within a given LGD. Within the main body of the report the SOAs within Lisburn and Castlereagh and Fermanagh and Omagh will be examined, as these demonstrate the largest difference compared to the overall proportion in Figure 3.1. 13% of Households within the Lisburn and Castlereagh area were in poverty, a reduction of three percentage points compared to the overall proportion. One in five households (20%) in the Fermanagh and Omagh area were in poverty, an increase of four percentage points compared to the overall proportion. In addition, Belfast will be highlighted as it leads into further interesting analysis at Small Area (SA) level. The remaining LGD plots will be presented in Annex C.

3.3.1 SOA Analysis at LGD Level

Figure 3.6 shows the proportion of households in poverty for each SOA within the Fermanagh and Omagh LGD. The proportion of households in poverty within Fermanagh and Omagh ranges from 13% to 33%. The map above demonstrates the differences across the LGD with the more urban areas, such as Omagh and Enniskillen, generally having a lower proportion of households in poverty. However, the border areas show a much higher proportion in poverty.

Figure 3.6: Map displaying the proportion of households in poverty at the SOA level for Fermanagh & Omagh
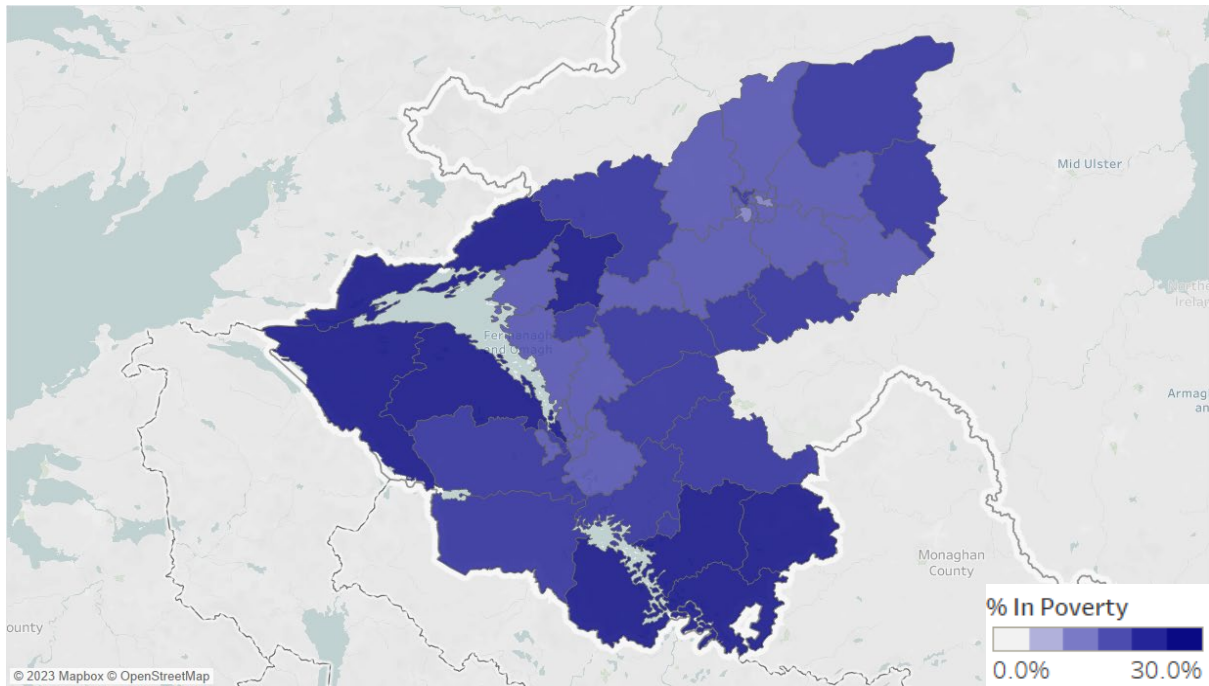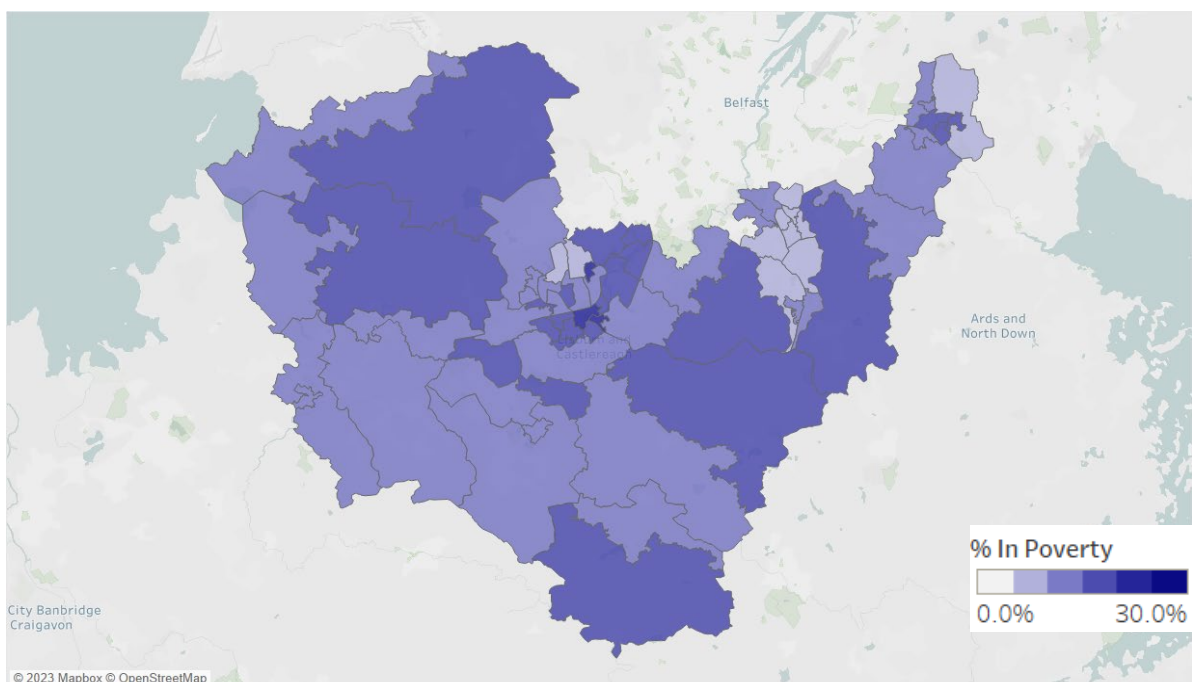

Figure 3.7 shows the proportion of households in poverty for each SOA within the Lisburn and Castlereagh LGD. The proportion of households in poverty within Lisburn and Castlereagh ranges from 6% to 20%. The map shows that the proportion of households in poverty within Lisburn and Castlereagh is consistent across most SOAs. There are a couple which demonstrate a higher proportion in poverty however the overall proportion remains low due to a number of SOAs with under 10% of the total households in poverty.

Figure 3.7: Map displaying the proportion of households in poverty at the SOA level for Lisburn & Castlereagh

Comparing across the two LGDs there is a clear contrast between them. In Lisburn and Castlereagh, it is uncommon for the SOA to have 20% of its households in poverty, while for Fermanagh and Omagh only a few SOAs have less than 15% of households in poverty.

3.3.2 Small Area (SA) Analysis at SOA Level

Figure 3.8 displays the proportion of households in poverty for each SOA within the Belfast LGD. The proportion of households in poverty within Belfast ranges from 7% to 39%[1].

Figure 3.8: Map displaying the proportion of households in poverty at the SOA level for Belfast.
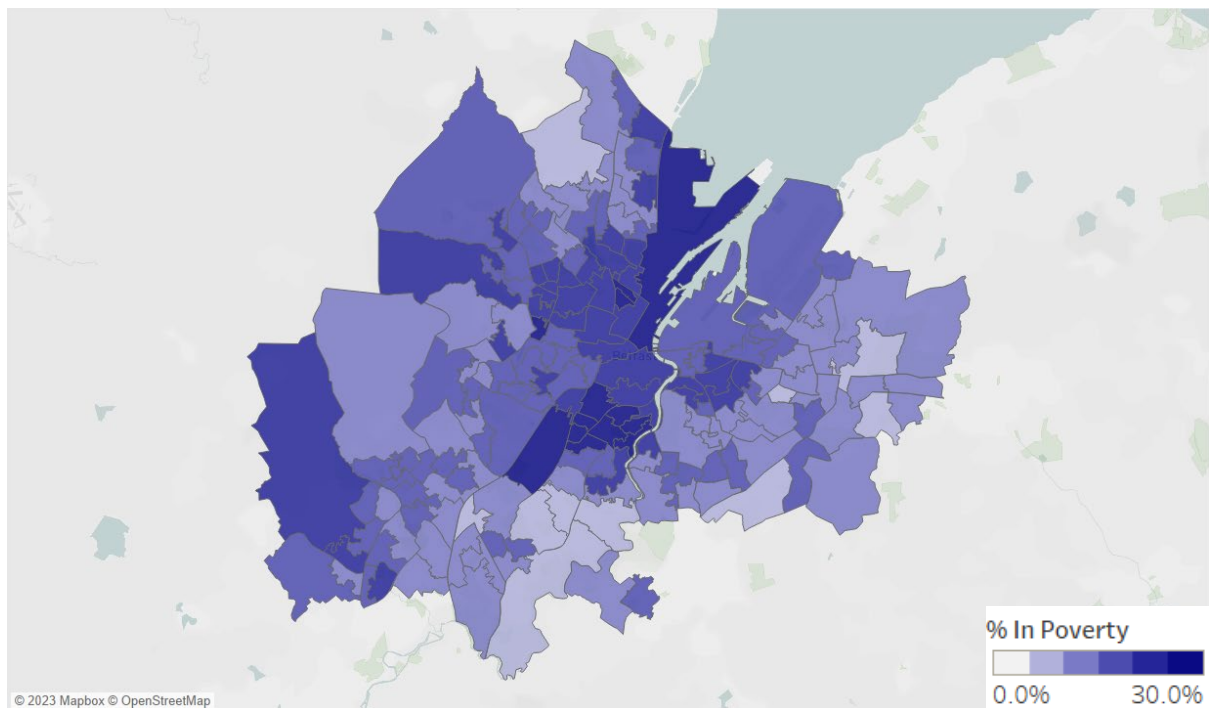
In addition to this, it is possible to examine the administrative data more granularly by considering SA analysis. SA estimates are a further refined view of the population below SOA level. They can be used as building blocks for population estimates of different geographies, which inform planning and provision of services. At SA level, NI is broken down into a larger number of areas (4,537) with an average population size of 400. The SA breakdown for Belfast is shown in Figure 3.9.

