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Multiple Deprivation in Northern Ireland

1 Introduction

This paper examines multiple deprivation levels across Northern Ireland using the most recent deprivation measures available.

The Paper begins with an age profile of Northern Ireland. The paper then provides summary information from the new Northern Ireland Multiple Deprivation Measure (NIMDM) 2017 relating to the top 10 per cent of the most deprived SOAs in Northern Ireland at constituency level. The relative change in deprivation levels from the previous measure (NIMDM 2010) is also examined.

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2 Demographic Profile

2.1 Population and Age

Table 2.1 presents the estimated population of each Parliamentary Constituency in Northern Ireland as of 30 June 2016. The table shows that the constituency populations range from a low of 90,016 (East Antrim) to a high of 125,252 (Upper Bann). The total Northern Ireland population was 1,862,137.

Compared with 2011, the population of the region as a whole has increased by 2.8%. Upper Bann has seen the largest increase (5.9%). In comparison, the populations of East Antrim and Belfast West have risen only marginally over this period (0.03% and 0.2% respectively).

Table 2.1 Estimated Population of Constituencies, June 2016

Assembly Area	2016
Belfast East	94,905
Belfast North	103,834
Belfast South	114,066
Belfast West	94,445
East Antrim	90,016
East Londonderry	101,202
Foyle	102,766
Lagan Valley	106,711
Mid Ulster	103,009
Newry & Armagh	118,021
North Antrim	111,543
North Down	91,076
South Antrim	102,436
South Down	111,988
Strangford	91,035
Upper Bann	125,252
West Tyrone	92,568
Fermanagh & South Tyrone	107,264
Northern Ireland	1,862,137

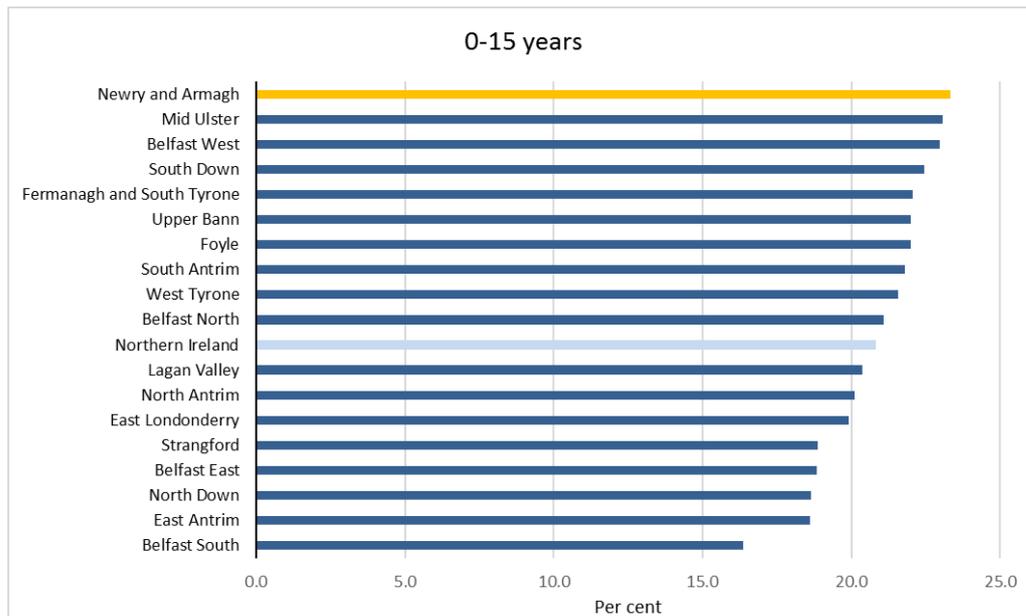
Source: NISRA (2017) Small Area Population Estimates 2016

Figure 2.1(a-d) presents a profile of the eighteen constituencies by broad age band at June 2016. Fig 2.1(a) shows that Newry and Armagh has the largest proportion of children, with almost a quarter (24%) aged 0 – 16 years, followed by Mid Ulster and Belfast West (23%). Belfast South (16%) has the smallest proportion of children (the Northern Ireland average is 21%).

In contrast, Fig 2.1(b) reveals that Belfast South has the largest proportion of young adults aged 16-39 (42%), followed by Belfast West (34%) and Mid Ulster (32%). North Down (27%), Strangford (28%) and East Antrim (29%) have the smallest proportion (the Northern Ireland average is 31%).

