



Northern Ireland  
Assembly

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**COMMITTEE FOR  
FINANCE AND PERSONNEL**

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**OFFICIAL REPORT  
(Hansard)**

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**Multiple Deprivation Measures:  
Outcome of Consultation: Briefing by the  
Northern Ireland Statistics and Research  
Agency**

2 June 2010

**NORTHERN IRELAND ASSEMBLY**

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**Multiple Deprivation Measures: Outcome of Consultation  
Briefing by the Northern Ireland Statistics  
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2 June 2010

**Members present for all or part of the proceedings:**

Ms Jennifer McCann (Chairperson)

Mr Jonathan Craig

Mr Simon Hamilton

Mr Fra McCann

Mr Mitchel McLaughlin

Mr Adrian McQuillan

Mr Declan O'Loan

**Witnesses:**

Dr Norman Caven )

Dr David Marshall ) Northern Ireland Statistics and Research Agency

Ms Cathryn McBurney )

**The Chairperson (Ms J McCann):**

I welcome Dr Norman Caven, Dr David Marshall and Ms Cathryn McBurney. Please begin by making some opening remarks, after which I will open up the session for questions.

**Dr Norman Caven (Northern Ireland Statistics and Research Agency):**

Thank you for asking us to come again. We last met the Committee on 4 November 2009 to talk about the outcome of the consultation on the work on the multiple deprivation measure. We shall now update you on how final decisions were made before running the data and the results. You have a copy of the report on the research and a profile of each of the 18 Assembly constituency

areas.

I shall begin by giving a brief background presentation; my colleague Dr Marshall will then go into the details of the results. The process of considering the Northern Ireland multiple deprivation measure (NIMDM) has been ongoing since July 2009. We have a fairly long history of doing this type of work, stretching back to our work on the Belfast areas of need, using the 1971 census data. Each census thereafter, we have repeated the exercise. For my sins, I have been involved in all of them. Our recent work uses a combination of census information and administrative records that, nowadays, are easier to access using computer technology. We have moved from a census-orientated, census-determined exercise to one that can be updated more often. In its final form, our work has a number of uses, including in neighbourhood renewal and in the Health Service allocation formula, and it is used widely in fund allocation and in monitoring the spatial impacts of policy.

Northern Ireland's use of Noble indicators is akin to what is done in Scotland, Wales and England. The Republic of Ireland tends to use its census material more; but it has a five-yearly census with which to update data. I should also stress that we are dealing with relative deprivation. We are looking at areas that are disadvantaged relative to the mean. There are people who live in non-deprived areas but who are, themselves, deprived. However, the policies that stem from much of our work are area-based and address concentrations of deprivation. Nevertheless, it is important to remember that those are ancillary to a range of policies that address deprivation at the individual level and that we are dealing with statistics that are relative to the average. Therefore, if one were to return in a hundred years, one would still find areas that are deprived relative to the mean. In addition, if an exercise like this were to be conducted in a particularly well-off area, there would still be sub-areas that were deprived relative to that mean.

NISRA tries to update the measure every five years approximately, and the Committee may remember from our last evidence session that we said that we had set up an interdepartmental steering group, which includes external members from organisations such as the Northern Ireland Council for Voluntary Action (NICVA), the Housing Executive and the Rural Development Council. In formulating that steering group, NISRA tried to achieve a wide consensus on the various issues.

The consultation document was published in July 2009, and it sought views on the update and

recognised that NISRA would conduct a fuller review after the results of the 2011 census are published. We continue to use the Noble methodology in this exercise and most of the work has been conducted in-house, rather than being put out to consultants.

Three consultation events were held; in Omagh, Lisburn and Belfast. We also met the Committee on 4 November 2009, after the consultation period had finished. The steering group considered all the responses, and some peer review was undertaken by members of the Noble team, independent members and members of the steering group, which represented the government and external bodies.