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[1] It should be noted that the maximum proportion of households in poverty in Belfast occurs for an SOA with a high proportion of Student Households. This may result in a higher proportion of households with no benefit receipt and no level of work-related income. As such this estimate for the proportion of households in poverty may be an overestimation.

Figure 3.9: Map displaying the proportion of households in poverty at the SA level for Belfast.
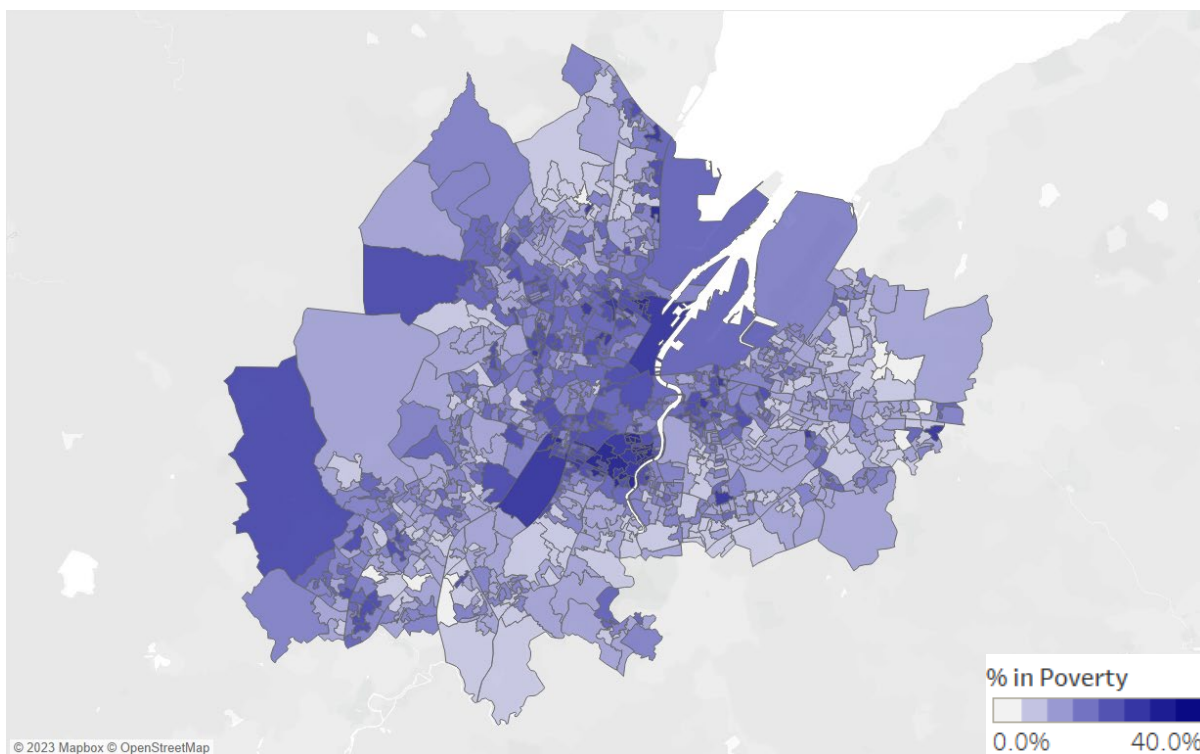
An example which highlights the power of more granular administrative data analysis occurs in the Cavehill 2 SOA. At an SOA level, 13.8% of households within Cavehill 2 are considered to be in poverty. This makes it the 627th out of 890 SOAs, with 1st having the highest proportion of households in poverty. However, examining Cavehill 2 at the SA level in Figure 3.12, it is evident that one of the small areas has a much higher proportion of households in poverty at 31.5%. Consequently, this SA is 75th out of 4,537 in terms of proportion in poverty. At an SOA level this data is obscured due to two other nearby small areas with poverty proportions of 2.6% and 5% respectively.

The analysis demonstrates that focusing exclusively on a place centred approach with regards to deprivation can result in missing pockets of deprivation present within more affluent areas. Using administrative data, we can investigate poverty at a more granular level and help highlight those areas who may become obscured at higher levels of analysis.

Figure 3.10: Map displaying the proportion of households in poverty at the SA level for the Cavehill 2 SOA
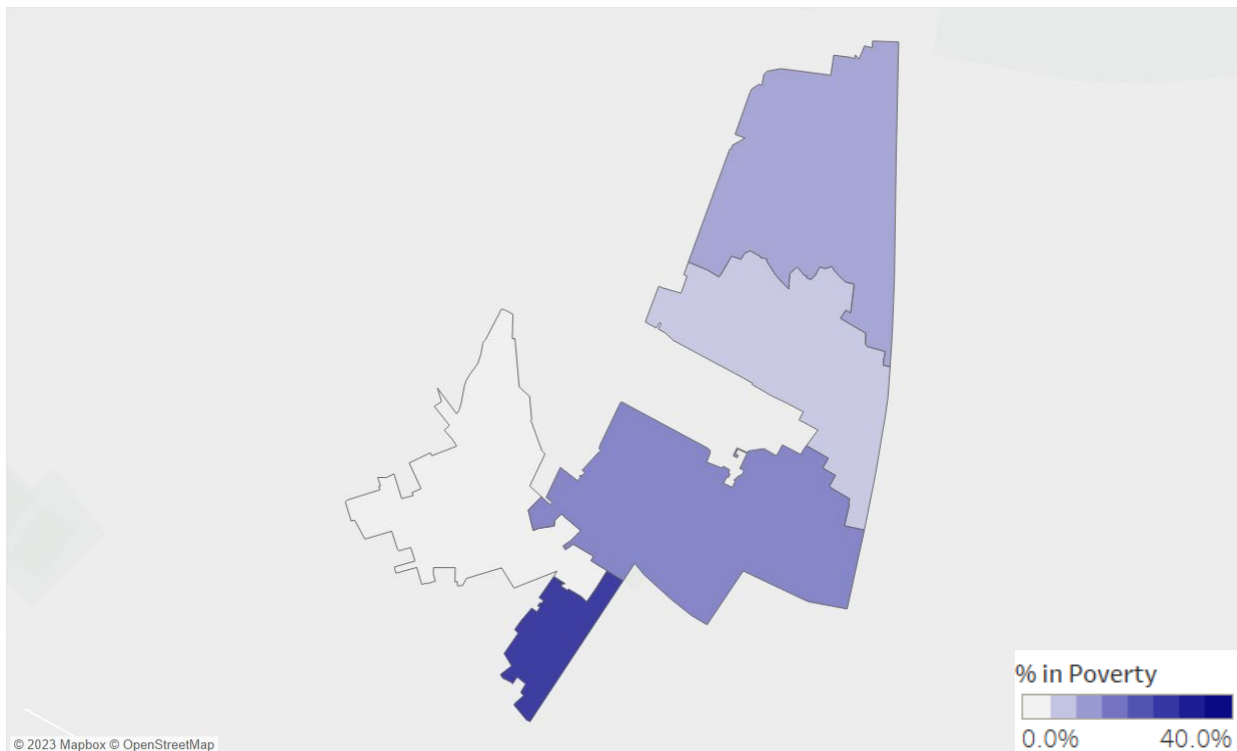
Key Takeaways

- Using administrative data poverty can be examined at a number of geographies including LGD, SOA and SA level.

- At LGD level Fermanagh and Omagh has the highest proportion of households in poverty with 20%. Lisburn and Castlereagh has the lowest at 13%.

- At SOA level the prevalence of poverty ranges from 6% to 39% with 99% of SOA poverty levels being 30% or less.

- In Lisburn and Castlereagh, it is uncommon for the SOA to have 20% of its households in poverty, while for Fermanagh and Omagh only a few SOAs have less than 15% of households in poverty.

- SA analysis shows that some impoverished areas can be masked from identification at an SOA level. The SOA Cavehill 2 has one of the lowest proportions in poverty, 13.5%. However, there is a SA within it where 31.5% of households are in poverty.

4. Income Source Analysis

In this section the different sources of income are considered for households within Northern Ireland. The two main income sources which are considered are income from benefit receipt and work-related income, which will include self-employed income. Further analysis of disability benefit receipt is also considered.

### 4.1. Benefit Receipt Analysis

When analysing the benefit receipt of a household there are three categories which a household can sit in:

1. No Benefit Receipt – None of the household income is from benefit receipt. (171,000 households – 23% of all households)
2. Means Tested Benefit Receipt – Some level of income present within the household is because of receiving a means tested benefit. (315,000 households – 43% of all households)
3. Non-Means Tested Benefit Receipt – Some level of income present within the household is from benefit receipt, but only non-means tested benefits. (247,000 households – 34% of all households)

From the descriptions above it should be noted that households in receipt of both means tested and non-means tested benefits will be classified as "Means Tested Benefit Receipt." For the purposes of this analysis Universal Credit, Jobseekers Allowance, Income Support, Employment and Support Allowance, Pension Credit and Housing Benefit are identified as means tested benefits. Other benefits, such as Carer's Allowance, Child Benefit, State Pension, and Personal Independence Payments, are classified as non-means tested benefits.
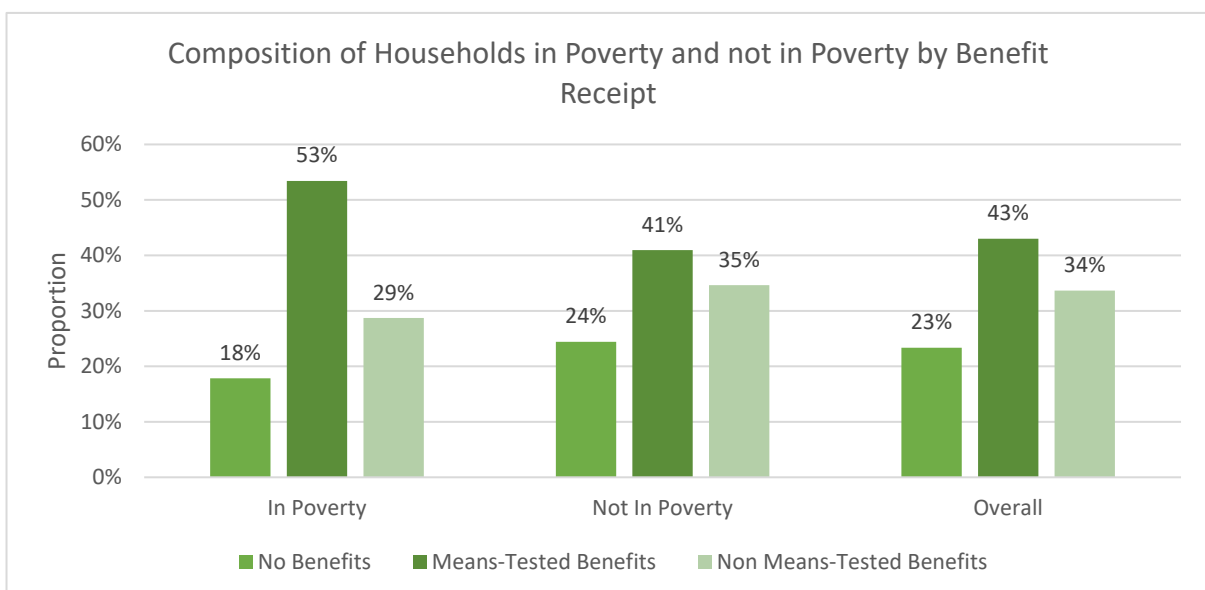
Upon examining the prevalence of households in poverty by benefit receipt type, those households in receipt of means-tested benefits have a much higher proportion of households in poverty with 20%. This is an increase of four percentage points compared to the overall number of households in poverty and an increase of six and seven percentage points compared to households in receipt of non-means tested benefits or no benefits respectively.