Fig 2.1 Mid-year Estimates 2016, broad age bands by Constituency

(a)



(b)

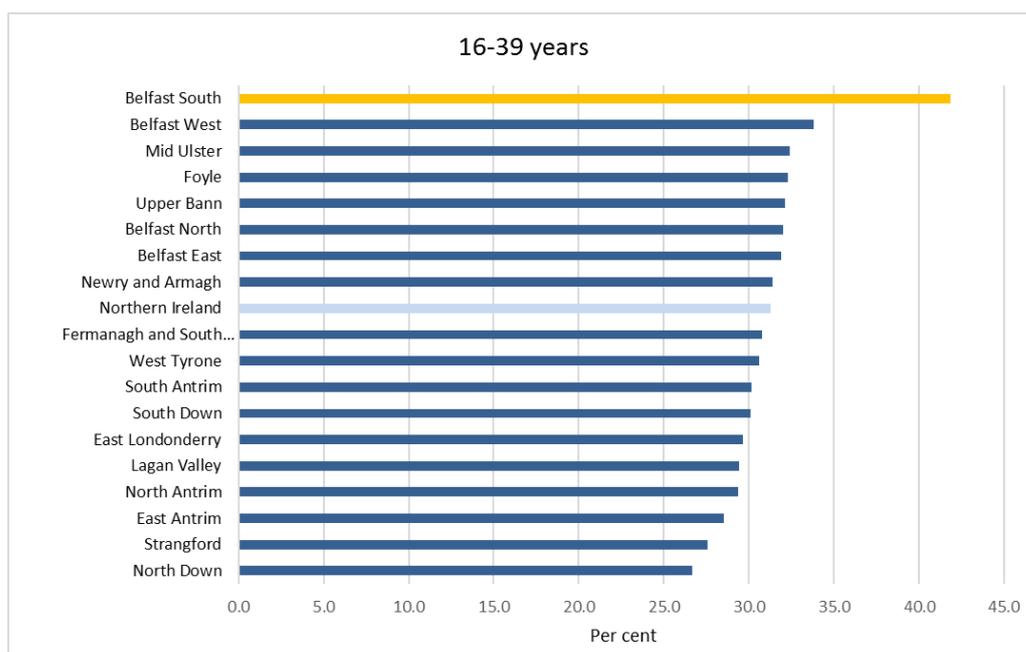
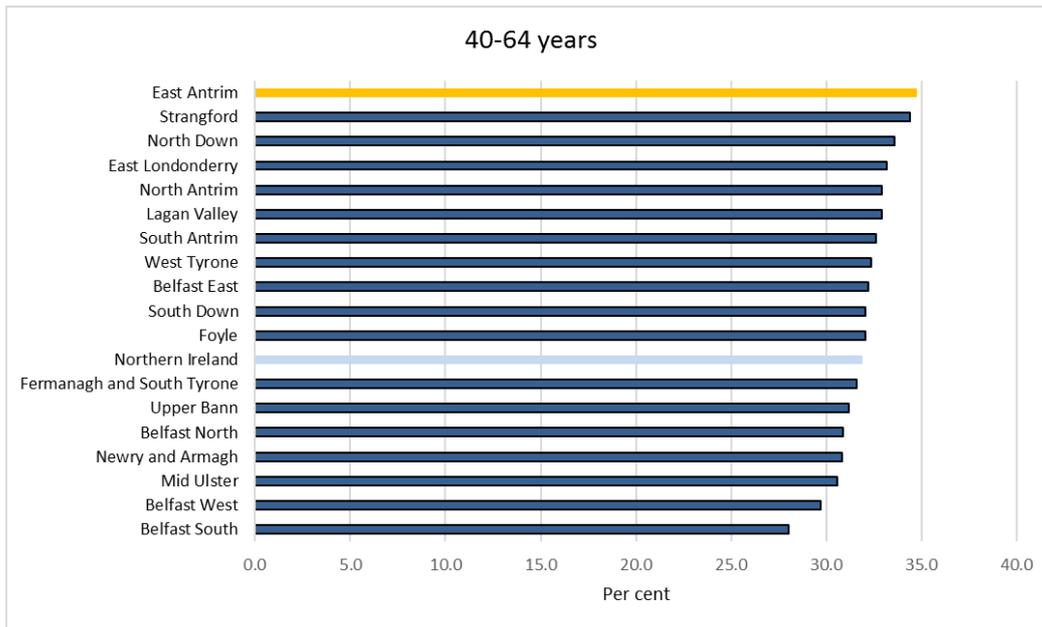
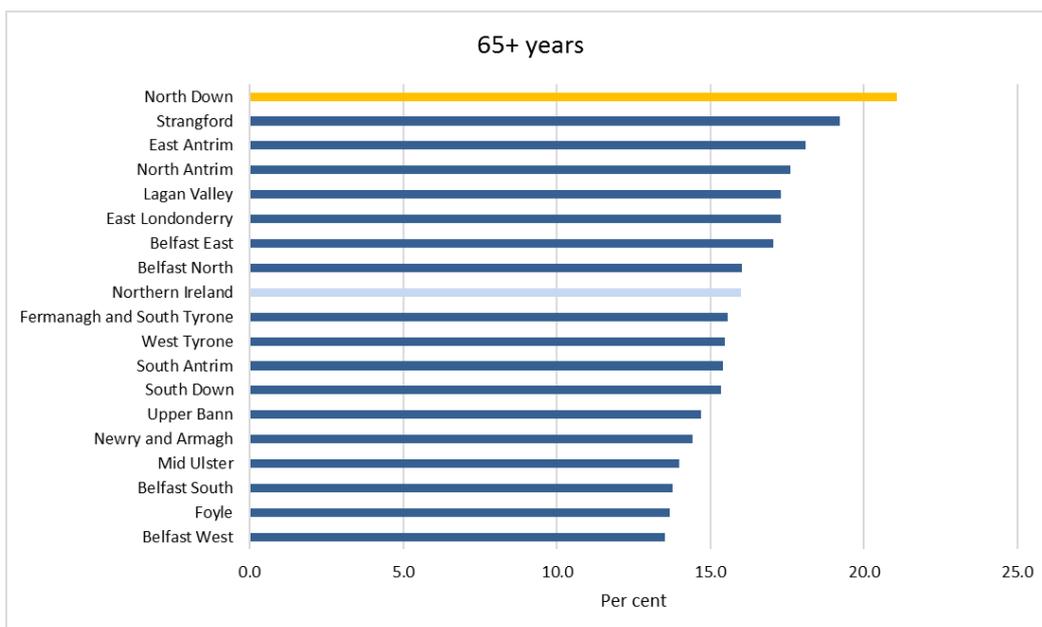