Using all of that information, we devised a blueprint document, which was forwarded to the Committee in February 2010 to give an indication of what we were going to do before the numbers were processed. We then carried out the exercise, and the headline results that were published on 31 March 2010 related to amalgams of census output areas called “super output areas”, which are areas with a population of approximately 2,000 people. More detailed results have just been published at a level below that, which use the census output areas as units of analysis and provide aggregations at a higher level of geography, sorting them into local government districts, parliamentary constituencies et cetera. The last thing that must be done is for NISRA to provide recommendations for future work. We expect to publish those this summer and we will forward them to the Committee at that time.

A number of issues arose during the consultation. Members may remember that last time we appeared before the Committee there was an issue about whether tax credit data would be available from HMRC. We pursued the matter with HMRC, got a solution and were able to include that information in the analysis. We also included data from the new Steps to Work scheme, which replaced the New Deal initiative. The scheme had started when the consultation began in 2008 and 2009, and the consultation respondees suggested that that data should be included, which it was. We also proposed that it was necessary to include data on primary schools in the education deprivation domain. Previously, the domain had focused solely on secondary schools. So, the new data was also included in the analysis. Finally, there was general support for a more detailed analysis at different levels of geography than had been done in the 2005 analysis, and, as I said, we were also able to include that.

There were a couple of issues that the Committee made specific reference to. I have already

covered the use of tax credit data, giving information on a smaller geographical basis and the inclusion of data on primary schools. A further issue of concern to the Committee was the use of service data, and we carried out a specific exercise, before we ran the analysis, to review all service centre data to ensure that it was as up to date as possible. The final issue that the Committee wanted to be included in the exercise was the use of data on free school meals. We consulted outside experts and the steering group on this matter and decided that it was better to include the free school meals variable in the income deprivation domain, and that the focus in the education domain should primarily be on educational outcomes.

I will hand over to Dr Marshall, who will take the Committee through some of the detail of the results.

**Dr David Marshall (Northern Ireland Statistics and Research Agency):**

The Northern Ireland multiple deprivation measure (NIMDM) 2010 is made up of 52 indicators across seven domains. In 2005, we had only 43 indicators, so there have been a significant number of additional indicators this time. Additional indicators were brought in through the consultation process and through recommendations from the work last time round.

Overall, the two most important domains are income and employment. They make up 50% of the overall multiple deprivation measure. That has been consistent since 2001. They are seen as the most important facets of deprivation. The other domains: health; education; proximity to services; living environment; and crime and disorder make up the totality of the NIMDM. As Norman said, we published the initial results at super output area level in March 2010. There are 890 super output area levels across Northern Ireland, and each has an average population of around 2,000 people. We deliberately created that additional geography in 2005 because the sizes of the electoral wards in Northern Ireland vary significantly. There are bigger areas in Belfast and smaller areas in places such as Moyle, and we wanted to make sure that the super output areas were of equivalent population size. That is important when measuring deprivation.

In May, we published the results at output area level. There are 5,022 output areas across Northern Ireland, and each has a population of around 350 people. In May, we also published the final report and summary measures. Members' packs contain summary measures on electoral wards, local government districts and Assembly constituency areas, which I will talk about in a minute.

The map of Northern Ireland at super output area level covers all of Northern Ireland. There are 890 areas coloured in shades of blue, in bands of 10%. The darkest blue areas are the 89 most deprived super output areas, and the lightest blue areas are 89 least deprived areas. One can see a gradation across Northern Ireland through the different colours. The maps of Belfast and Derry local government districts show the position in the more built up urban areas. Parts of north and west Belfast, parts of Derry local government district, parts of south Armagh and parts of west Tyrone tend to be the most deprived areas in Northern Ireland. A semicircle of areas around Belfast represents the least deprived areas: that picture is evident from the map. I will talk about the change since 2005, but, overall, a significant number of the areas that were deprived five years ago are still deprived when measured against today's relative deprivation measure.

