

Cover

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Executive Summary

This document is an overview of the Scottish Index of Multiple Deprivation published on 28 January 2020 (SIMD20) and the specific detail for Dumfries and Galloway. The SIMD20 is an area measure of deprivation, rather than one which identifies individuals. It is designed to identify the neighbourhoods and communities that have the most challenging lack of resources and opportunities across Scotland.

The following are key results for Dumfries and Galloway from the recent publication of SIMD20:

- Dumfries and Galloway has 201 datazones, of which 20 (10%) are in national quintile 1, the 20% most deprived category
- SIMD is a tool for identifying deprived areas, not deprived people
- 78% of income deprived and 77% of employment deprived people live outside of areas of Dumfries and Galloway considered to be the most deprived (national quintile 1)
- It has been advised for many years that when implementing local initiatives, local SIMD quintiles are used
- Using the SIMD20 local quintiles to identify people who would be considered income deprived would identify:
 - 39% of income deprived people in Nithsdale
 - 25% of income deprived people individuals in Wigtownshire
 - 22% of income deprived people in Annandale and Eskdale
 - 13% of income deprived people in Stewartry
- Therefore it is very important that SIMD is not the only method used for engaging with people who are at risk of deprivation
- Using local quintiles, the 20% of areas (40 out of 201 datazones) identified as having challenges include:
 - **Annandale and Eskdale:** Annan (5 x datazones), Eastriggs (1), Gretna (1)
 - **Nithsdale:** Central Dumfries (4 x datazones), Lochside and Lincluden (7) Nunholm (1), Summerville (3), Troqueer (1) Upper Nithsdale (4)
 - **Wigtownshire:** Stranraer (8 x datazones), Newton Stewart (1), Rhins (2), Machars (2)

1. Introduction

This document is an overview of the Scottish Index of Multiple Deprivation published on 28 January 2020 (SIMD20) and the specific detail for Dumfries and Galloway. The SIMD20 is an area measure of deprivation, rather than one which identifies individual people. It is designed to identify the neighbourhoods and communities that have the most challenging lack of resources and opportunities across Scotland.

For a broader look at inequalities, please see chapter 4 of the Health and Social Care Strategic Needs Assessment here: http://www.dg-change.org.uk/wp-content/uploads/2017/01/20160403-Strategic-Needs-Assessment-V1_0.pdf

In theory, identifying the most deprived communities should help organisations know where their work can have the biggest impact. However we know that in rural areas, where deprivation is less concentrated, there are several limitations to using this method. This is discussed below.

This document has maps and tables of the area deprivation figures for Dumfries and Galloway and the four localities.

2. How SIMD is calculated

Datazones are geographical areas which have on average 750 people, although because of how our population is distributed, the number of people can be as low as 407 (Gretna) and as high as 1,477 people (Collin).

The datazone which has had the greatest population change since the 2011 Census is S01007627 in the Collin - 01 area of Dumfries, growing by 170% from 547 residents in 2011 to an estimated 1477 residents in 2017 and a 50% increase from the previous publication of the SIMD 2016 (983 residents).

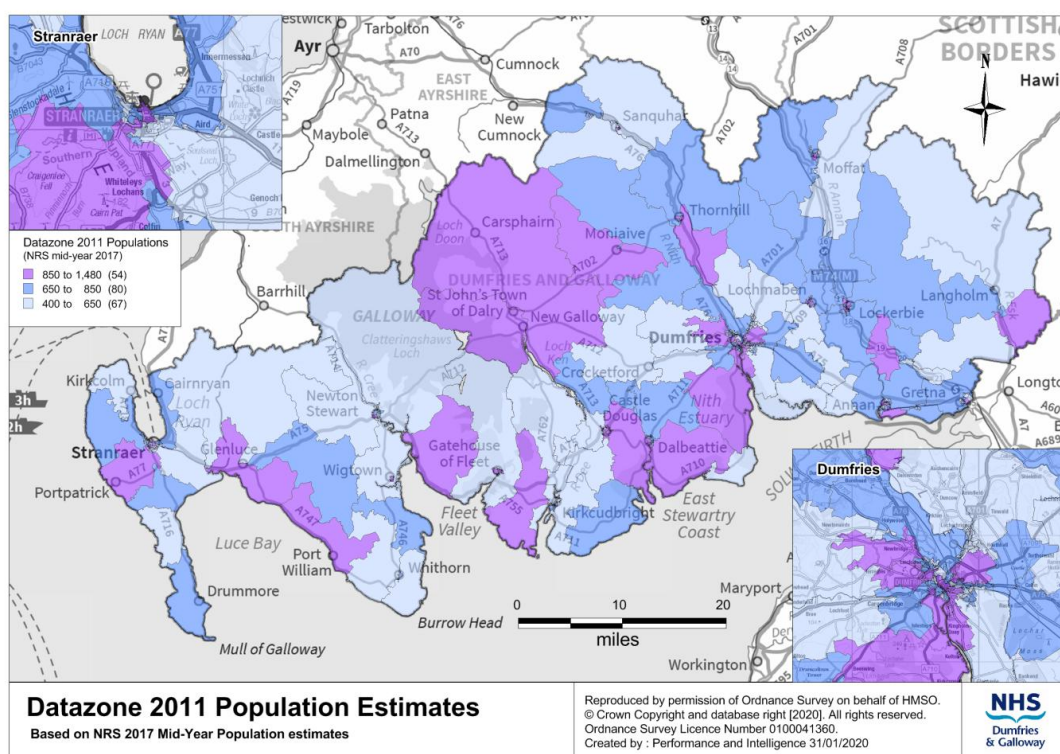
Across Dumfries and Galloway there are 201 datazones, which are distributed as follows:

Table 1: Datazones and Populations by locality

	Annandale and Eskdale	Nithsdale	Stewartry	Wigtownshire	Dumfries and Galloway
Number of datazones (2011)	51	79	31	40	201
Locality total population 2017	37,938	58,708	24,076	28,478	149,200
Locality working age population 2017	22,231	35,995	13,671	16,407	88,304

SIMD20 was published using the 2017 population estimates, therefore for accuracy they are used in this report. The map below shows where the datazones with the highest and lowest populations are located.

Figure 1: Map of Size of Population estimates by 2011 Datazones



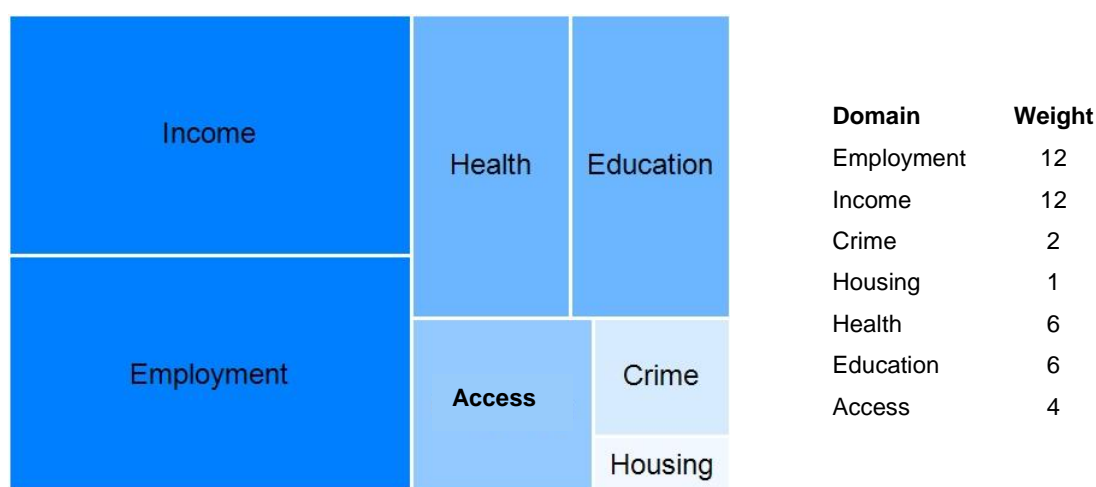
For each datazone, information about the population that live there is used to give an indication of the different disadvantages people in that area are experiencing. These are brought together in 7 domains:

- Employment
- Income
- Crime
- Housing
- Health
- Education
- Access

This includes information about topics like benefit claims, crime rates, central heating, hospital stays for drugs and alcohol, educational attainment and distance core services are from where people live. For further detail, see the SIMD methodology summary here: <https://www.gov.scot/publications/scottish-index-multiple-deprivation-2020/pages/7/>

The domains are weighted in a way that employment and income have the greatest influence, as shown below. It is assumed that these weightings have remained unchanged since SIMD16 as it is not stated otherwise.

Figure 2: Domains Weightings Used in SIMD20



There have been some minor changes in the way the SIMD is calculated since 2016¹ which are as follows:

- The education domain now includes the Skills Development Scotland participation measure replaces the proportion of 16-19 year olds not in education, employment or training indicator based on DWP data
- The access to services domain now includes a digital connectivity indicator
- The income and employment domains have been updated to reflect on-going changes to the welfare system and remain broadly comparable with earlier indices.