Figure 4.1: Prevalence of households in poverty by benefit receipt
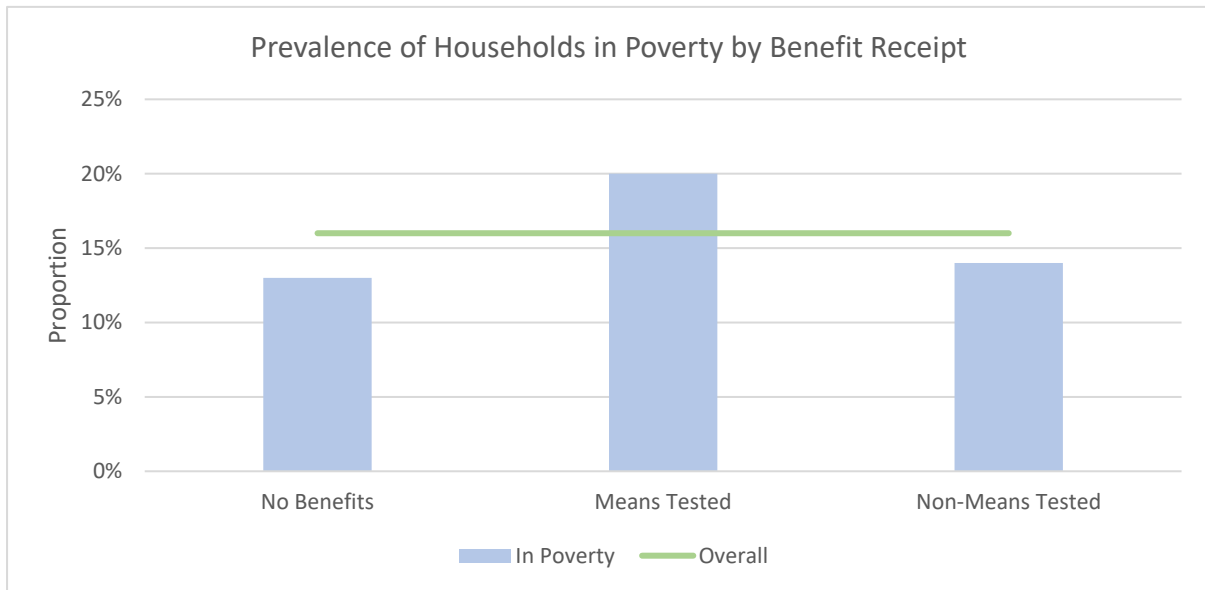
Figure 4.1: Prevalence of households in poverty by benefit receipt

When considering the composition of households in and not in poverty by benefit receipt type in Figure 4.2, the composition of households in poverty has a much higher proportion of households with some level of means tested benefit receipt at 53%, an increase of ten percentage points compared to the overall proportion of households in receipt of means tested benefits (43%). Fewer households in poverty have no benefit receipt or only non-means tested benefit receipt, the proportions being 18% and 29% respectively. This is a reduction of five percentage points for both when compared to each corresponding overall proportion of households.

Figure 4.2: Composition of households in and not in poverty by benefit receipt

4.1.1. Income Groupings by Benefit Type

When considering the prevalence of the most stable cohort, there is a much smaller proportion of households in the means tested benefit receipt group with only 66% compared to the 78% and 82% when considering the other benefit receipt types. The proportions of households in deep poverty, shallow poverty and at risk are larger for the means tested benefit receipt group than the other two being 8%, 12% and 13% respectively, while for households with non-means tested benefit receipt the proportions are 7%, 7% and 8%.

Benefit Type Receipt	Deep Poverty	Shallow Poverty	At Risk	Most Stable
No Benefits	7%	5%	6%	82%
Means Tested Benefits	8%	12%	13%	66%
Non-Means Tested Benefits	7%	7%	8%	78%
Overall	7%	9%	10%	74%

Table 4.1: Prevalence of households in each income grouping by benefit receipt

When the composition of households is considered for each income grouping the means tested households make up the majority of households in shallow poverty and at risk categories with 60% and 58% respectively. Households in receipt of means tested benefits are the largest proportion of households in deep poverty at 46%. There is a higher proportion of households in deep poverty with no benefit receipt at 22%, compared with those in shallow poverty or at risk with 14%.

Figure 4.3: Composition of households in each income grouping by benefit receipt

Composition of Income Groupings by Benefit Receipt
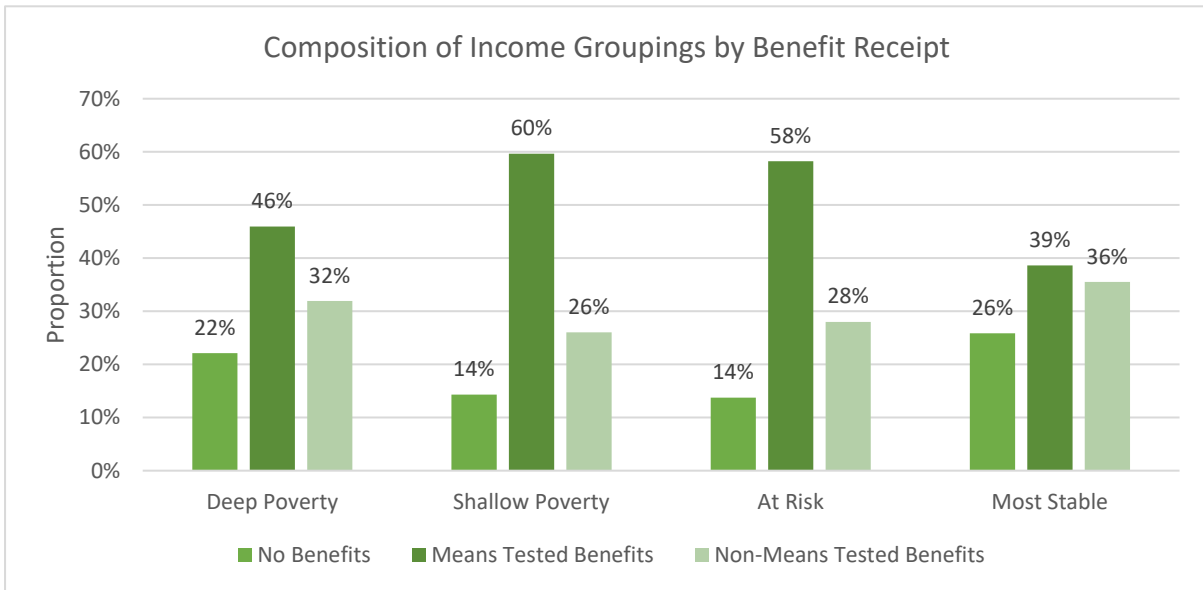
4.2. Work-Related Income

The presence of work-related income (WRI) is considered for each household, beginning with the prevalence for those in poverty. The total number of households with no WRI is broadly comparable to the total number of households in poverty, being 133,000 compared to 120,000 respectively. The proportion of households with no WRI in poverty is 36%, an increase of twenty percentage points compared to the overall proportion in poverty and twenty-four percentage points when compared with households with some level of WRI.

Figure 4.4: Prevalence of households in poverty by WRI
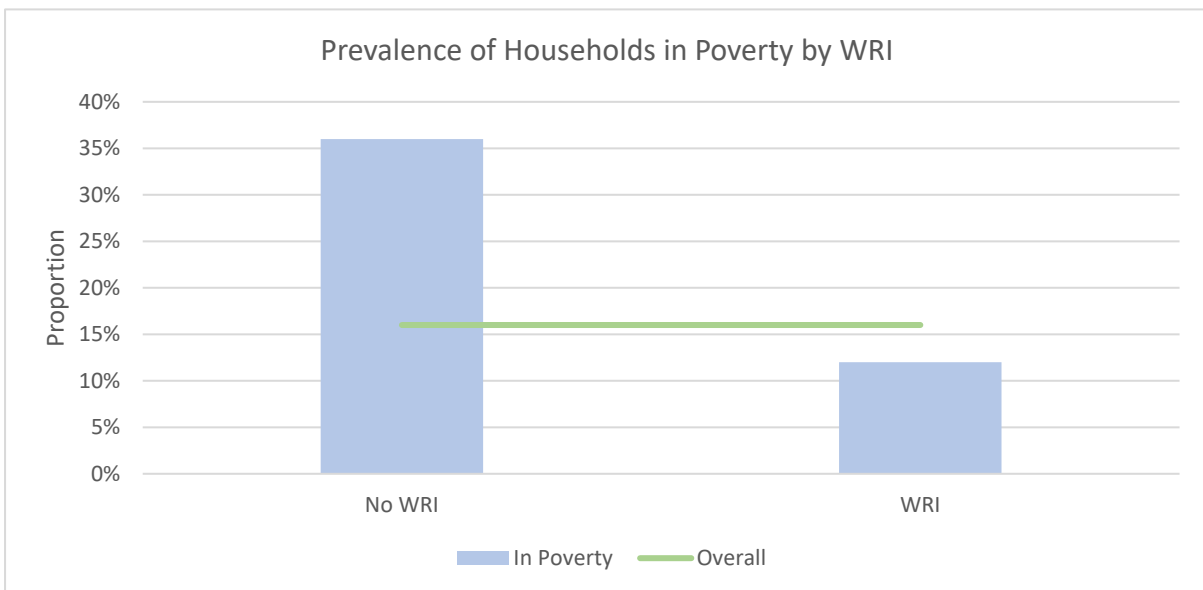

Prevalence of Households in Poverty by WRI

Figure 4.5 details the composition of the households in and not in poverty. Of those households in poverty, 60% have WRI. This is due to the far greater number of households in work. Households in work make up 86% of households not in poverty and 82% of households overall.