Fig 2.1(c) presents the proportion of residents aged 40 – 64 years in each of the 18 constituencies. East Antrim (35%) has the largest proportion of middle-aged adults, followed by Strangford and North Down (34%). Belfast South (28%) and Belfast West (30%) have the smallest proportion.

(c)



(d)



Source: NISRA (2017) Small Area Population Estimates 2016

The proportion of older people (aged 65+) is shown in Figure 2.1(d). Constituencies in the East of Northern Ireland have the largest proportion of older people, notably North Down (21%), Strangford (19%), East Antrim and North Antrim (18%). By contrast, Belfast West, Foyle and Belfast South (14%) have the smallest proportion.

The above findings are mirrored in the median (average) age of constituencies. In 2011, Northern Ireland had a median age of 38 years, which varied across individual constituencies, from a low of 33 years to a peak of 42 years. In general, the constituencies with the highest median age (oldest) can be found in the East of Northern Ireland, particularly North Down (median = 42 years), Strangford and East Antrim (40). The youngest constituencies are in Belfast, plus the West and South of Northern Ireland: in particular, Belfast West, Belfast South (33 years), Mid Ulster (34), Foyle and Newry and Armagh (35).

3 Multiple Deprivation

This section presents key findings from the latest Northern Ireland Multiple Deprivation Measure (NIMDM 2017) in respect of the 18 Assembly Areas (also known as parliamentary constituencies). For purposes of clarity and simplicity the paper will focus on the top 10 per cent most deprived SOAs in Northern Ireland.

3.1 Background

Northern Ireland is split into 890 spatial areas known as Super Output Areas (SOAs), with an average population of around 2,100 people. The NIMDM 2017, which updates and replaces the earlier 2010 measure, uses the SOA geography to identify small area (spatial) concentrations of multiple deprivation across Northern Ireland. The Measure is constructed from 38 different indicators relating to seven types or 'domains' of deprivation, namely: *Income, Employment, Health, Education, Access to Services, Living Environment* and *Crime and Disorder*. Results are provided in the form of ranks, with SOAs ordered from most deprived (rank 1) to least deprived (rank 890). The administrative statistics which are used to calculate the various indicator ranks are mostly drawn from the 2015 – 16 period.

The seven domains are combined to form the overall measure of multiple deprivation (NIMDM) with the following weights: Income (25%), Employment (25%), Health (15%), Education (15%), Access to Services (10%), Living Environment (5%), and Crime and Disorder (5%).

Please note that the NIMDM is a **relative** measure of deprivation, meaning that it is possible to say that one area is more or less deprived than another, but it is not possible to say how *much more* or less deprived it is than another. Further, while the NIMDM 2017 updates the 2010 measure, it is **not** possible to directly compare across the two time periods to make a judgement on whether an area has become more or

less deprived over time. This is because the Measure provides a spatial ranking at a single point in time ¹.

3.2 Deprivation Ranks for Overall Measure and Domains at SOA / Constituency Level

Map 3.1 (overleaf) provides a visual representation of deprivation levels for each of the 890 SOAs in Northern Ireland. The map also shows the 18 Assembly Area boundaries.

In the map, SOAs which lie within the top 10 – 20 per cent of most deprived SOAs are shown in two shades of red, while the various shades of blue illustrate the least deprived SOAs in Northern Ireland. The map also identifies the ten most deprived SOAs in Northern Ireland. These include East (Strabane, West Tyrone), Waterworks 2 (Belfast North) and Crevagh 2 (Foyle).

While clusters of deprivation (shown in red) are evident across Northern Ireland, they are particularly visible in city SOAs (Belfast and Derry / Londonderry) and in peripheral or border areas. Likewise, less deprived SOAs (shown in blue) can be found in many parts of Northern Ireland, but they are more numerous around Greater Belfast and in the East of Northern Ireland ².