Dumfries and Galloway is a large region with a mix of remote rural areas, towns and urban communities, therefore using SIMD20 to identify deprivation within rural communities has to be done with extra consideration. Rural data zones represent larger areas than that of urban areas and will include a varied mixture of households experiencing different levels of deprivation. As mentioned above access to services and work are a large consideration when calculating deprivation, however not as large as employment and income. Therefore pockets of deprivation are smaller for rural communities.

Nationally in Dumfries and Galloway, the communities experiencing the most deprivation are found around the larger towns of the region. When we look at deprivation using local quintiles, communities found in the most deprived bracket (quintile 1), we see the addition

of more rural areas. Using SIMD20 to identify particular problems of specific places in rural places is an effective use of the SIMD tool, especially if comparing places within a local region.

It is important to understand that area measures of deprivation are designed to highlight communities where there are multiple challenges, not just poverty. The SIMD is not designed to be used as a way of identifying individual people, although it is commonly misused in that way. The national literature for using the SIMD20¹ advises the appropriate uses of area based deprivation measures:

Table 2: Appropriate Uses for the SIMD

Use SIMD for	Do Not Use SIMD for
✓ Comparing overall deprivation of small areas	✗ Saying how much more deprived one area is from another – the difference between two ranks can be tiny or large
✓ Comparing the seven domains of deprivation	✗ Comparing ranks over time – changes are relative and may not reflect actual changes in the neighbourhood
✓ Comparing the proportion of small areas in a council that are very deprived	✗ Comparing with other UK countries – each country measures deprivation slightly differently
✓ Finding areas where many people experience multiple deprivation	✗ Identifying all people who are deprived in Scotland – not everyone who is deprived lives in a deprived area
✓ Finding areas of greater need for support and intervention	✗ Finding affluent areas – lack of deprivation is not the same as being rich

¹ <https://www.gov.scot/collections/scottish-index-of-multiple-deprivation-2020/#technicalnotes>

3. Dumfries and Galloway's national SIMD distribution

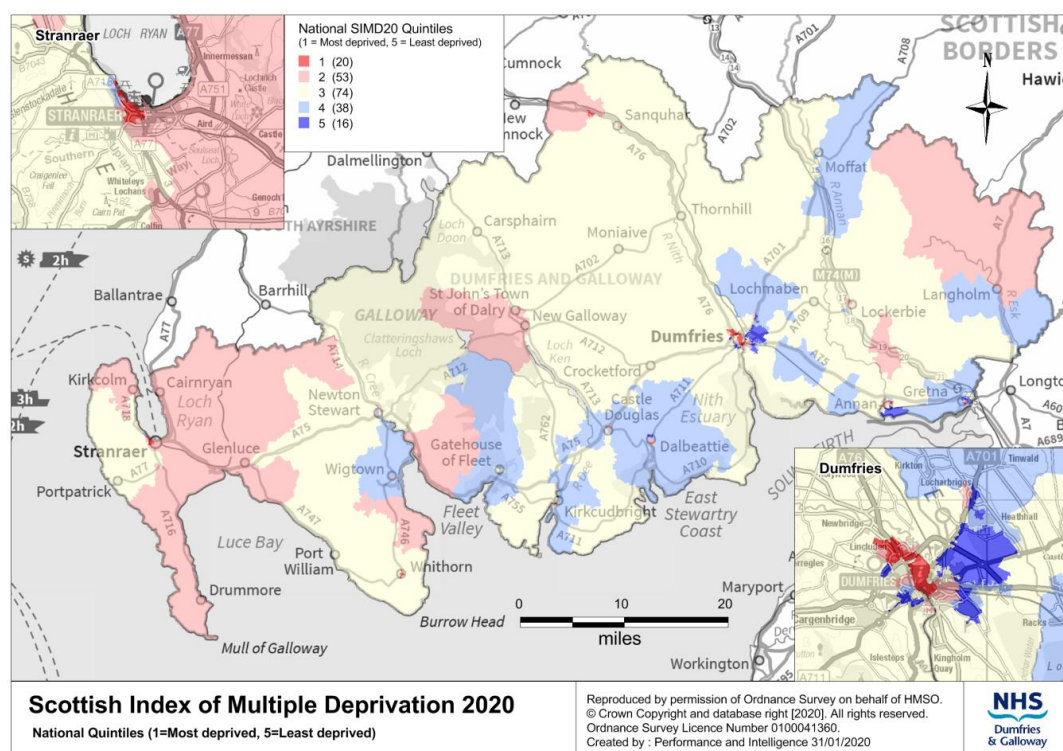
Across Scotland there are 6,976 datazones that are ranked in order of deprivation from 1 as the most deprived to 6,976 as the least deprived. Datazones are then grouped into fifths (quintiles), tenths (deciles) or twentieths (vigintiles) and given a SIMD score where 1 is the most deprived and 5/10/20 are the least deprived². We refer to these as the 'national quintiles'.