Figure 4.5: Composition of households in and not in poverty by WRI

Composition of Households in Poverty and not in Poverty by Presence of WRI
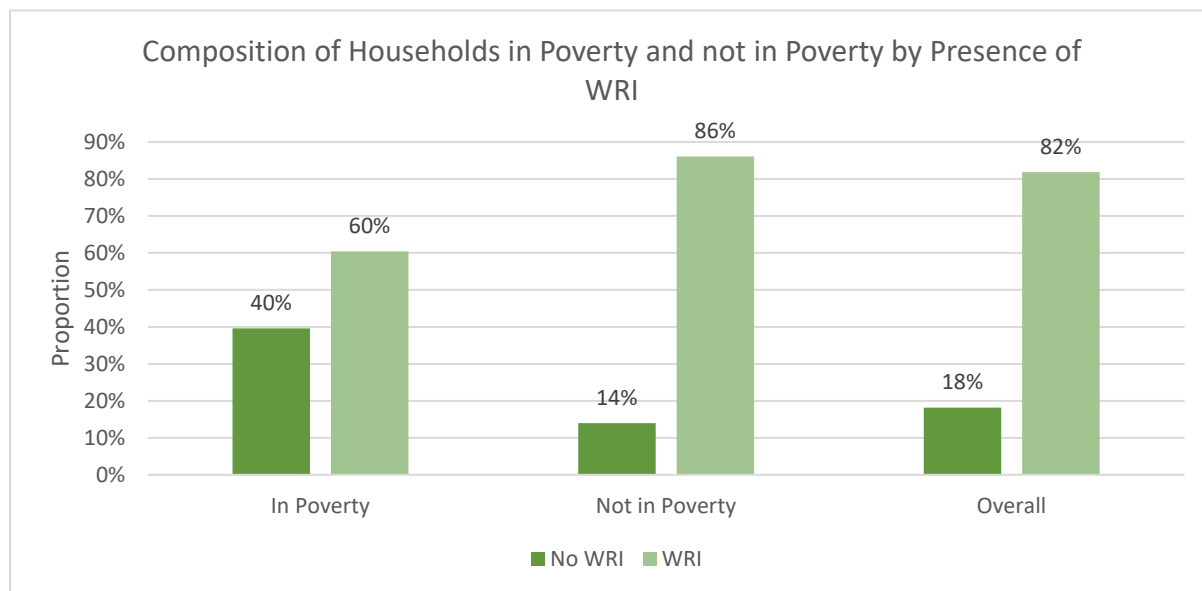
4.2.1 Income Groupings by WRI

There are significant differences in the proportions of those households with no WRI and those with some level. For those households without, 18% are in both deep poverty and shallow poverty, 13% at risk and only 51% considered to be the most stable households. For households with some level of WRI only 5% (one in twenty) are in deep poverty, 7% in shallow poverty and 9% considered at risk. 79% of households with some level of WRI are considered in the most stable category. This is twenty-eight percentage points higher than those households with no WRI.

Work Related Income	Deep Poverty	Shallow Poverty	At Risk	Most Stable
No WRI	18%	18%	13%	51%
WRI	5%	7%	9%	79%
Overall	7%	9%	10%	74%

Table 4.2: Prevalence of households in each income grouping by WRI

Considering the composition of the different income groupings while moving from deep poverty to the most stable households the proportion of those households with no WRI decreases from 44% to 13%. The reverse of this is evident for those households with some level of WRI, increasing from 56% of those households in deep poverty to 87% of the most stable households.

Figure 4.6: Composition of households in each income grouping by WRI

Composition of Households in Income Groupings by WRI
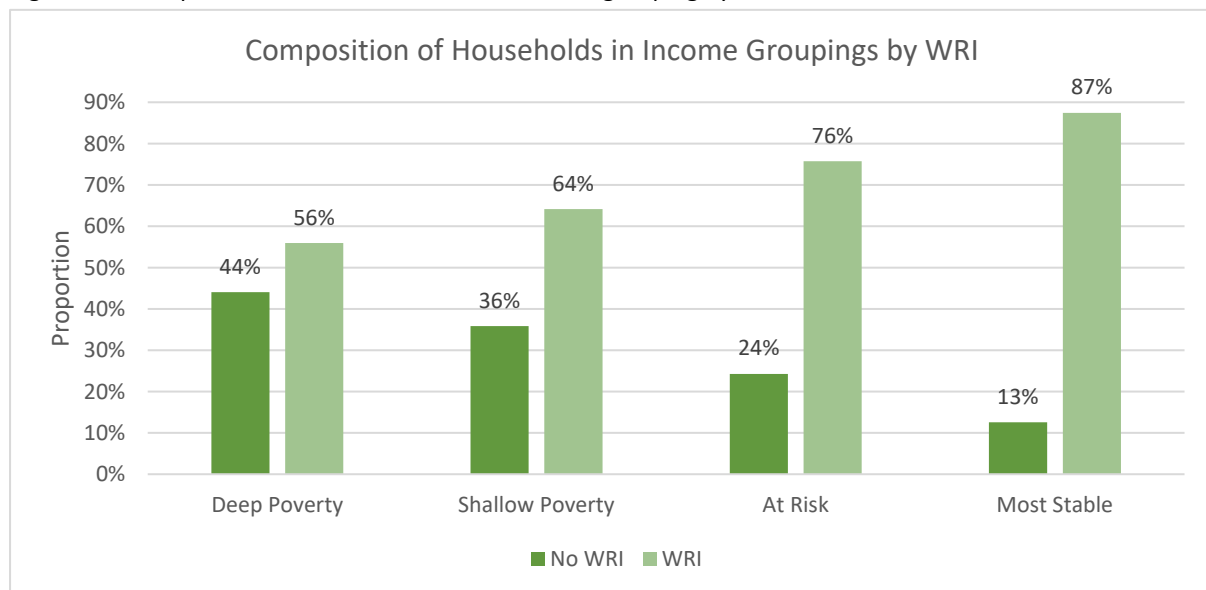
4.3. Disability Benefit Receipt

Using the administrative data, it is also possible to consider households with some level of income due to receipt of a disability benefit. Throughout this analysis Attendance Allowance (AA), Personal Independence Payment (PIP) and Disability Living Allowance (DLA) are the disability benefits considered.

Analysis of this data will be considered with disability benefit receipt continuing to be included in the equivalised household income. However, it should be noted that equivalisation of household income does not take into consideration the additional cost of living with a disabling condition. Disability benefits are provided to address these additional costs so it could be argued that income from disability benefit receipt should not be included within the equivalised household income calculation. This is discussed further in Section 4.3.2.

Figure 4.7: Prevalence of households in poverty by disability benefit receipt

Prevalence of Households in Poverty by Disability Benefit Receipt
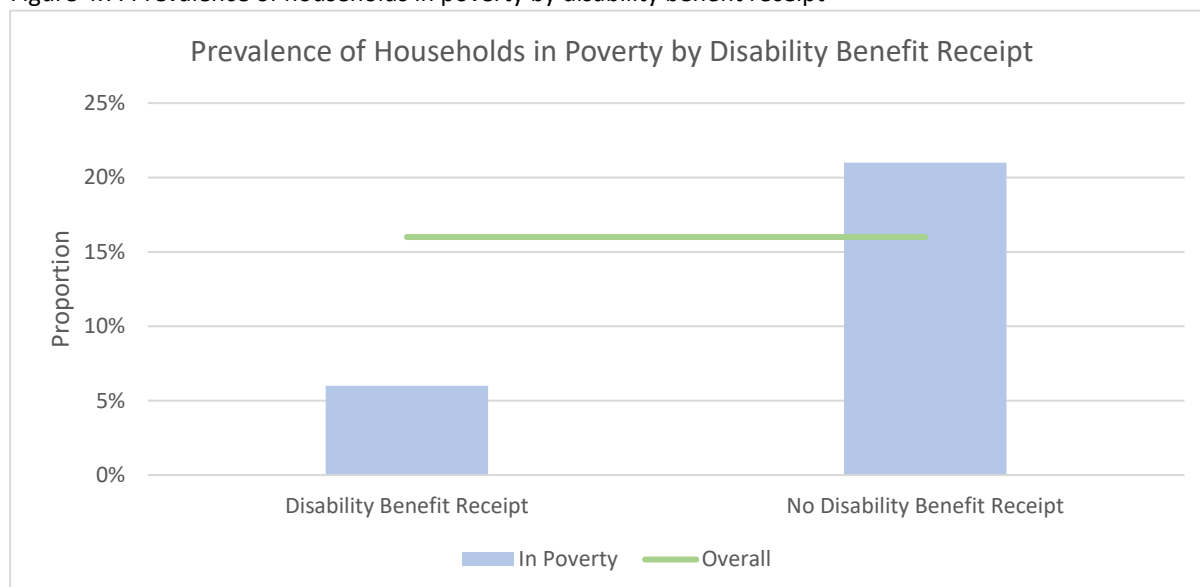
In 20/21, 228,000 households in NI were in receipt of disability benefits of which only 6% are in poverty. This is ten percentage points lower than the overall poverty rate and fifteen percentage points less than the prevalence of poverty for households with no receipt of disability benefits (Figure 4.7). According to the 21/22 Poverty and Income Inequality report produced from the FRS, 14% of individuals in receipt of disability benefits live in households that are in poverty – an equivalent figure is unavailable for 20/21 due to a reduced sampling framework during the COVID-19 pandemic. It should be noted that both figures are not directly comparable for a number of additional reasons; the administrative data is based on households in poverty whereas the FRS figure represents individuals in poverty. Furthermore, there is a potential under-reporting of benefits in the FRS which may impact this figure.

When the composition of households in and not in poverty by disability benefit receipt is considered, as in Figure 4.10, it is found that only 12% of households in poverty have some level of disability benefit receipt. This is twenty-three and nineteen percentage points less than the proportions for households not in poverty and overall, respectively. However as noted above disability benefit receipt is designed to address the increased cost of living with a disabling condition, which is not factored into this analysis.