Another map illustrates the multiple deprivation measure in 10% bands, but it is not at super output area level; it is at the finer grained output area level. The result is similar, but magnified, and there is an improved focus and more detail. One can see specific areas such as Taughmonagh in south Belfast, which is embedded in the Malone area. One sees the picture of spatial deprivation that exists there. On the outskirts of the Derry local government district, one can see Cornshell Fields, which is a newbuild housing estate. That is the sort of additional picture that one gets at output area level. There is demand for that level of detail. There is also more finely grained detail in rural areas, which is important when one is considering rural deprivation. Those are the sort of headline spatial results that have been published.

We have three specific summary measures at local government district level. The first two relate to income-deprived people and employment-deprived people. We have two measures: the one that relates to income deprivation represents the portion of the population within a local government district that is income deprived. At the Northern Ireland level, the results showed that 440,000 people were income deprived — around 25% of the population. However, that figure varies by local government district. In Derry local government district, which has the highest level of income deprivation, 38% of people are income deprived. In North Down local government district, only 14% of people are income deprived: there is a twofold to threefold variation.

Employment deprivation is slightly different; it relates to the proportion of the working-age population who are employment deprived. We mean employment deprivation in its widest sense;

we do not simply mean people who are unemployed. We include people who are sick and cannot work or people who are caring for a relative — in other words, people who are not part of the labour market because of specific issues. At the Northern Ireland level, around 140,000 people are employment deprived. However, by local government district, the numbers vary between 20% in Strabane to 9% in North Down. Similar statistics for all 18 Assembly constituency areas are contained in the Assembly area profiles that members have received.

Those are the high level numbers in relation to local government districts. We have also looked at the concentrations of spatial deprivation within each local government district, which shows a different picture. Around 40% of the population who live in the local government districts of Belfast, Strabane and Derry are in the most deprived super output areas. That means that, in those areas, deprivation is very highly concentrated spatially, whereas in areas such as Magherafelt, Ballymoney and North Down it is around 2% to 3%. That is a significant variation. It does not mean that 2% to 3% of the population of North Down is deprived; it means that the spatial concentration of the population is different in those areas. That measure is important, as Dr Caven said earlier, in targeting differences in spatial deprivation. Again, those statistics are available for all the Assembly constituency areas.

One of the important questions that came up in our discussions was about whether anything had changed since we last carried out a measurement exercise five years ago. Research carried out by academics in Great Britain for London provided a poverty index rather than a deprivation index, even though, clearly, there are links between poverty and deprivation. The research looked at poverty in London in 1896 compared with the situation in 1991. One map shows the electoral wards in central London in 1896 as measured by Charles Booth. The second map shows the same area with data taken from the 1991 census. One can see similarities between the maps in that the poorest areas in the east end of London have not changed significantly since 1896, and the richest areas in the west end have not changed much either. That is important to note when we are examining relative deprivation: we are not measuring absolute deprivation, we are measuring relative deprivation. Although things change, we still have to have a “most deprived” category.

Another factor is important in Northern Ireland, given some of the results that we have obtained. As I said, we are measuring relative deprivation; and lack of change does not mean that nothing has changed. The specific point to make is that there has been significant population movement since the last census in 2001. The total population in Northern Ireland has increased

by around 5% over the past seven or eight years. There have been significant increases in population due to more births than deaths occurring and migration from eastern Europe. The population in the most deprived areas has fallen by around 3% to 4%, whereas the population in the lesser deprived areas has increased. Typically, people have moved out of the more deprived areas and into the hinterland. People have moved into different housing and they have migrated to different areas in Northern Ireland. I am not talking about just international migration to Northern Ireland; people are moving to different areas to further their education or take up a job. That is happening all over Northern Ireland. We have a thematic, coloured map showing the population change from 2001 to 2008 by super output area, which illustrates that shift in population graphically. That map covers each of the 890 super output areas and shows the population change between 2001 and 2008. The darker brown areas on the map show a small population gain of 30% or more. Indeed, some areas have a significant population gain of 50%, 60% or even more. The lighter-coloured areas are those which have had either population losses or no gains, in other words the number of people has not changed much since 2001.

Derry local government district shows the situation quite starkly. The population at the outskirts of the district has been growing, in places such as Cornshell Fields, because people have moved from the city centre to the outskirts. That trend is mirrored across Northern Ireland.