Table 3: SIMD2020 Ranks expressed as National Quintiles

National Quintile (20%)	SIMD Rank From	To	Dumfries and Galloway Count	Percentage
1 – most deprived	1	1395	20	10%
2	1396	2790	53	26%
3	2791	4185	74	37%
4	4186	5580	38	19%
5 – least deprived	5581	6976	16	8%
All		6976	201	100%

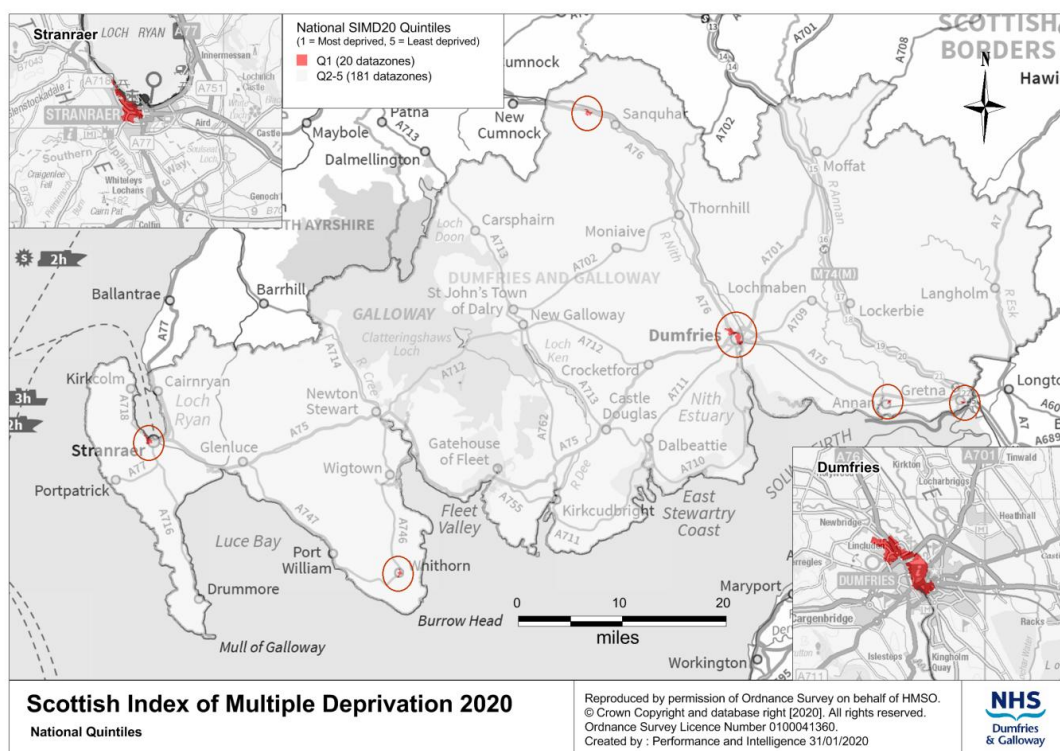
Dumfries and Galloway has 201 datazones, of which 20 (10%) are in national quintile 1, the 20% most deprived category. Equally, only 16 (8%) datazones are assigned to the least deprived national quintile 5. The lowest rank is for datazone S01007485 in Stranraer West - 05, which ranked 78. The highest rank was datazone S01007627 in the Collin - 01 area of Dumfries, which ranked 6,733.

Figure 3: SIMD2020 deprivation map of Dumfries and Galloway – national quintiles



² Scottish Government [Link](#) (last accessed 17th January 2020)

Figure 4: SIMD2020 deprivation map of Dumfries and Galloway – national quintile Q1



Analysis shows that within the 20 datazones that are in the 20% most deprived nationally, only 22% of the region's income deprived and 22.7% of the region's employment deprived people are included. This means that 78% of income deprived and 77% of employment deprived people live in areas of Dumfries and Galloway considered to be less deprived according to SIMD 2020.

The recommended approach for using SIMD with local areas is to produce 'local quintiles' whereby all the datazones within Dumfries and Galloway are ranked according to the results for SIMD 2020 and then split into 5 equal groups (quintiles) where local quintile 1 comprises the 20% most deprived within Dumfries and Galloway and local quintile 5 the 20% least deprived. It has been advised for many years that when implementing local initiatives, local quintiles are used.