Table 3.1 and Fig 3.1 (pp. 6 – 7) show the proportion of SOAs in each Assembly Area which lie within the top 10 per cent most deprived SOAs in Northern Ireland (overall measure). The table also includes the same information for each of the seven domains of deprivation. This provides a 'broad brush' indicator of the degree of multiple deprivation across the eighteen constituencies.

¹ For a full discussion and description of the seven domains and 38 indicators, see NISRA (2017) **Northern Ireland Multiple Deprivation Measures 2017: Description of Indicators**. Available at: https://www.nisra.gov.uk/sites/nisra.gov.uk/files/publications/NIMDM17_Description%20of%20Indicators.pdf

² In considering Map 3.1, it is important to note that in the most deprived areas (red), there will be people who would not be regarded as deprived. Similarly, in those areas ranked as least deprived (blue), there will be people who may experience multiple deprivation.

Map 3.1 Overall Multiple Deprivation Measure 2017 by SOA

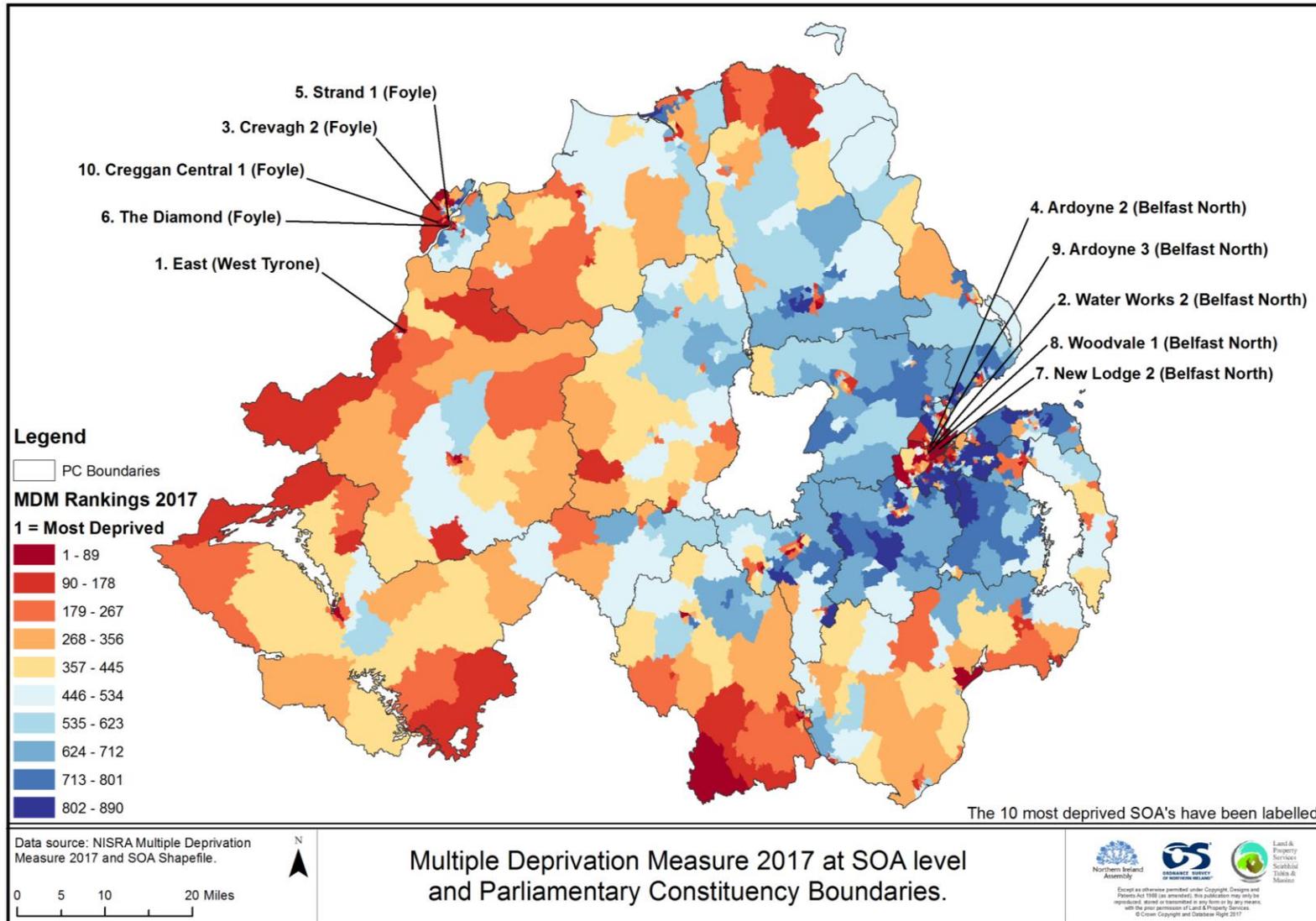


Table 3.1: Proportion of SOAs in each PC which lie within top 10 percent of most deprived SOAs in NI, 2017