Population change is also seen along the major roads. Population growth can be seen along the M1 and M2 to Belfast. Although it is not shown on the map, the same applies to the A1 also. Therefore, it is important when we are looking at spatial deprivation to note that people move around and that that is an important factor to take into account when we are monitoring and measuring changes over time. We will look at that again over the summer to provide some guidance on what those changes have been.

I will move on to the recommendations. Dr Caven touched on the work that we did in bringing indicators into the analysis that we undertook. However, there were a significant number of recommendations that we must look at and take forward. There are two or three key areas, of which health and disability is one. In the consultation process, there has been significant interest in measures of health that are not Health Service specific. Such measurements relate to obesity, alcohol and drug misuse, but not as regards interventions, hospitalisations, acute treatment or mortality. Rather, the interest relates to what proportion of the population in each small area has alcohol, obesity or other problems.



We think that we will be able to devise indicators using items such as prescriptions, which are available. A new system in the business services organisation can gather better information on prescriptions, and that will be available to us the next time we come to do this. There is also demand for information about disability that is separate from health deprivation. The concept is that there is a disability dimension to deprivation that is distinct from health deprivation and centres around issues such as developmental disorder and autism. Using information from the 2011 census, we hope that we will be able to measure that better in the future. That is another area on which the consultation exercise has focused.

With respect to education, there was support, as Dr Caven said, for information about primary school education. However, we also see the need for better information at a younger age, at key stage 1 or with respect to access to preschool education. There is an issue about measuring more exam results in key subjects such as English and mathematics at GCSE, and keeping those as the key indicators. That also emerged from the consultation, as did the need to collate information on adult qualifications, which will also be provided by the 2011 census.

Finally, there was considerable interest in the proximity to services indicator, specifically the idea that two areas have the same proximity to a specific service, but there is more demand at one service delivery point than another, be it a hospital or whatever. Effectively, the scenario is that two areas are similarly deprived with respect to proximity, but there is a differential in demand. That issue will need to be looked at again in the next review. Added to that is the idea of proximity to service with respect to access to transportation and issues concerning age or other factors. Those are the sort of outline draft recommendations.

The steering group has not made a judgement on all the recommendations yet. Therefore, we want to go back to the steering group with the specifics that were discussed, but which were not included in the measures, and write a recommendation paper that will be published over the summer. With respect to the final stage of the project, we have already published some guidance regarding use of the measures, and we will provide more detail following the final recommendations. We will hold dissemination events across Northern Ireland, one of which, we hope, will be held at Parliament Buildings for Members, officials and support staff. That event is being organised through the Assembly's Research and Library Services. We have published some information on change over time and equality.

During the consultation programme, we saw that there was a demand for information about what will happen following the reduction in local government districts from 26 to 11. We have developed the statistics in such a way that we can produce information for the new 11 local government districts if they come into being. The information would be analysed as and when that situation arises.

**The Chairperson:**

Thank you very much for what has been a very detailed presentation. You have provided us with a lot of information.

Some of the statistics for particular Assembly constituency areas are startling, but they are perhaps nothing new for members. You mentioned change over time. The last year in which statistics were presented was 2005. Overall, is multiple deprivation getting worse in the areas that seem to come up all the time as areas of deprivation and disadvantage, or has the gap closed since 2005?

**Dr Marshall:**

We have concentrated on producing a relative measure to date, and, over the summer, we will look at the absolute change over time. However, we are seeing changes. For example, the information for the centre of Belfast has shifted due to new housing developments, and some areas in the city centre are no longer in the top 10%, which is a change. Change tends to happen in areas where there is population movement, and Cornshell Fields is an example of that.

It is hard to answer your question specifically. We need to look at the information in more detail and, when the analysis is done, come back to the Committee. There has been significant population change, which makes it difficult to make direct comparisons on absolute measures.