Figure 4.8: Composition of households in poverty and not in poverty by disability benefit receipt
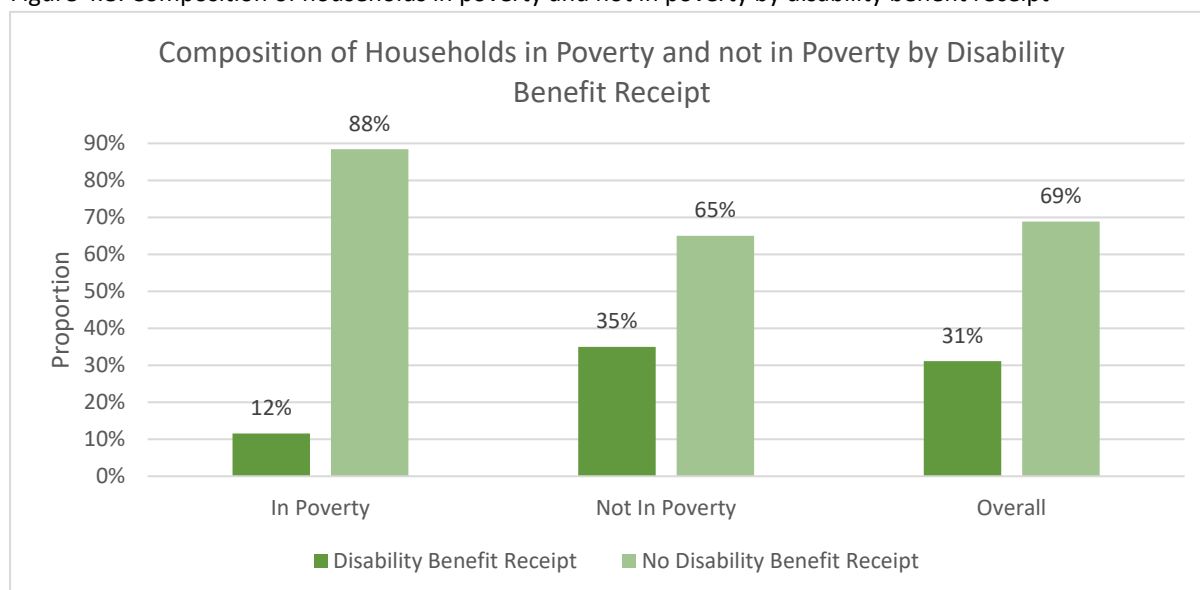
4.3.1 Income Groupings by Disability Benefit Receipt

Further analysis of households with some level of disability benefit receipt is shown in Table 4.3. When income groupings are considered for households in receipt of disability benefits, 86% are within the most stable category. A further 8% are above the poverty threshold in the at risk category. Only 2% of households in receipt of disability benefits fall into the deep poverty category, with 4% in shallow poverty. In comparison, 10% of households with no receipt of disability benefits are in deep poverty, with a further 11% in shallow poverty. The proportion of households in the most stable category is eighteen percentage points lower than for those households in receipt of disability benefits, at 68%.

Benefit Type Receipt	Deep Poverty	Shallow Poverty	At Risk	Most Stable
No Disability Benefit Receipt	10%	11%	11%	68%
Disability Benefit Receipt	2%	4%	8%	86%
Overall	7%	9%	10%	74%

Table 4.3: Prevalence of households in income groupings by disability benefit receipt

When the composition of each income grouping is considered, the proportion of households in receipt of disability benefits increases unidirectionally moving from the Deep Poverty

category with 9% to the Most Stable category at 36%. The proportions for the Shallow Poverty and At Risk categories are 14% and 25% respectively, as demonstrated in Figure 4.9.

Figure 4.9: Composition of households in each income grouping by disability benefit receipt
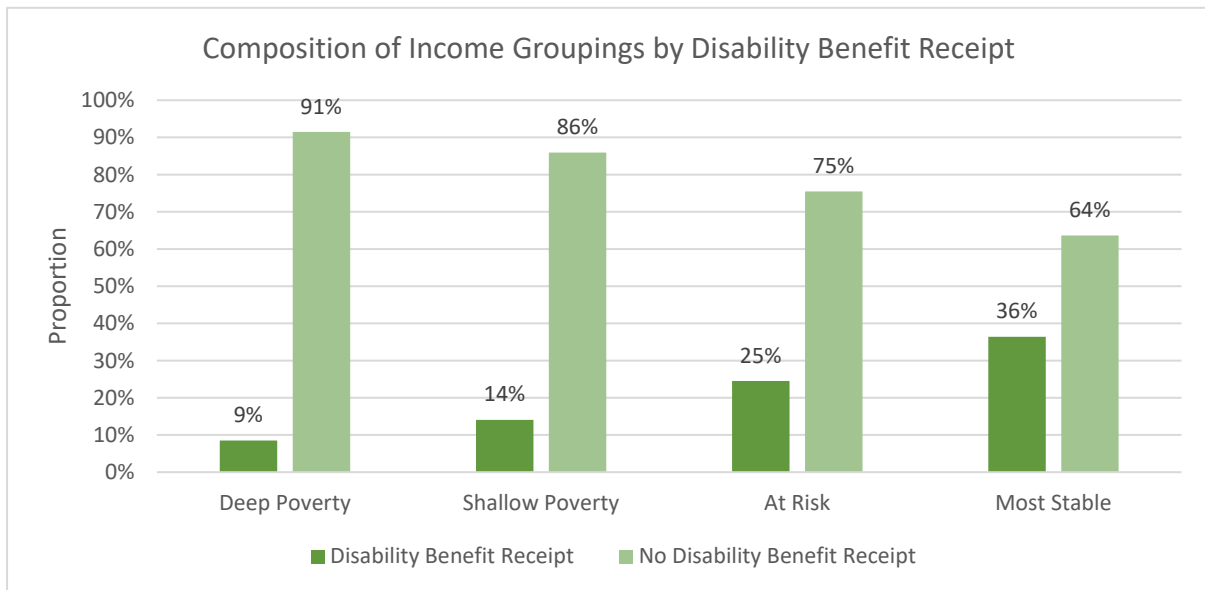
4.3.2 Additional Considerations for Disability Benefit Receipt

The Social Metrics Commission released a report 'Measuring Poverty 2020' in which a new poverty measurement is proposed which "Accounted for the inescapable costs that some families face …. These include the extra costs of disability." As part of their methodology they note a deduction from the total income due to the inescapable extra costs of disability.

The above analysis shows that for a household in receipt of disability benefits, the likelihood of having an equivalised income below the poverty line is reduced. The initial findings indicate that only 6% of households in receipt of disability benefits are below the threshold for Relative Poverty. However, as discussed in the work of the Social Metrics Commission, the equivalisation does not take into consideration the additional cost of living associated with a disabling condition. A more accurate representation of the prevalence of poverty for these households may be to remove the financial aid provided by the disability benefit receipt from the total household income, before equivalisation is carried out. If the amount received because of disability benefits is removed from the household income this would inevitably result in an increase in both the numbers and proportion of households falling below the threshold.

It should be noted that removing the disability benefits from the household would shift the median income, which would in turn change the relative poverty threshold. As the median income used for the calculation is the overall UK median income it would require further analysis to examine how this could accurately be adjusted. The Department for Work and Pensions has announced plans to resume work developing an experimental measure of poverty based on the Social Metrics Commission's innovative work. As a result, it may be suitable to consider the impact of this for NI in future poverty analysis.

Key Takeaways

- 20% of households in receipt of means tested benefits are in poverty. Only 14% of households in receipt of non means tested benefits and 13% of households with no benefit receipt are in poverty.

- 36% of households with no work related income are in poverty. This is twenty-four percentage points greater than households with work related income, 12% of which are in poverty.

- Of those households not in poverty, 86% have some level of work related income. At the income grouping level, 87% of the most stable group have some level of work related income.

- When considering standard equivalisation, only 6% of households in receipt of disability benefits are in poverty. However, disability benefits are primarily provided to address the additional costs of living with a disabling condition.

- If the amount received because of disability benefits is removed from the household income this would inevitably result in an increase in both the numbers and proportion of households falling below the threshold. It may be suitable to consider the impact of this for NI in future poverty analysis.

5. Conclusion

This report is the culmination of a research project which aimed to address the following:

1) Using administrative data, identify how many households in NI belong within each of the income groupings, including those in deep poverty and those at risk of poverty?

2) Using administrative data, examine the characteristics of these households e.g. by geographical area, and how do these differ across the various income groupings?

3) Consider how this analysis could be used to shape interventions that could be implemented to aid households in or at risk of falling into poverty?

The data analysis provided presents the number of households and individuals within each of the different income groupings, based on the relative poverty threshold for the 2020/21 year. It was found that 55,000 households (7%) are in deep poverty, 66,000 are in shallow poverty (9%), 72,000 are at risk of entering poverty (10%) and 541,000 are in the most stable group (74%) and less likely to enter poverty.

Several different characteristics are examined throughout this report including household size, type, and individual age within each household. Analysis is conducted on different geographical scales, with analysis of local government districts, super output areas, small areas, and settlement types. Finally benefit receipt and the level of work related income were examined.

Key findings reveal that:

- Of those households in poverty, 46% are single individual households. Only 32% of households overall are single individual households. At an income grouping level 51% of households in deep poverty and 42% of households in shallow poverty are single individual households.

- Increasing the number of adults in a household reduces the proportion of households in poverty. For single adult households without children 23% are in poverty. This drops to 9% for couples without children and 4% for more than two adult households without children.

- Lone parent households have the highest proportion of households in or at risk of falling into poverty, with 37% of households being in poverty and a further 18% at

risk of falling into poverty. When considered at an income grouping level, 18% of lone parent households are in deep poverty and 19% are in shallow poverty.

- As the number of children increases, the proportion of lone parent households in poverty rises from 31% for one child, to 38% with two, 47% with three and finally 55% for lone parent households with four or more children.

- Pension age individuals are shown to be less common in or at risk of poverty. Only 2% of pension age individuals live in households in deep poverty, a further 6% live in households in shallow poverty and 9% of individuals are in households at risk of falling into poverty. 83% of pension age individuals are in the households considered to be most stable.

- Households with no work related income made up 40% of households in poverty, and only 14% of those not in poverty. When benefit compositions were considered, 53% of households in poverty were in receipt of means tested benefits. 20% of households in receipt of means tested benefits were in poverty.

The presentation of information within this report demonstrates the usefulness of utilising administrative data to inspect various contributing factors to poverty. Further probing of the data has been produced at a variety of geographical levels. From this analysis it can be seen that the administrative dataset is a powerful tool which can be used to examine poverty levels more granularly than has been done previously. The analysis demonstrates that focusing exclusively on a place centred approach with regards to deprivation can result in missing pockets of deprivation present within more affluent areas.

Small Area analysis across Northern Ireland demonstrates that certain areas with large proportions of households in poverty may be masked by analysis conducted at LGD or even SOA level. The Cavehill 2 SOA was considered, and it was found that, despite being 627th out of the 890 SOAs in terms of poverty, there is a small area within Cavehill 2 which is 75th out of 4,537.