Constituency	Total No. of SOAs	Multiple Deprivation Measure	Income Domain	Employment Domain (18-64 years)	Health Deprivation and Disability Domain	Education, Skills and Training Domain	Access to Services Domain	Living Environment Domain	Crime and Disorder Domain
Belfast West	50	46.0%	10.0%	58.0%	56.0%	40.0%	0.0%	30.0%	22.0%
Foyle	54	31.5%	29.6%	37.0%	29.6%	11.1%	0.0%	13.0%	18.5%
Belfast North	58	31.0%	22.4%	31.0%	29.3%	34.5%	0.0%	19.0%	24.1%
Upper Bann	54	13.0%	7.4%	7.4%	7.4%	14.8%	1.9%	9.3%	9.3%
Newry and Armagh	50	10.0%	26.0%	4.0%	6.0%	2.0%	12.0%	14.0%	10.0%
West Tyrone	42	9.5%	19.0%	14.3%	9.5%	2.4%	35.7%	2.4%	2.4%
Belfast East	46	8.7%	2.2%	4.3%	13.0%	19.6%	0.0%	8.7%	15.2%
East Londonderry	50	6.0%	16.0%	6.0%	4.0%	4.0%	14.0%	4.0%	16.0%
Belfast South	58	5.2%	1.7%	1.7%	8.6%	15.5%	0.0%	29.3%	17.2%
Fermanagh S. Tyrone	41	2.4%	14.6%	2.4%	2.4%	0.0%	39.0%	2.4%	7.3%
East Antrim	45	2.2%	4.4%	0.0%	0.0%	8.9%	6.7%	8.9%	2.2%
North Antrim	52	1.9%	9.6%	1.9%	0.0%	1.9%	17.3%	5.8%	7.7%
South Down	52	1.9%	3.8%	1.9%	1.9%	0.0%	19.2%	1.9%	9.6%
Strangford	52	1.9%	5.8%	1.9%	0.0%	5.8%	1.9%	3.8%	1.9%
Lagan Valley	48	0.0%	0.0%	0.0%	0.0%	2.1%	8.3%	8.3%	2.1%
Mid Ulster	43	0.0%	4.7%	0.0%	2.3%	0.0%	25.6%	0.0%	0.0%
North Down	46	0.0%	0.0%	0.0%	2.2%	0.0%	0.0%	8.7%	2.2%
South Antrim	49	0.0%	0.0%	0.0%	0.0%	8.2%	12.2%	2.0%	4.1%

Fig 3.1: Proportion of SOAs in each PC which lie within top 10 percent of most deprived SOAs in NI, 2017