**The Chairperson:**

I appreciate that. However, I am trying to tease out the overall view. The statistics are very similar to those that I remember from the previous Noble indices, and they indicate that there has been no significant change and that deprivation has not been tackled in certain areas. I want to know whether you share that view.

**Dr Caven:**

If you are talking about change relative to the mean, then the pattern has existed since the early 1970s, and certain areas were below the average at that particular point in time. Overall, those areas might be improving with respect to the standard of living of people in those areas. However, when we look at what the average super output area looks like then the areas that David described are the ones that are below or above that average. As he said, that pattern has, in some ways, changed over time. Although the changes over time have not been significant, the maps of changes in the electoral areas of London between 1896 and 1991, which David mentioned, show a similar situation there.

**Mr F McCann:**

Thank you for that very extensive presentation. It will take us a while to digest the information. When you were here previously, concerns were raised, similar to those raised at party meetings, about the process used. Although the statistics are startling, I am not surprised about the deprivation in areas that were socially deprived five or 10 years ago. Your data goes back to 1971, but, in some areas, deprivation is generational and goes back far further than that. The issue is how we deal with it to try to change that situation. One of the interesting findings is that most people who move do so to try to get out of poverty, but, in many cases, people are moving that poverty with them, which is stretching the whole conveyor belt of deprivation.

Jennifer posed the question. Obviously, you deal all the time with statistics and with the indices that probably guided the parameters of deprivation, but were you surprised that the extent of deprivation had not changed much? You said that, because of the way in which some of the questions were asked, the statistics may not reflect the true picture of deprivation, but I represent an inner-city area of Belfast, and it has not changed. All the major factors that make up social deprivation have existed for generations in that area. Therefore, although you said that there have been some changes in the centre of Belfast, other areas in and around the city centre have not changed at all.

**Dr Caven:**

As David said, it is significant that there has been population decline in the worst deprived areas. That may be because people are getting employment and moving out, or it may be that people are dying and no one is moving into their properties. What is driving that population decline merits more examination.

**Mr F McCann:**

Inner-city areas have been in decline for up to 40 years, and that continues to be the case. I can speak only for Belfast, but, in many ways, there has been a complete slum clearance in all the constituencies of Belfast, and it has decimated inner-city areas.

**Dr Caven:**

Yes, I accept that.

**Mr McLaughlin:**

It is a very extensive analysis, and it has considerable import for the issues that affect most of the MLAs here. With regard to the key domains of income and employment, does the analysis provide any measurement of the effectiveness of policy interventions? Does it hold out the expectation that, incrementally and over a period of time, we can make an impact? Is there a correlation between what the Government are doing and what the statistical analysis tells us?

**Dr Marshall:**

One specific area that I have worked on in detail is mortality. We are seeing significant improvements in mortality rates across Northern Ireland in deprived and less deprived areas.

**Mr McLaughlin:**

That is a matter of provision and access.

**Dr Marshall:**

There are significant improvements there. Heart disease death rates have fallen dramatically. We are trying to get at the relativities between the most deprived and the least deprived. There is still a differential in respect of mortality rates. That differential has not changed significantly over the past 20 years. However, there has been a rising tide, and mortality rates have improved significantly for everyone over the past 20 or 30 years.

**Mr McLaughlin:**

That is an example of how impact occurs in a generalised way, and it has to do with technological and other developments. I am thinking more of the stubbornly persistent patterns of deprivation and regional disparity and how the Government can intervene effectively. That has knock-on —

that is not the word I am looking for, but I hope that I am conveying my point — benefits.

We can address the issue of mobility perhaps by allowing people to enjoy the benefits of improved housing stock. A range of issues that affect social and personal well-being can be addressed, but there is a persistent pattern of regional disparity that makes the argument for a strategic approach. As Fra said, those patterns are built over generations. They took a long time to develop, and they will not be reversed by an Assembly in one mandate. However, we can make an impact on such areas. Some areas have come to regard themselves as being socially deprived, and the norm in those areas might be that people are economically inactive or that they have chronic long-term illnesses. All the issues of that type bear down on individual well-being.