4. Distribution of the most deprived areas

Similar to previous releases of the SIMD measure, the distribution of areas considered to be the most deprived are not evenly spread throughout the localities, with no datazones at all in Stewartry identified as being in either the most deprived national or local quintiles. That does not mean there are no people with challenges in Stewartry, only that they are outnumbered by less deprived neighbours.

The table below summarises the number of datazones and estimated number of residents in local and national quintile 1, as well as gives the best estimate of the number of income and employment deprived people in each locality and how many of them live in areas the SIMD would indicate was most deprived.

Table 4: Number of datazones and number of residents within 20% most deprived (Q1) across Dumfries and Galloway by national and local SIMD 2020 quintiles

	Annandale and Eskdale	Nithsdale	Stewartry	Wigtownshire	Dumfries and Galloway
Datazones					
All	51	79	31	40	201
20% most deprived across Scotland (National quintile1)	3	11	0	6	20
20% most deprived across Dumfries and Galloway (Local quintile1)	7	20	0	13	40
Residents					
All residents (2017)	37,938	58,708	24,076	28,478	149,200
20% most deprived across Scotland (National quintile1)	2,143	8,075	0	3,836	14,054
20% most deprived across Dumfries and Galloway (Local quintile1)	5,156	14,372	0	9,299	28,827
All Income deprived	3,769	6,691	2,284	4,340	17,084
In local quintile 1 area;	914	3,366	0	2,106	6,386
(% working age)	(14%)	(18%)	(0%)	(16%)	(16%)
All Employment deprived	1,679	3,257	998	1,814	7,748
In local quintile 1 area;	427	1,664	0	2,106	2,962
(% working age)	(30%)	(37%)	(0%)	(39%)	(36%)

Source: SIMD 2020; Scottish Government

There are particularly striking differences between localities in the proportion of income and employment deprived people effectively identified by using SIMD. At best, using the SIMD20 local quintiles to identify individuals who would be considered income derived would only

identify 18% of the deprived individuals in Nithsdale, 16% in Wigtownshire, 14% in Annandale and Eskdale and none in Stewartry. Therefore it is very important that SIMD is not the only method used for engaging with individuals who are at risk of deprivation. Figures 5 and 6 below illustrate the difference between using national and local quintiles.