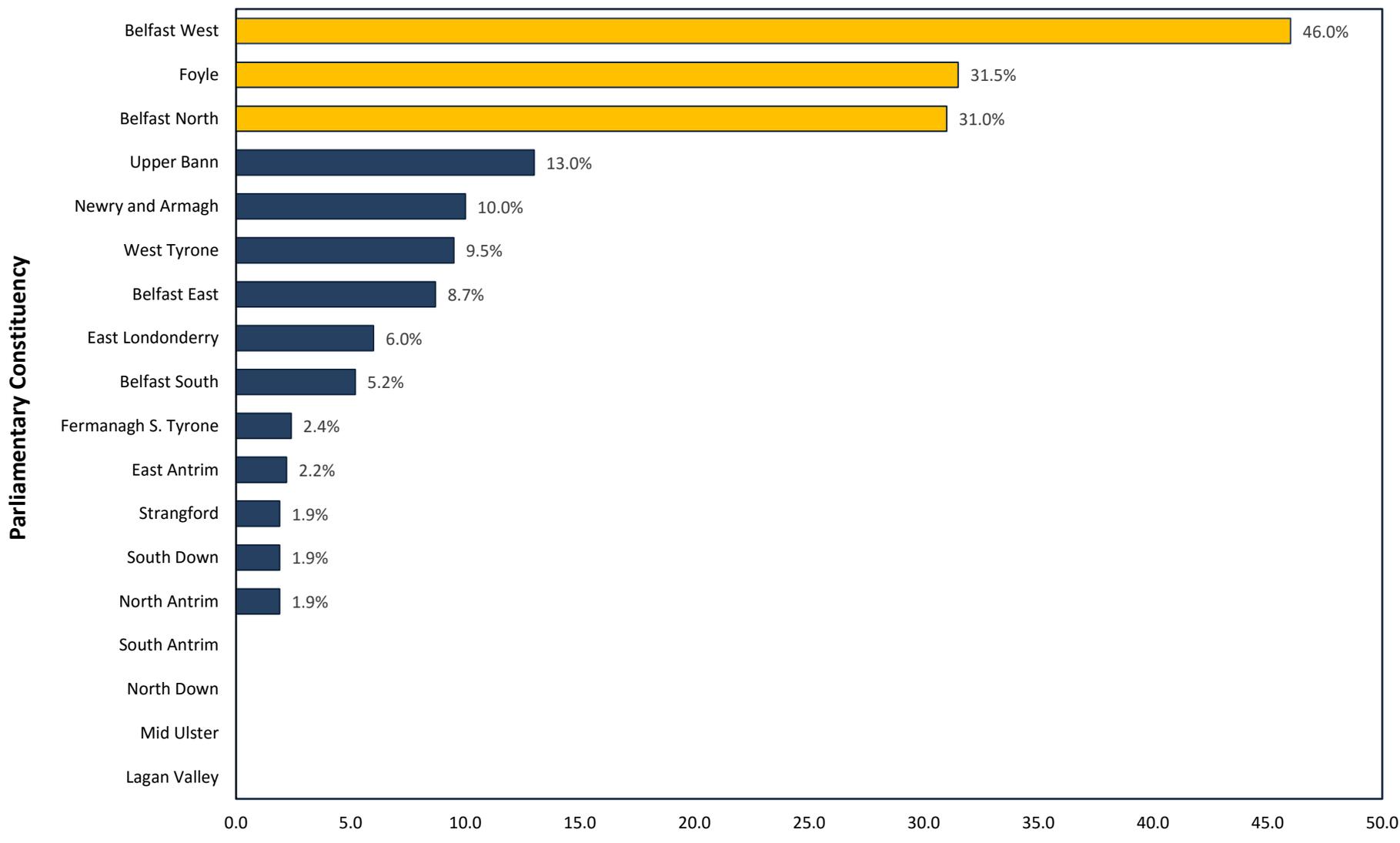


Table 3.1 reveals that, on the overall measure (Column 3), Belfast West, Foyle and Belfast North are the most deprived Assembly Areas in Northern Ireland ³ Belfast West contains a total of 50 SOAs, nearly half of which (46%) lie within the top 10 per cent most deprived SOAs in Northern Ireland. Similarly, in Foyle (32%) and Belfast North (31%) almost a third of SOAs in these constituencies are nested within the top decile of most deprived SOAs. At the other end of the scale, four Assembly Areas (Lagan Valley, Mid Ulster, North Down and South Antrim) do not contain any SOAs inside the top 10 per cent of most deprived SOAs.

The levels of deprivation relating to the seven domains which make up the main measure are discussed below. In addition, Appendix 1 presents a series of seven maps, which illustrate deprivation ranks at the SOA level for each domain and Assembly Area.

The **Income** domain (Column 4) measures the proportion (%) of the population living in households whose income is below 60 per cent of the Northern Ireland median. Column 4, Table 3.1, shows the proportion of SOAs in each constituency which lie within the top 10 per cent of most deprived SOAs in Northern Ireland on this domain. The three most income-deprived constituencies are Foyle (30%), Newry and Armagh (26%), and Belfast North (22%). At the SOA level, Creggan (Newry and Armagh) is the most income-deprived in Northern Ireland, while Stranmillis 2 (Belfast South) is the least income-deprived (not shown). The least income-deprived constituencies are South Antrim, North Down and Lagan Valley, where none of the constituency SOAs lie within the most income-deprived ten per cent.

The **Employment** domain (Column 5) refers to the proportion (%) of the working age population who are in receipt of at least one employment related benefit ⁴, plus individuals who are not in receipt of the selected benefits, nor have received income from employment. The three most employment-deprived constituencies are Belfast West (58%), Foyle (37%), and Belfast North (31%). New Lodge 2 (Belfast North) is the most employment-deprived SOA in Northern Ireland, while Stranmillis 2 (Belfast South) is the least deprived on this measure.

The **Health deprivation and disability** domain (Column 6) is comprised of eight indicators. These include preventable deaths, health-related welfare benefits, cancer registrations, emergency admission rates; low birth weight babies; children's dental extractions; multiple prescriptions on a regular basis; long-term health or disability issues; and a mental health indicator. The most health-deprived constituencies in Northern Ireland are Belfast West, where over half (56%) of its SOAs are nested within the top decile of most deprived SOAs in Northern Ireland; followed by Foyle (30%) and

³ While all three constituencies contain areas with significant levels of multiple deprivation, it is also important to remember there will be parts of each constituency where deprivation levels are comparatively modest.

⁴ Employment-related benefits include JSA, Incapacity Benefit, Severe Disablement Allowance, Carer's Allowance, and Employment and Support Allowance.

Belfast North (29%). At the other end of the scale, there are five constituencies where none of their SOAs appear in the most deprived 10 per cent; these are North, South and East Antrim; Strangford and Lagan Valley.

Eighteen of the 20 most deprived SOAs on the health domain are located in the Belfast West (10 SOAs) and Belfast North (8) constituencies, with the other two in Foyle. Whiterock 2 (Belfast West) is the most health-deprived, while Aldergrove 1 (South Antrim constituency) is the least deprived SOA on this domain.