The analysis presented can be used to shape interventions to assist households in or at risk of falling into poverty. It can be utilised by policy areas, for example, to find locations with a high proportion of households in poverty and address this through various outreach options. Expanding upon this research would allow for the examination of additional

household factors which may contribute to the number of households in Northern Ireland in poverty.

Annex A: Equivalisation of Household Income

When discussing income groupings within this report the relative poverty threshold is considered, as defined within the Northern Ireland Poverty Bulletin (found here). For a household to be in relative poverty, the EQI must be less than 60% of the UK median income for the year. For the 20/21 financial year this was calculated as £324 a week (before housing costs) or £16,875 for the year.

When discussing the EQI of the households the conventional equivalization scale is used, as presented in the Households Below Average Income Northern Ireland (HBAI) (found here). Here the equivalence scale takes an adult couple without children as the reference point (having an equivalence value of one). The income for single person households is increased through equivalisation and the income for households of three or more people is reduced. Consider a single person, a couple with no children, and a couple with two children aged fourteen and ten, all having unadjusted weekly household incomes of £200 (BHC). The process of equivalisation, as conducted in HBAI, gives an equivalised income of £299 to the single person, £200 to the couple with no children, but only £131 to the couple with children.

Annex B: Comparisons between Administrative Data and the Family Resources Survey (FRS)

The methodology for deriving estimates for households in the various income groupings is complex. Figures in this report are based on analysis of cross government administrative data, including Social Security Benefit and HMRC data, for the 2020/21 tax year.

There are differences between the administrative dataset and the FRS, which may impact the poverty analysis:

- Missing children for high earners.

- There are no self-assessment income values e.g. income from renting out a property etc. included on the dataset, other than those who are self-employed.

- There are approximately 11,000 records received from HMRC for the 2020/21 tax year not currently utilised due to missing information. Some of these may translate to households in poverty.

- Child maintenance payments are not available on the dataset. Having this income missing from a household income may cause some households with dependent children, to be incorrectly assessed as being in poverty.

- It is known that FRS under reports benefit receipt and income in general. Whilst there are manual interventions applied to improve these values the numbers of households in poverty may still be inflated.

Annex C: SOA Figures and Maps

Local Government District	Minimum Proportion of Households in Poverty at SOA Level	Maximum Proportion of Households in Poverty at SOA Level
Antrim and Newtownabbey	8%	18%
Ards and North Down	9%	24%
Armagh City, Banbridge and Craigavon	10%	27%
Belfast	7%	39%
Causeway Coast and Glens	12%	25%
Derry City and Strabane	10%	32%
Fermanagh and Omagh	13%	33%
Lisburn and Castlereagh	6%	20%
Mid and East Antrim	9%	21%
Mid Ulster	13%	24%
Newry, Mourne and Down	9%	36%

Table C1: Proportion of Households in Poverty at an SOA level within each LGD

Figure C1: Map displaying the proportion of households in poverty at the SOA level for Antrim & Newtownabbey
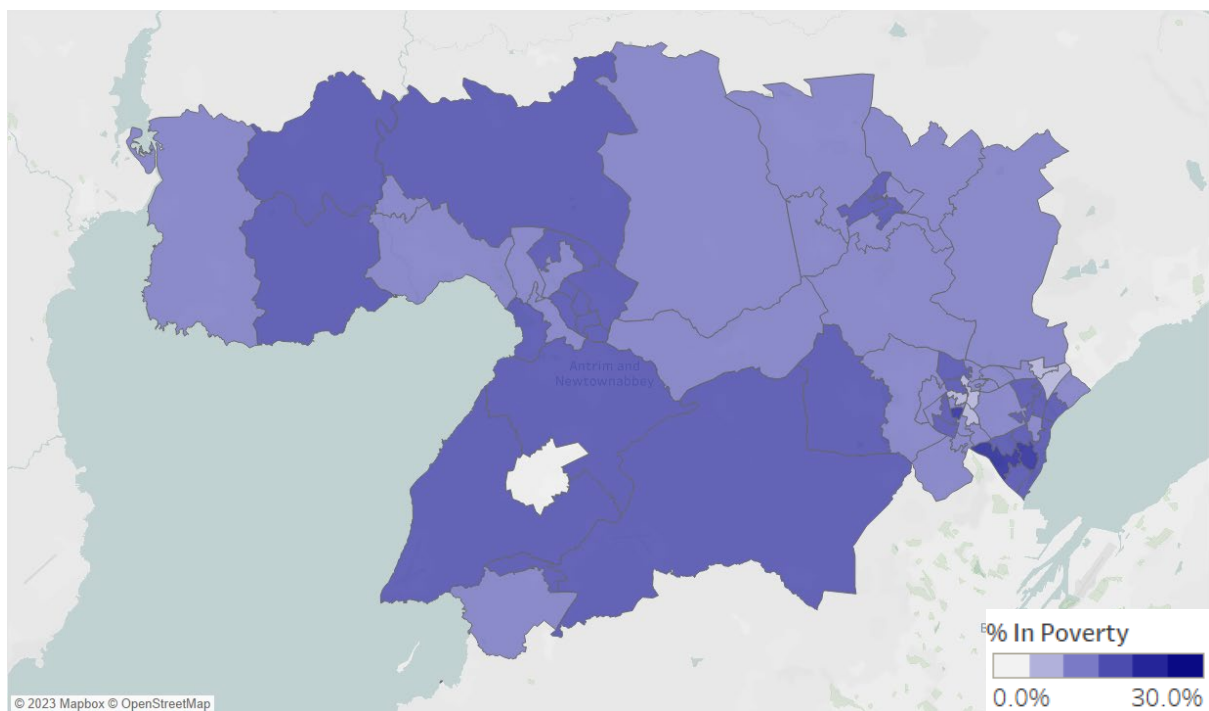
Figure C2: Map displaying the proportion of households in poverty at the SOA level for Ards & North Down
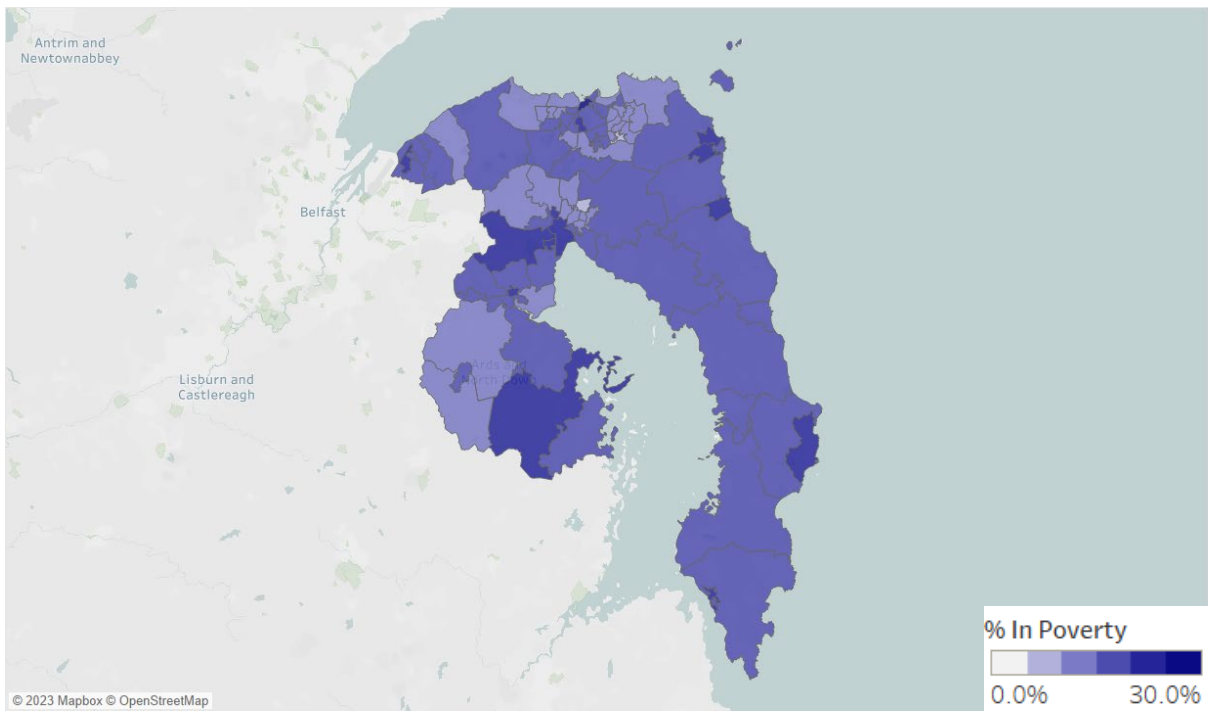
Figure C3: Map displaying the proportion of households in poverty at the SOA level for Armagh City, Banbridge & Craigavon
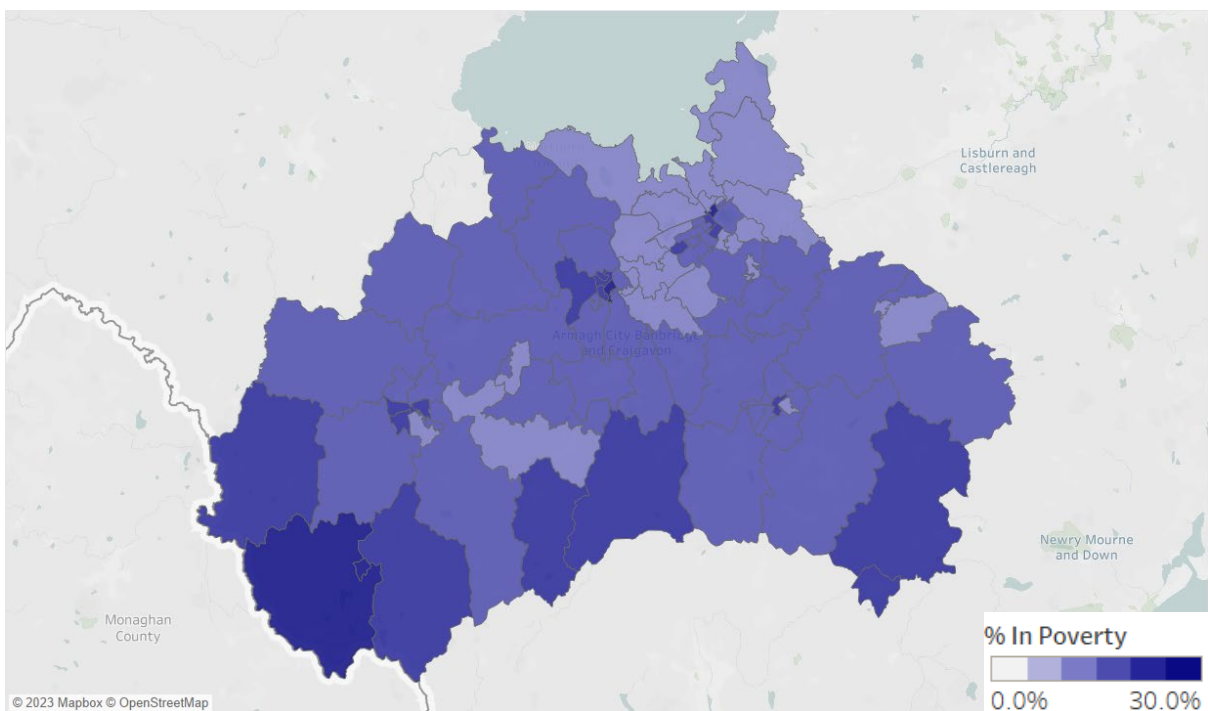
Figure C4: Map displaying the proportion of households in poverty at the SOA level for Belfast
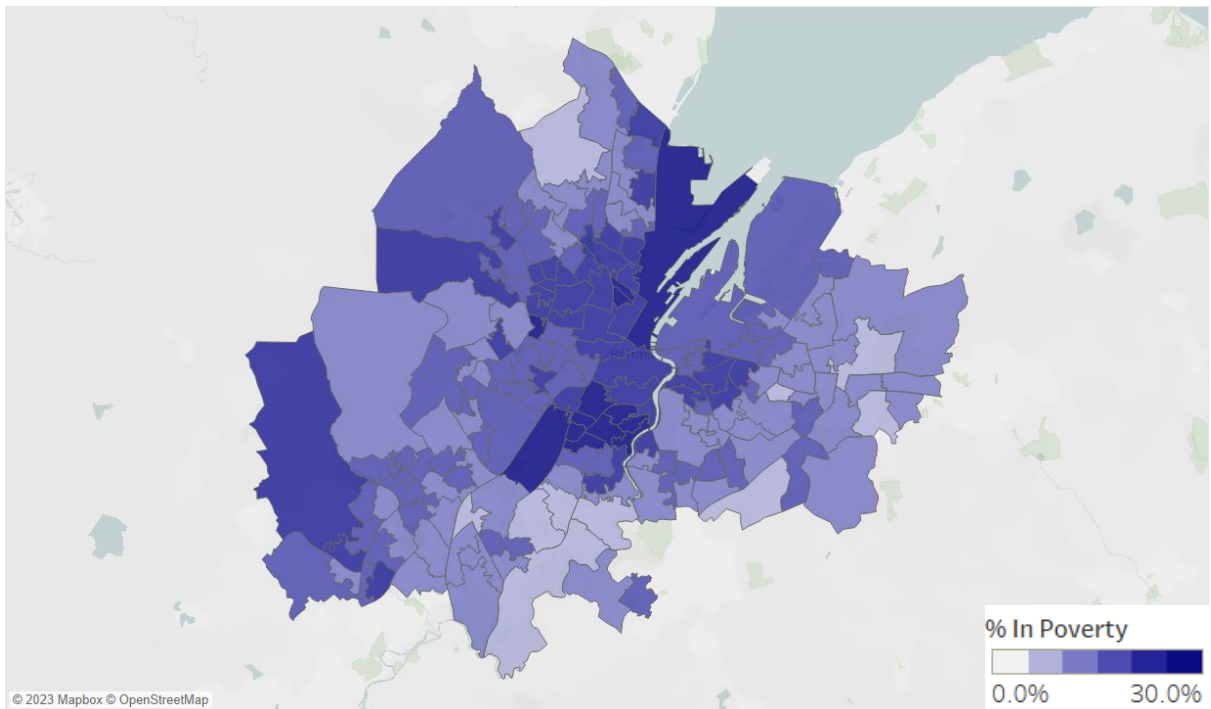