Figure 5: SIMD2020 deprivation map of Dumfries and Galloway – local quintiles

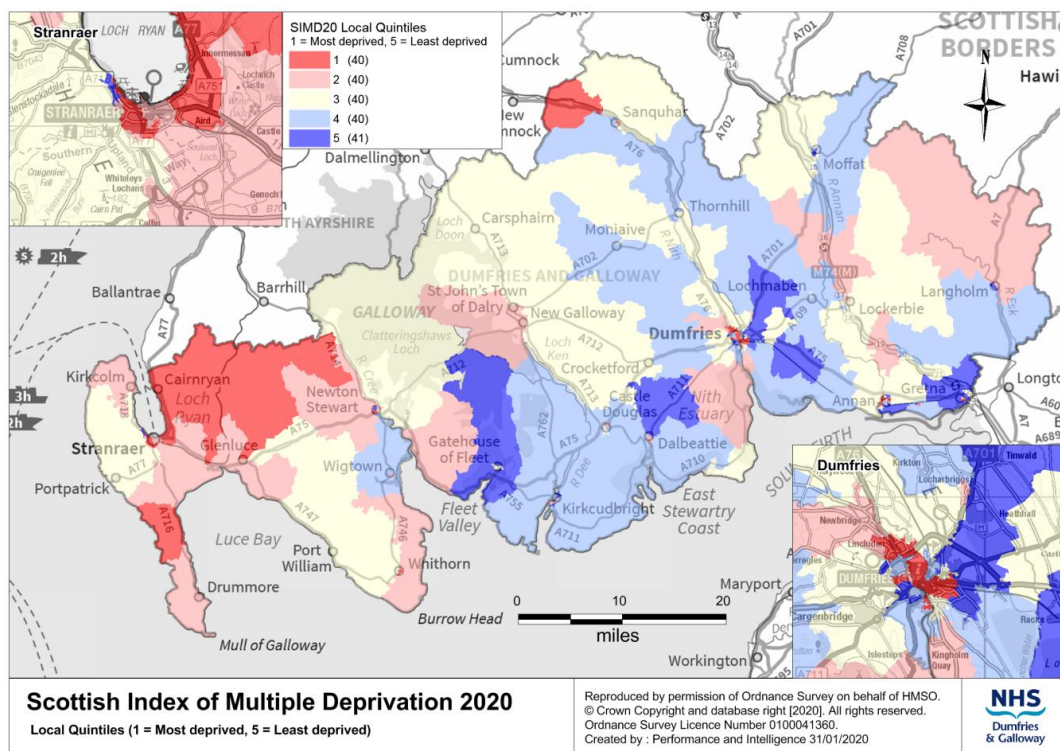
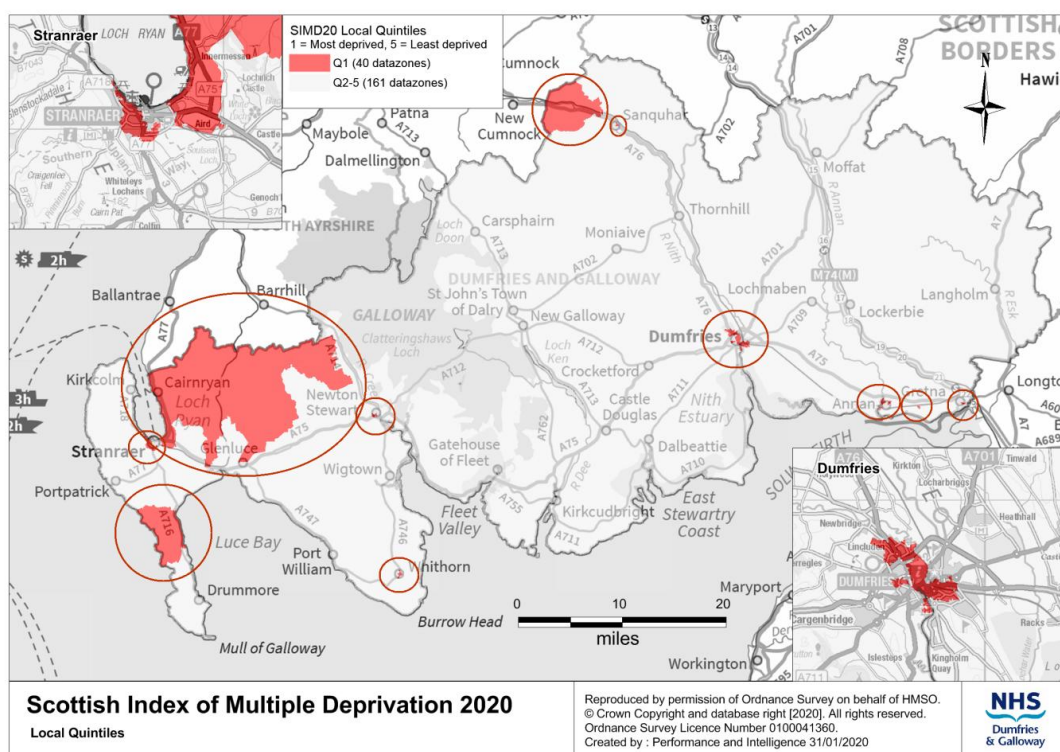


Figure 6: SIMD2020 deprivation map of Dumfries and Galloway – local quintile Q1



The following table lists the datazones that have been identified as local quintile 1, amongst the 20% most deprived in Dumfries and Galloway; some are also the 20% most deprived quintile nationally.