The **Education, Skills and Training** domain (Column 7) contains eight indicators. The list includes the proportion of primary and post-primary pupils with SEN; school absenteeism, proportion of school leavers not achieving 5 or more GCSEs A*-C; proportion of school leavers not entering education, training or employment; proportion of 18-21 year olds not entering FE colleges or HEIs; and the proportion of working age adults with no or low-level qualifications.

Three Belfast constituencies, notably Belfast West (40%), Belfast North (35%) and Belfast East (20%) are the most educationally-deprived constituencies in Northern Ireland. The least deprived are North Down, South Down, Fermanagh and South Tyrone and Mid Ulster.

In terms of individual SOAs, the three most deprived on this domain are in the Belfast North constituency, namely: New Lodge 3, Woodvale 1, and Woodvale 2. Stormont 1 is the least educationally deprived SOA in Northern Ireland.

An education, skills and training deficit is significant, given the vital importance of educational and vocational qualifications in the modern economy. In the absence of such qualifications, it may be difficult for residents to compete for higher-level jobs, making present poverty levels more likely to persist.

Three indicators make up the **Access to Services** domain (Column 8), namely: travel time by private and public transport to a range of 16 services (including GP, dentist, Post Office, A & E hospital etc.) and the proportion of properties with slow broadband. As one might expect, given that Belfast is an urban area, none of the Belfast constituencies feature prominently on this domain. The three most deprived constituencies regarding access to services are rural, namely: Fermanagh and South Tyrone (39%), West Tyrone (36%), and Mid Ulster (26%). South Down (19%) and North Antrim, with 17 per cent of its SOAs in the most deprived decile, also exhibit high levels of deprivation in relation to access to services. Plumbridge (West Tyrone) is the most deprived SOA on this [Access to Services] domain.

The **Living Environment** domain (Column 9) has nine indicators, including: the proportion of unfit dwellings, or require adaptations, or in need of repair; overcrowded households; road traffic collisions; and road defects; and the proportion of properties in flood risk areas. Belfast West (30%), Belfast South (29%) and Belfast North (19%) are the most deprived constituencies on this domain. Indeed, half of the 20 most-deprived

SOAs on this domain are in Belfast South. Botanic 2, for example, is the most deprived SOA in Northern Ireland in terms of the living environment domain, yet has an overall deprivation ranking of 457 out of 890.

Mid Ulster is the least deprived constituency in terms of the living environment, with none of its SOAs represented in the top 10 per cent of most deprived SOAs.

The **Crime and Disorder** domain (Column 10) is comprised of seven indicators, namely: the rate of violence (including sexual offences), robbery and public order; plus the rates of burglary offences, vehicle crime, arson and criminal damage, deliberate primary and secondary fires, and anti-social behaviour incidents. The most deprived constituencies in relation to crime and disorder are Belfast West (24% of SOAs), Belfast North (22%) and Foyle (19%). The rural constituencies are the least deprived on this domain, notably Mid Ulster (0%), Strangford (1.9%) and Lagan Valley (2.1%).

At the individual SOA level, the most deprived SOAs are The Diamond (Foyle), Falls 2 and Shankill 2 (both Belfast West). Rostulla 2 (East Antrim) is the least deprived SOA in terms of crime and disorder in Northern Ireland, followed by Ballymacconnell (North Down) and Ballymacbrennan (Lagan Valley).

Overall, the picture which emerges from the NIMDM 2017 is one of relatively higher levels of deprivation in particular constituencies, notably Belfast North, Foyle, and Belfast West. Less deprived areas are typically located in the constituencies of Belfast East, Belfast South, East Antrim, and North Down. It is important to note, however, that every constituency, both urban and rural, contains pockets or spatial clusters of multiple deprivation, such as the inner city areas of Belfast East and the Strabane area in general. A finer grained analysis, this time at the individual constituency or small area level, is required to identify these locations in more detail.

The next section will explore how the relative level of deprivation across the Northern Ireland constituencies has changed from the previous measures, NIMDM 2010.

4 Changes in NIMDM over time, 2010 to 2017

4.1 NIMDM 2010

NISRA has made clear that the NIMDM 2017 cannot be compared directly with the 2010 measure. This is because the two measures provide a spatial ranking at a single point in time. Further, the 2010 measure differs slightly in methodology from its 2017 counterpart.

For example, the *income deprivation* domain in 2010 used the receipt of income-related benefits as a proxy for income deprivation, as compared to the 2017 measure which used income data. The *Employment* domain in 2010 did not include individuals who had no income from employment, nor benefits associated with employment deprivation. The *Health Deprivation* domain in 2010 did not include people who were

on multiple or repeat prescriptions; this was introduced in 2017 with a view to better reflecting the complex and long-term health needs which people can face.

The *Access to Services* Domain in 2017 included travel times to a wider range of services than had been the case in the 2010 measure, and access to broadband was also introduced. The *Living Environment* Domain in 2017 includes new indicators on energy efficiency; quality of roads; flood risk; overcrowding, and the suitability of housing for people with disabilities. The *Crime & Disorder* Domain measure in 2010 did not include a measure on theft which was later included in the 2017 measure.

