3.0 Using the Multiple Deprivation Measure and Domains

The Northern Ireland Multiple Deprivation Measure comprises seven domains, each measuring different aspects or 'forms' of deprivation; income, employment, health, education, proximity to services, living environment and crime and disorder. The domains are combined with varying weights to form the overall multiple deprivation measure as follows:

Income - 25%
Employment - 25%
Health Deprivation and Disability - 15%
Education Skills and Training - 15%
Proximity to Services - 10%
Crime and Disorder - 5%
Living Environment - 5%

When forming the Multiple Deprivation Measure the domains are combined (via an exponential transformation) to minimise the extent to which deprivation in one domain is cancelled out by lack of deprivation in another.

3.1 Variation in Domain Ranks

Six of the seven domains of deprivation are positively correlated meaning that an area deprived in one of the following six domains (income; employment; health deprivation & disability; education, skills & training; crime & disorder and living environment) is *likely* to be deprived in others.

Of particular note are the high positive correlations between the income, employment, health and education domains.

While weaker positive correlations exist between the crime and living environment domains and the income, employment, health and education domains, only the proximity to services domain is negatively correlated with the other domains.

This negative correlation between the proximity to services domain and other domains means that an area that is deprived in proximity to services is likely to be less deprived in the other six domains.

	Florence Court	Central
	and Kinawley	(Coleraine LGD)
	(Fermanagh LGD)	
Multiple Deprivation Measure Rank	506	115
Income Deprivation Rank	490	114
Employment Deprivation Rank	711	148
Health Deprivation and Disability Rank	685	97
Education Skills and Training Rank	591	207
Proximity to Services Rank	29	879
Living Environment Rank	354	31
Crime and Disorder Rankl	824	55

The two examples chosen above show the variation in domain ranks within areas.

Florence Court and Kinawley SOA in Fermanagh LGD is an area that is deprived in terms of Proximity to Services, ranked 29th most deprived in NI in this domain. Although it is highly deprived in the Proximity to Services domain it is relatively less deprived in the other six domains and the overall multiple deprivation measure.

Similarly Central SOA in Coleraine, ranked 879 and so one of the least deprived SOAs in terms of Proximity to Services, is within the 30% most deprived areas when each of the other domains are considered.

3.2 Relationship between Domains and the Multiple Deprivation Measure

Low correlations exist between the Proximity to Services, Crime and Disorder, and Living Environment domain and the Multiple Deprivation Measure due to the lower weights/shares of those domains in the Multiple Deprivation Measure as well as the lower correlations with the remaining domains.

The table below highlights the variation in domain ranks for similar multiple deprivation ranks, and the variation in multiple deprivation ranks for similar domain ranks.

	Creggan Central 1 (Derry LGD)	Clonard 1 (Belfast LGD)	Atlantic (Coleraine LGD)
Multiple Deprivation Measure Rank	10	13	334
Income Deprivation Rank	2	11	339
Employment Deprivation Rank	6	15	274
Health Deprivation and Disability Rank	13	5	516
Education Skills and Training Rank	75	88	399
Proximity to Services Rank	622	851	429
Living Environment Rank	122	67	326
Crime and Disorder Rank	562	31	40

Creggan Central 1 SOA in Derry LGD and Clonard 1 in Belfast LGD have similar Multiple Deprivation Measure ranks at 10th and 13th most deprived respectively out of 890 areas. The two areas have very similar ranks across the Income, Employment, Health and Education domains. However the areas differ greatly in terms of crime and disorder, separated by over 500 ranks. Creggan Central 1 is in the 4th least deprived decile in terms of crime and disorder while Clonard 1 is ranked in the 10% most deprived areas.

Conversely, although Clonard 1 in Belfast LGD and Atlantic in Coleraine LGD differ by over 300 ranks in terms of multiple deprivation, they have similar levels of crime and disorder deprivation. Clonard 1 is ranked 31st most deprived and Atlantic is ranked at 40th most deprived.

This highlights the importance of assessing the domains of deprivation when developing policies aimed at targeting particular aspects of deprivation. A policy aimed at targeting crime and disorder through focusing on the most deprived areas in terms of Multiple Deprivation Measure would have included Creggan Central 1 in Derry LGD and excluded Atlantic SOA in Coleraine LGD where the opposite should have been the case.

When targeting a specific form of deprivation it may be more appropriate to focus on one deprivation domain, while the multiple deprivation measure may be more appropriate when targeting deprivation in a more general sense.

Contact Point

Cathryn McBurney
Neighbourhood Statistics
NISRA

McAuley House 2-14 Castle Street

Belfast BT1 1SA

Tel: 028 90 348 112

Email: deprivation.nisra@dfpni.gov.uk

Website: www.nisra.gov.uk/deprivation.htm