Table 5: All Datazones Identified as Local Quintile 1 by SIMD20

Geographical area		Data Zone	National Quintile	Total pop' 2017	Working age #	Income deprived		Employment deprived	
						%	#	%	#
Wigtownshire	Stranraer West – 02	S01007482	1	447	242	21%	94	17%	41
	Stranraer West - 04	S01007484	1	524	336	20%	107	24%	78
	Stranraer West – 05	S01007485	1	452	280	41%	185	28%	79
	Stranraer West – 06	S01007486	1	790	449	42%	332	26%	115
	Stranraer East – 01	S01007487	1	845	542	26%	221	19%	100
	Stranraer South – 01	S01007490	2	911	489	20%	182	12%	58
	Stranraer South – 02	S01007491	2	1165	691	18%	212	12%	80
	Stranraer South – 03	S01007492	2	633	360	15%	98	16%	56
	Rhins North – 05	S01007498	2	751	398	15%	112	10%	41
	Rhins South – 02	S01007500	2	546	300	16%	87	12%	35
	Machars North – 01	S01007502	2	493	305	16%	79	13%	39
	Machars South – 06	S01007511	1	778	452	25%	196	15%	66
	Newton Stewart – 01	S01007513	2	964	563	21%	201	15%	83
Nithsdale	Upper Nithsdale – 01	S01007552	2	835	535	20%	163	17%	90
	Upper Nithsdale – 02	S01007553	1	782	481	23%	177	16%	75
	Upper Nithsdale – 03	S01007554	1	429	245	29%	124	23%	55
	Upper Nithsdale – 05	S01007556	2	508	259	16%	80	13%	33
	Lochside and Lincluden – 02	S01007575	1	837	508	26%	217	23%	115
	Lochside and Lincluden - 03	S01007576	1	693	427	33%	230	25%	109
	Lochside and Lincluden - 04	S01007577	1	730	466	30%	216	22%	101
	Lochside and Lincluden - 05	S01007578	1	667	431	27%	181	24%	103
	Lochside and Lincluden - 06	S01007579	1	626	413	27%	168	21%	85
	Lochside and Lincluden - 07	S01007580	1	792	472	24%	190	15%	68
	Lochside and Lincluden - 08	S01007581	2	480	295	21%	103	12%	36
	Summerville – 01	S01007582	1	630	416	22%	139	16%	67
	Summerville – 02	S01007583	1	925	620	31%	286	23%	139
	Summerville - 05	S01007586	2	771	492	20%	157	13%	63
	Troqueer – 05	S01007592	2	719	465	20%	144	13%	61
	Dumfries Central - 01	S01007609	2	881	576	19%	164	15%	84

	Dumfries Central – 02	S01007610	2	532	319	13%	71	14%	45
	Dumfries Central – 03	S01007611	2	893	496	21%	184	16%	79
	Dumfries Central - 04	S01007612	1	964	690	27%	259	26%	181
	Nunholm - 06	S01007616	2	678	431	17%	113	17%	75
Annandale and Eskdale	Annan West – 01	S01007660	2	818	509	15%	125	15%	76
	Annan West – 03	S01007662	2	868	515	16%	143	13%	66
	Annan East – 01	S01007664	2	570	336	18%	100	13%	45
	Annan East - 06	S01007669	1	635	405	22%	137	17%	68
	Annan East - 07	S01007670	1	685	414	22%	149	15%	60
	Eastriggs - 03	S01007674	2	757	470	15%	112	12%	57
	Gretna - 04	S01007679	1	823	436	18%	148	13%	55

Source: SIMD 2020; Scottish Government

(Note: The towns and villages are based on the best fit to the datazones, NRS community population estimates will be more accurate).

Table 5 gives a breakdown for the different localities in Dumfries and Galloway. The areas where there is the highest concentration of geographical deprivation are Lochside and Lincluden, Stranraer and Annan.

The national report for SIMD20 states that comparisons over time between different versions of SIMD should be treated with caution. SIMD is a relative measure and so movement from one quintile to another does not necessarily mean there has been real terms change in circumstances within a community. Despite these warnings, sometimes national and local policies and initiatives can be focused on communities in national quintile 1. Therefore it is relevant to note that 5 datazones across Dumfries and Galloway have been re-categorised as national quintile 1:

- Stranraer West – 02
- Summerville – 01
- Annan East – 07
- Machars South – 06
- Gretna – 04

Whilst 2 datazones that were in national quintile 1 have been categorised as national quintile 2:

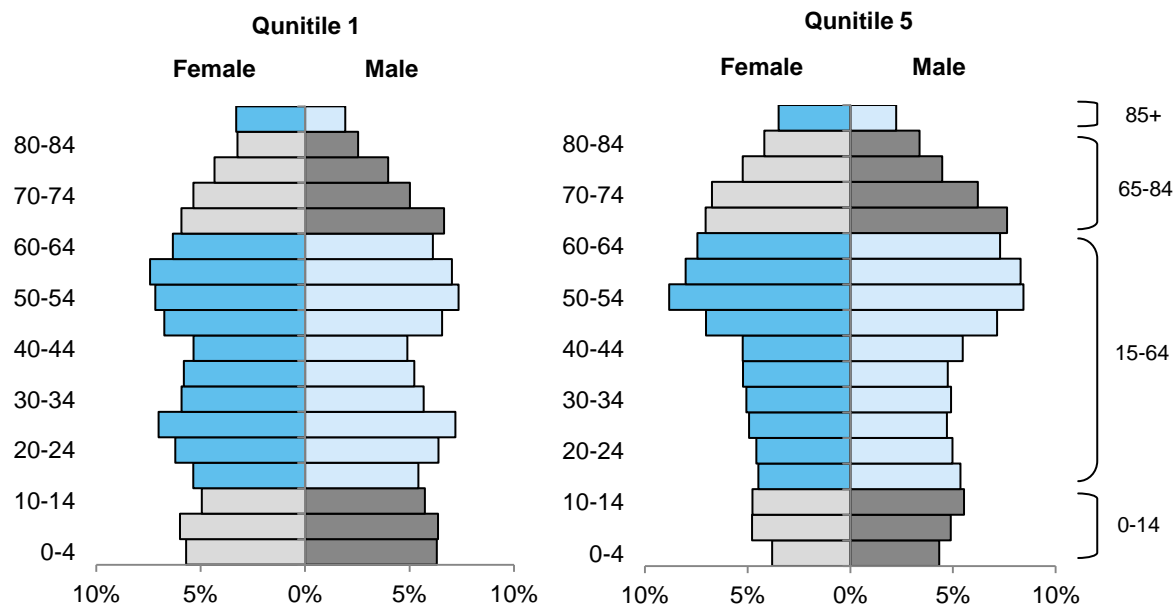
- Dumfries Central – 01
- Annan West - 01