The weighting applied to the domains remained the same in 2017 as it was in 2010.

4.2 Relative Changes in Deprivation Levels over time

As noted above, the multiple deprivation measures provide “a spatial ranking at a single point in time” and because of this we are unable to examine how absolute deprivation has changed between 2010 and 2017. What we can say though is that the three most deprived constituencies in 2010, namely Belfast West, Belfast North and Foyle, are still the most deprived in 2017. This is because all three constituencies contain a substantially larger proportion of SOAs in the top 10 per cent most deprived SOAs, compared with any other constituency in Northern Ireland.

At the individual SOA level, using the top 20 most deprived SOAs as an example, we can also examine whether the rankings have changed over time, and identify those SOAs which have joined, left or remained in the top 20 over this period.

Table 4.2 (below) shows the 20 most deprived SOAs in both 2017 and 2010. In 2010, 18 of the 20 most deprived SOAs in Northern Ireland were located in Belfast constituencies – 12 in Belfast West and six in Belfast North, This compares with 11 in 2017 – two in Belfast West and in nine in Belfast North. Whiterock 2 was the most deprived SOA in 2010 in Northern Ireland; by 2017 the same SOA was now the 23rd most deprived of all Northern Ireland SOAs. The most deprived SOA in 2017 was East (Strabane) in West Tyrone, which had a ranking of 12 out of 890 in 2010⁵.

The five most deprived SOAs in 2010 were no longer in the 20 most deprived areas by 2017. Overall, only four SOAs were in the top 20 most deprived areas in both years, namely: East, New Lodge 2, Ardoyne 3, and Shankill 2 (see highlighted cells in Table 4.2).

⁵ Again, it is important to recall that the NIMDM 2017 is a relative indicator of multiple deprivation, i.e. SOAs are ranked in relation to other SOAs. Therefore, merely because the ranking of a particular SOA in 2017 has changed since 2010, does not of itself mean that the absolute level of deprivation in an SOA has either worsened or improved. Indeed, given factors such as the continuing impact of austerity, a sustained increase in housing costs, inflation, a fall in real wages since 2010, and cuts to the welfare budget, it is more likely than not that, for many people, living standards have generally flatlined or fallen. Absolute poverty and deprivation is not captured by a relative measure.

Table 4.2: 20 Most Deprived SOAs in 2010 and 2017

2017 Most Deprived SOAs	Constituency	2010 Most Deprived SOAs	Constituency
East	West Tyrone	Whiterock 2	Belfast West
Water Works 2	Belfast North	Whiterock 3	Belfast West
Crevagh 2	Foyle	Falls 2	Belfast West
Ardoyne 2	Belfast North	Falls 3	Belfast West
Strand 1 (Derry LGD)	Foyle	New Lodge 1	Belfast North
The Diamond	Foyle	Shankill 2	Belfast West
New Lodge 2	Belfast North	Crumlin 2 (Belfast LGD)	Belfast North
Woodvale 1	Belfast North	Falls 1	Belfast West
Ardoyne 3	Belfast North	Ardoyne 3	Belfast North
Creggan Central 1	Foyle	Creggan Central 1	Foyle
Greystone (Limavady LGD)	East Londonderry	Upper Springfield 3	Belfast West
Woodvale 2	Belfast North	East	West Tyrone
Brandywell	Foyle	Clonard 1	Belfast West
Woodville 1	Upper Bann	New Lodge 2	Belfast North
Water Works 1	Belfast North	New Lodge 3	Belfast North
Ardoyne 1	Belfast North	Collin Glen 3	Belfast West
Woodvale 3	Belfast North	Twinbrook 2	Belfast West
Shankill 2	Belfast West	Shankill 1	Belfast West
Shantallow West 1	Foyle	Duncairn 1	Belfast North
Collin Glen 2	Belfast West	Upper Springfield 1	Belfast West

The above example serves to illustrate that there has been some movement in the ranking of individual SOAs during this period.

5 Conclusion

This paper has analysed the latest multiple deprivation measure (NIMDM 2017) at the constituency (Assembly Area) level. Two distinct trends emerge from this limited analysis. Firstly, the majority of the most deprived SOAs tend to be located in urban areas, notably Belfast North, Belfast West and Foyle (Derry / Londonderry). Strabane is also a deprivation 'hot spot'. At the same time, the least deprived areas are typically found in the suburbs of Greater Belfast and surrounding areas. Secondly, there is evidence of an overall East/West divide, with higher levels of deprivation concentrated in the West, and areas of lesser deprivation more likely to be in the East.

The most deprived constituencies in 2010 – Belfast West, Belfast North and Foyle – remained the most deprived in 2017 (based upon the proportion of SOAs in each constituency which lie within the ten per cent most deprived SOAs in Northern Ireland).

Appendix 1 – Multiple Deprivation Maps by Domain