Figure C5: Map displaying the proportion of households in poverty at the SOA level for Causeway Coast & Glens
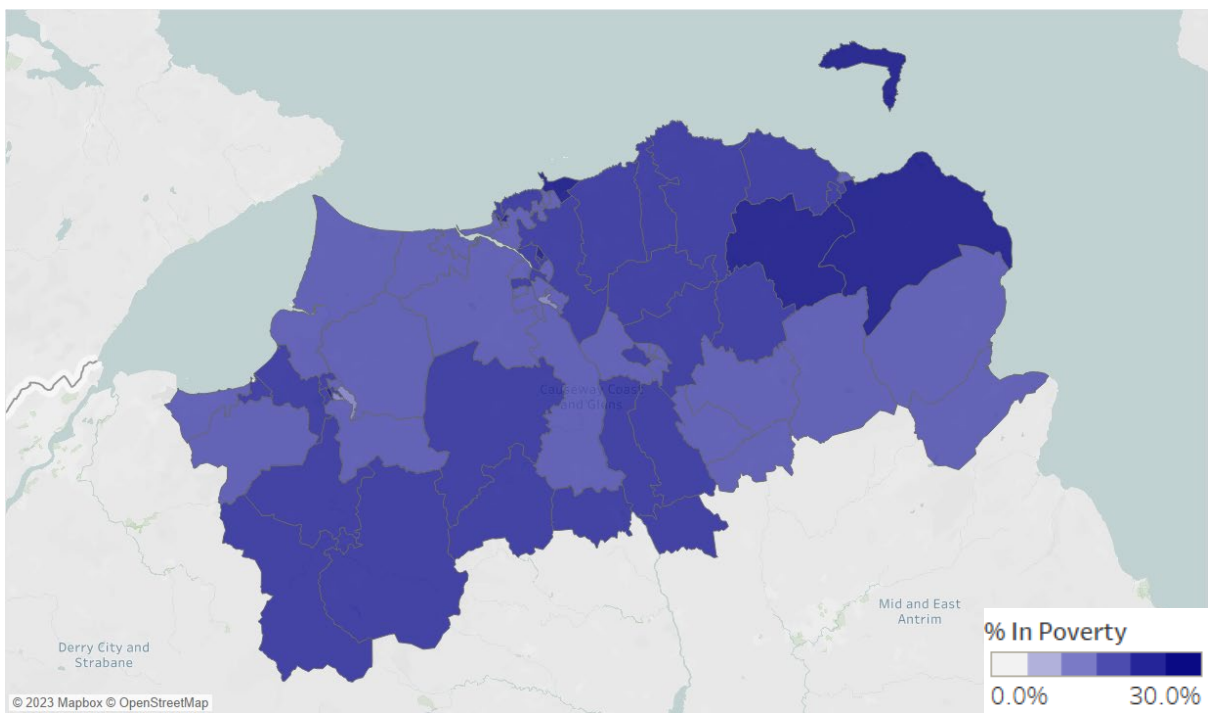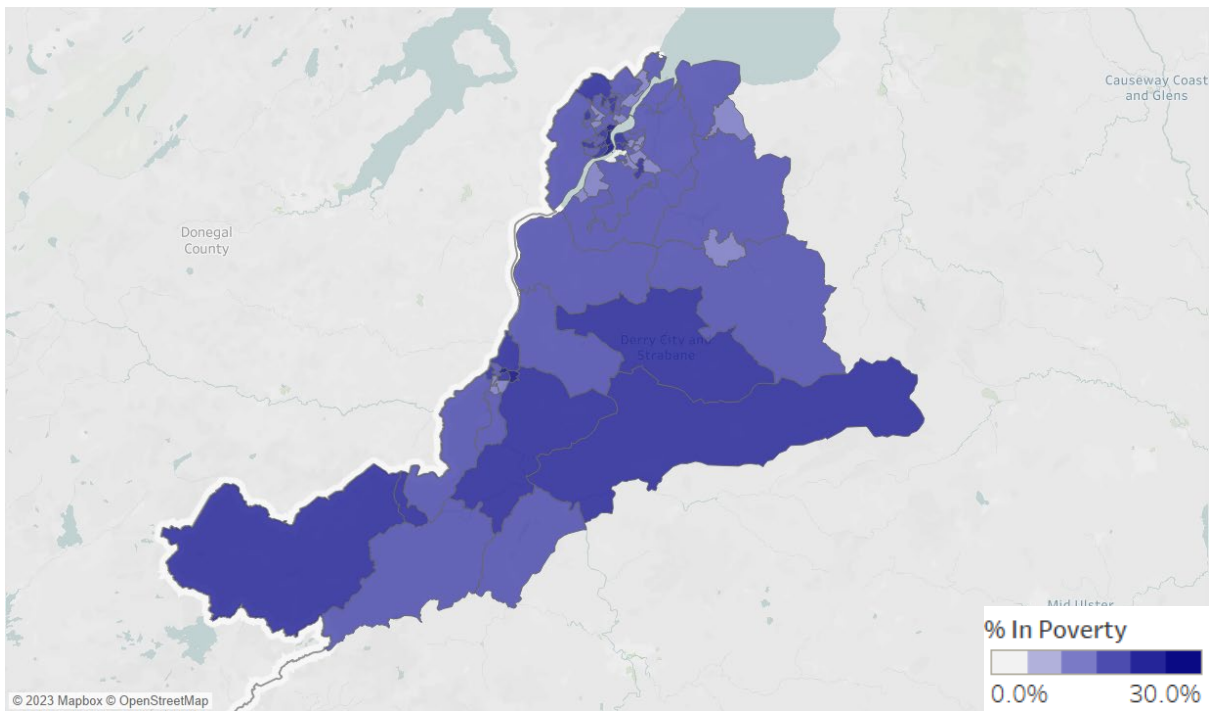
Figure C6: Map displaying the proportion of households in poverty at the SOA level for Derry City & Strabane