5. Additional Analysis

There are several interesting things to note with this release of the SIMD.

Different areas have different neighbourhood characteristics and one of the interesting aspects is the distribution of different age groups. The population pyramids below demonstrate that the distribution for local quintile 1 communities looks different to the other quintiles.

Figure 7: Population Pyramids for Local Quintile 1 and Quintile 5 from SIMD20



Source: NRS 2017 population estimate for datazones (corrected); SIMD20

There is a larger proportion of children and adults under the age of 45 with smaller proportion of older adults in the most deprived areas.

Table 6: Population 2017 by Local SIMD Quintile

		SIMD20 Local Quintiles				
		1	2	3	4	5
Males	85+	303	382	307	289	336
	65-84	3,286	3,508	2,848	2,865	3,278
	15-64	8,062	8,679	9,276	9,173	8,586
	0-14	2,179	2,156	2,416	2,277	2,218
Females	85+	528	641	588	517	535
	65-84	3,464	3,831	3,197	3,224	3,482
	15-64	8,612	8,980	9,761	9,543	9,063
	0-14	2,044	2,103	2,406	2,111	2,146
All People	85+	749	1023	895	806	871
	65-84	5,274	7,339	6,045	6,089	6,760
	15-64	17,824	17,659	19,037	18,716	17,649
	0-14	4,980	4,259	4,822	4,388	4,364

Source: NRS 2017 population estimate for datazones (corrected); SIMD20

There have been small changes to the way income deprivation is calculated as the eligibility criteria of certain benefits have changed and Universal Credit was introduced. The number of people claiming income related benefits and credits are now determined through the Universal Credit system. There has been no change to the way the employment domain is calculated.

The estimate of the number of people who are income deprived has dropped since the SIMD 2016 was released from by around 2% for Dumfries and Galloway, and the number of people who are employment deprived has dropped by around 14%. All localities have seen improvements, but the largest reported change was for Nithsdale. During the same period, population estimates indicated very little change in the number of residents.

Table 7: Change in Estimates of Income and Employment Deprived People over Time

	Annandale and Eskdale Nithsdale Stewartry Wigtownshire				Dumfries and Galloway
SIMD 2016					
All Residents	38,293	59,028	23,950	28,669	149,940
All Income deprived	3,795	6,930	2,300	4,340	17,365
All Employment deprived	1,970	3,825	1,160	2,010	8,965
SIMD 2020					
All Residents	37,938	58,708	24,076	28,478	149,200
All Income deprived	3,769	6,691	2,284	4,340	17,084
All Employment deprived	1,679	3,257	998	1,814	7,748
Difference					
All Residents	-355	-320	+126	-191	-740
All Income deprived	-26 (-1%)	-239 (-3%)	-16 (-1%)	-0 (-0%)	-281 (-2%)
All Employment deprived	-291 (-16%)	-568 (-15%)	-162 (-14%)	-196 (-10%)	-1,217 (-14%)

Source: SIMD16 and SIMD20; Scottish Government

6. Conclusion

Dumfries and Galloway has had some fluctuations within their community SIMD rankings from 2016 to 2020 and it is encouraging to note that many were improved. This suggests that actions to help improve community inequalities are effective. However communities that may not have reflected improvement in SIMD ranking could be due to a faster improvement change in the other communities in the rest of Scotland. SIMD can be used by communities themselves to highlight the things that matter to them. This means SIMD can be used to build a case for engagement and support where there is a focus on the strengths and assets of our communities and we work together to make Scotland a fairer and more inclusive place to live.