In such a small, compact region, we should be able to translate evidence of deprivation into targeted interventions. Is there any evidence that your work is being interpreted or accessed for that purpose?

**Dr Caven:**

In some ways, we are in the business of supplying signposts. One of the advantages of breaking the results down into different domains is that educational initiatives can be targeted more precisely by using the education domain, rather than the general multiple deprivation measure. That is also true of the other domains. It is always difficult to disentangle cause and the effect of particular programmes, which probably need to be evaluated in their own right. We present areas that can be addressed by such programmes, if those are delivered spatially in a sensible way. However, those programmes may need to be evaluated in their own right.

**Mr McLaughlin:**

The argument that I am making is that the findings must provide more than simply a commentary on the state of the population. They must also inform our actions.

**Mr Craig:**

Your figures show some interesting anomalies. I can relate only to my own area, and your figures show that Lambeg is one of the most deprived areas in my constituency. That is quite surprising, because it is known as one of the more affluent areas. Does anything in the statistics tie in and relate to the age profile of an area's population? My instinct tells me that Lambeg has a high elderly population and that most of the people living there are retired. That might prove the

point that retired people are much less well off than the rest of us. Is there anything in your statistics that ties in with that assertion?

**Dr Marshall:**

We can come back to you on the detail about Lambeg. Alongside the income domain, we present an income measure relating to children and an income measure relating to older people. Differential patterns emerge on income deprivation for young people and for the retired population. Some demand has been made for specific spatial measures relating to, for example, children. We have tried to improve the information that we hold on health deprivation, so we now have indicators on low birth rates and on children's dental health. There is demand for a demographic look at the figures but in an area-based way. Perhaps we will need to look at that again in the review that we will carry out in a few years' time.

**Mr McQuillan:**

Are there any figures to show that the amount of resources put into an area corresponds with the extent to which it has been getting better from, say, the early 1980s till now? I am thinking of places in my constituency such Ballysally and Dhu Varren. Back in the 1980s, you could not have given a Housing Executive house away in Ballysally. They were all lying empty. Nowadays, it is so good in Ballysally that everyone is looking for a house there, and there is a waiting list. Obviously, there has been a movement of some sort there. How would you describe what is happening there? Are there figures to explain what is happening in such areas?

**Dr Marshall:**

I do not have specific detail. Like mortality rates, there has been significant change in housing. Housing truly is an area in which changes can be seen. However, it is a relative measure, so there will be areas that, relatively, are still below the Northern Ireland average. That is the key point. We need to look in more detail at how those areas have changed over time, and that is the piece of analysis that we have to do next.

**Mr F McCann:**

Adrian raised a relevant point. Housing has advanced well in most areas over the years, but that does not mean that deprivation has changed in those given areas.

**Mr McQuillan:**

People are keener to live there now. I do not know the reason for that, but it must be more than just housing.

**Mr F McCann:**

Maybe it is the level of political representation.

**Mr McQuillan:**

Maybe that is what it is.

**Mr McLaughlin:**

I am sure that that helps. *[Laughter.]* Could a factor also be the changing pattern of social housing provision and the emergence and development of the private-rented sector — that is, stress on the social housing stock?

**Mr McQuillan:**

Could it also be because the hoods, who ran the show for so long on some of those estates, are moving away or being got rid of, no matter what side they were on?

**Mr F McCann:**

They have all moved in —

**Mr McQuillan:**

Into the Assembly, maybe. Perhaps it is because areas have been rid of those boys that it is simply better all round. How do you ever measure something like that?

**Dr Marshall:**

That concept of disorder came up in the consultation. People want a measure of that as well as of crime. We have measures of fires from the Fire and Rescue Service and measures of complaints to the police. We will also probably have to look at environmental health in terms of public health nuisances and noise complaints. We hope to try to include all that sort of detail next time round.

**The Chairperson:**

Thank you for your presentation. You have given us plenty of food for thought. On the back of what Mitchel said, I would hope that those types of statistics will influence policy and ensure that more targeted help is given, particularly to areas of need. We may invite you to give evidence again. Thank you.