Figure C7: Map displaying the proportion of households in poverty at the SOA level for Fermanagh & Omagh
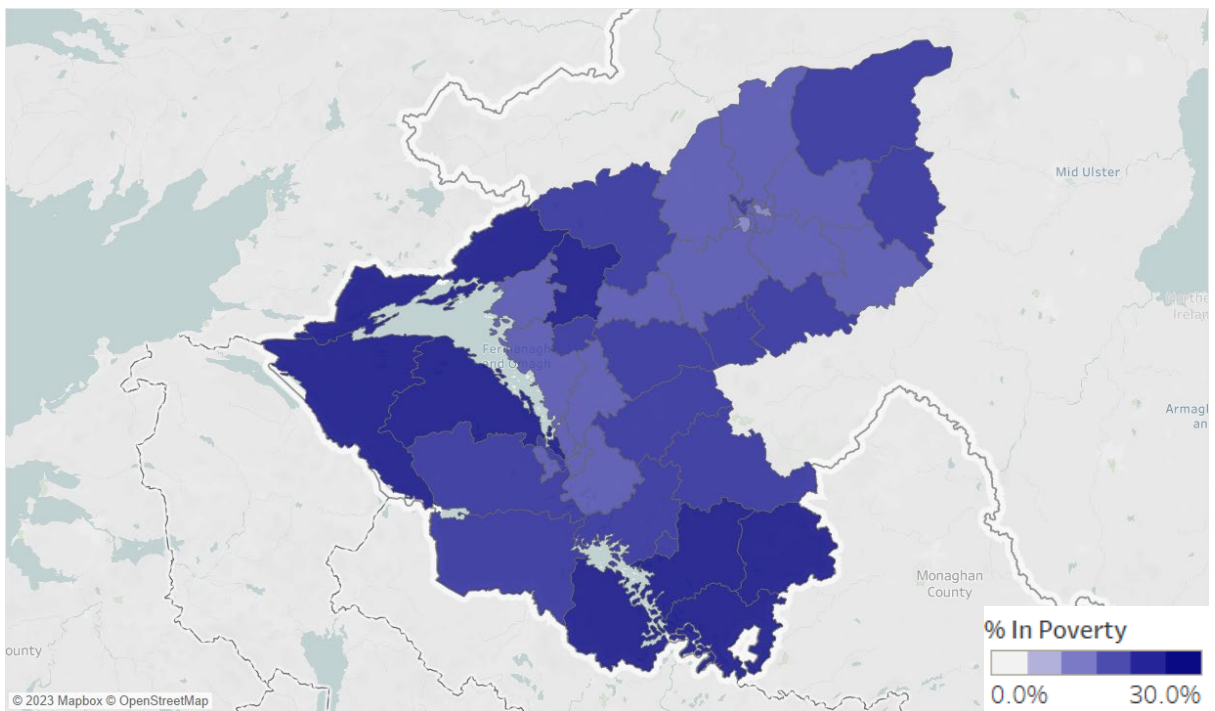
Figure C8: Map displaying the proportion of households in poverty at the SOA level for Lisburn & Castlereagh
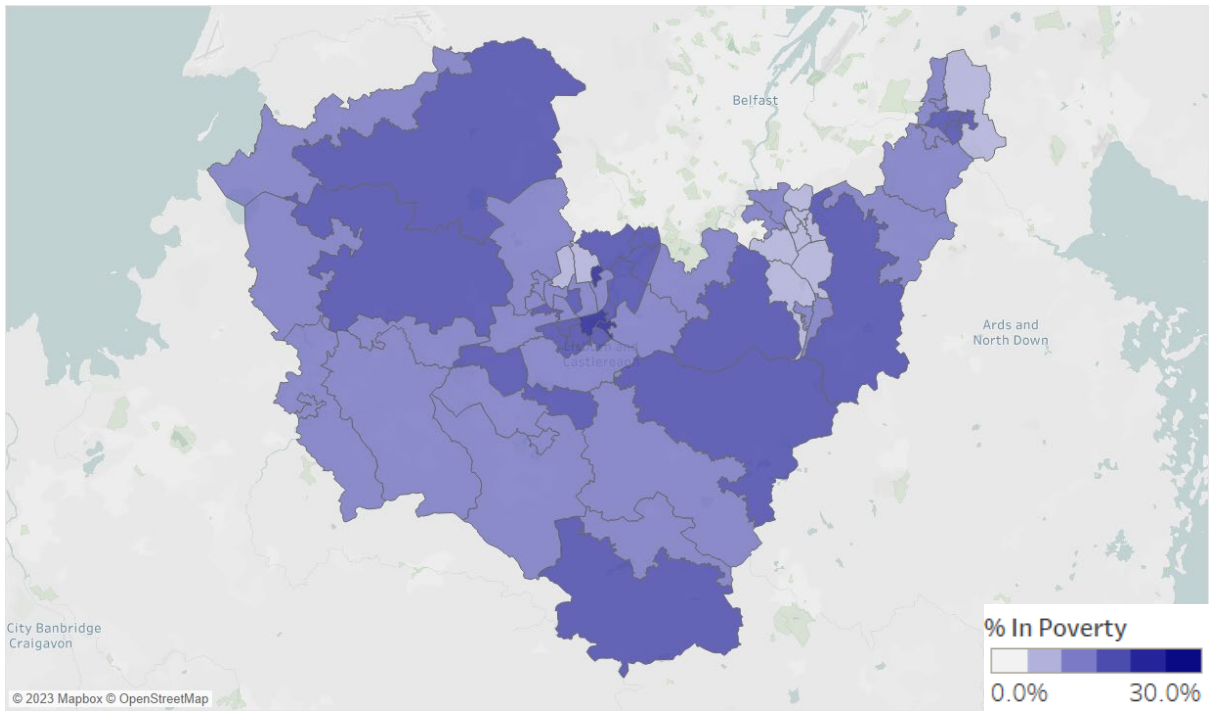

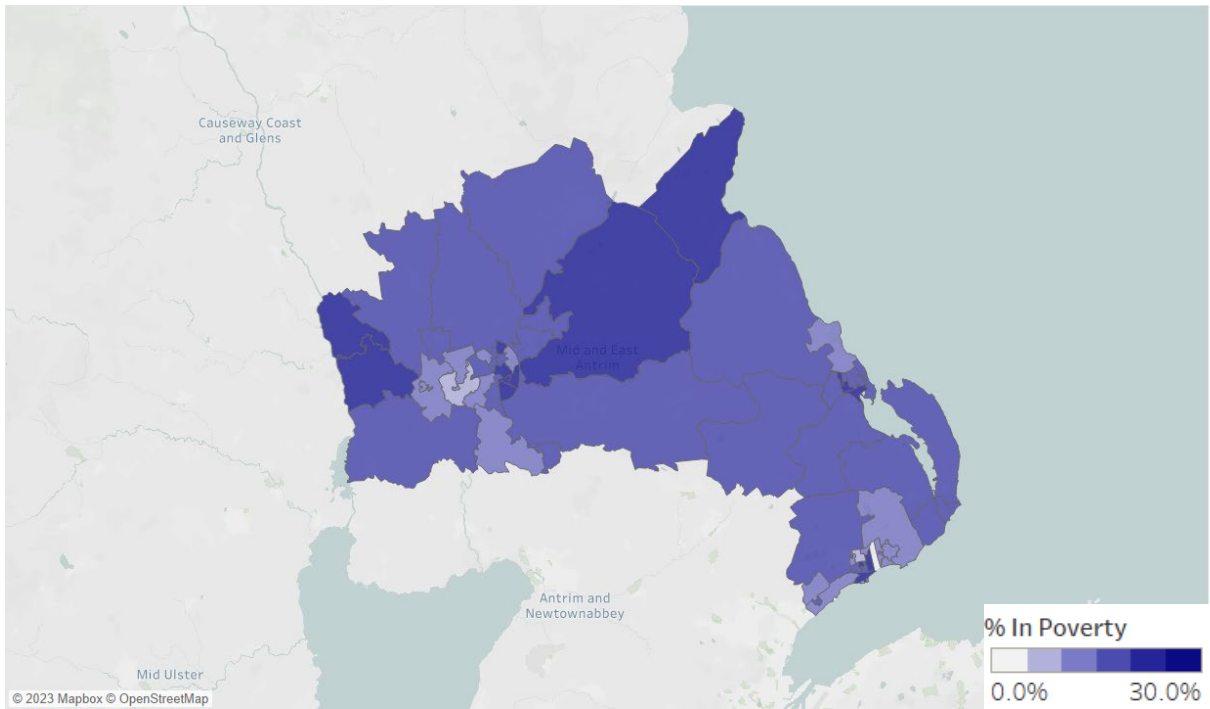Figure C9: Map displaying the proportion of households in poverty at the SOA level for Mid & East Antrim

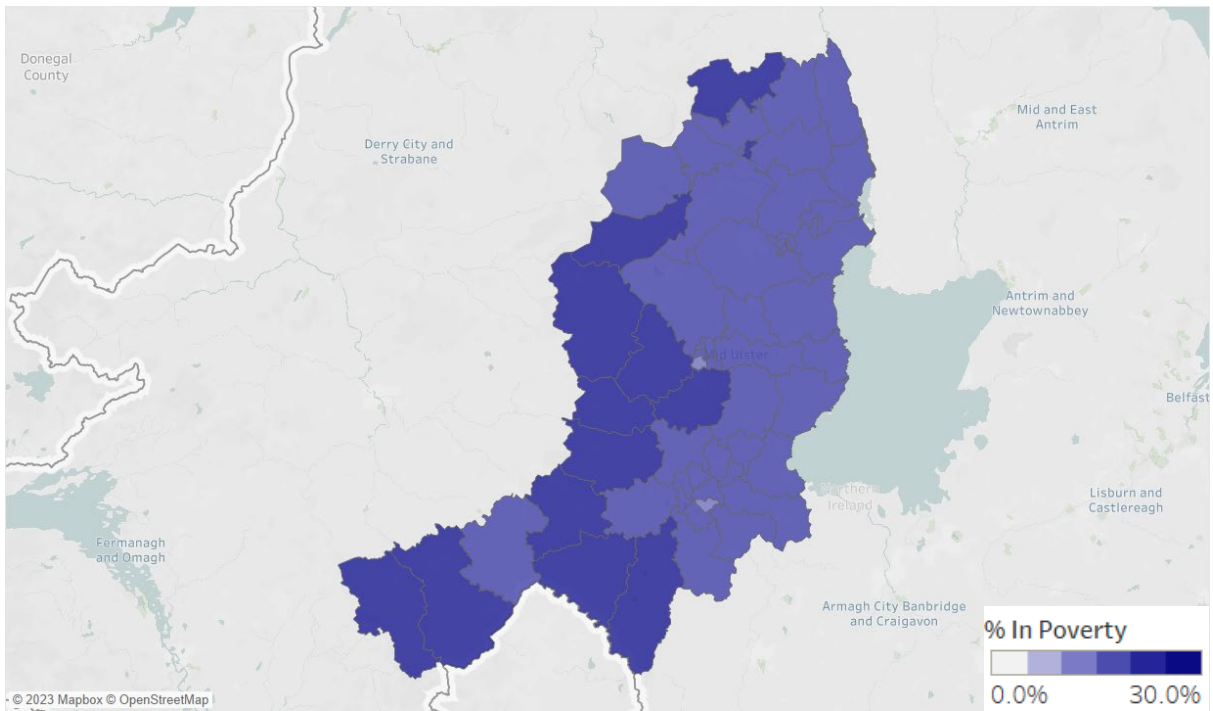Figure C10: Map displaying the proportion of households in poverty at the SOA level for Mid Ulster

Figure C11: Map displaying the proportion of households in poverty at the SOA level for Newry, Mourne & Down