

## Long Term Strategy for Measuring Deprivation – 2008 update

### *Background*

1. In August 2003, the Scottish Centre for Research on Social Justice (SCRSJ) published its final report on Measuring Deprivation in Scotland: Developing a Long-Term Strategy.

<http://www.scotland.gov.uk/Publications/2003/09/18197/26536>

2. The then Scottish Executive published its response to the Long Term Strategy (LTS) in September 2003, accepting all the recommendations made by the SCRSJ.

<http://www.scotland.gov.uk/Publications/2003/09/18198/26550>

3. Since the publication of the LTS four years ago, a considerable amount of progress has been made on addressing each of the recommendations through the development of the SIMD 2004 and SIMD 2006.
4. Some recommendations are still being explored, whilst others, after investigation and/or analysis by the Scottish Government, are no longer considered feasible and will not be pursued from now on. Other recommendations are no longer being pursued in relation to the Scottish Index of Multiple Deprivation as the work will be taken forward elsewhere in Scottish Government for example through the framework that will result from the *Discussion Paper on Tackling Poverty, Inequality and Deprivation in Scotland*.
5. The attached annex contains each of the recommendations made by the SCRSJ, alongside each recommendation is the original view and also a current response in italics.
6. This paper has been discussed with the SIMD external advisory group with the intention of producing a new strategy to reflect current thinking, data availability and methodology issues.

*Office of the Chief Statistician  
February 2008*

## Measuring Deprivation in Scotland: detailed recommendations

### 1. DEFINITIONS AND CONCEPTUAL FRAMEWORK

#### RECOMMENDATION

#### 2003 SCOTTISH EXECUTIVE RESPONSE

#### 2008 SCOTTISH GOVERNMENT UPDATED POSITION

1.1- adopts the definition of deprivation set out by Townsend as the starting point for its work

The Executive accepts this recommendation. There are no implications for the forward programme of work to develop deprivation measures.

*This will be retained as a general principle to inform future work.*

1.2 - recognises that poverty or lack of financial resources is the central cause of deprivation and that both should be captured in deprivation measures.

The Executive generally accepts this recommendation, but considers there may be a need to also consider other causes. There are no implications for the forward programme of work to develop deprivation measures.

*This will be retained as a general principle to inform future work*

## 2. INDIVIDUAL AND AREA APPROACHES

### RECOMMENDATION

### 2003 SCOTTISH EXECUTIVE RESPONSE

### 2008 SCOTTISH GOVERNMENT UPDATED POSITION

2.1 - develops both individual and area based measures of deprivation, as these are complementary rather than alternative approaches

The Executive accepts this recommendation. There are no implications for the forward programme of work to develop deprivation measures.

*The SG uses the SIMD as it's measure of area based deprivation and uses the HMRC/DWP measures based on median income as a definition of individual poverty. There is no intention of changing these definitions, however the issues behind this recommendation are covered in the "Discussion Paper on Tackling Poverty, Inequality and Deprivation in Scotland" and will be picked up in the resulting framework. This area will not be pursued in relation to the SIMD as it is not possible to measure individual deprivation at the small area level.*

2.2 - recognises that the two measures need to be based on rather different conceptual bases and adopts the conceptual framework for individual and area measures set out

The Executive generally accepts this recommendation, but considers it may be possible and desirable to bring the conceptual frameworks into greater alignment. This will be reviewed during the introduction of the individual-based approach. There are no short-term implementation implications for the area-based measures.

*See 2.1*

2.3 - uses a household survey approach to measuring individual deprivation

The Executive accepts this in principle, but recognises that the lead time for survey development means that it is unlikely that this can be introduced quickly. It will be considered along with

*See 2.1*

other aspects of the Executive's programme of surveys and other social research. Costs will be an important consideration.

2.4 - continues to monitor developments in linking data from existing administrative sources as a possible means of measuring individual deprivation in future

The Executive accepts this recommendation and will build it in to its on-going work programme. However, issues such as individual confidentiality make it likely that progress will not be possible in the near future.

***This will be retained as a general principle to inform future work as data linking may provide additional sources of small area level data, however as noted in 2.1 above, individual deprivation is being taken forward elsewhere in the SG.***

*Through SNS administrative data sources are continually being identified and quality assured for possible use in measuring deprivation. The SG hopes that in the future, although realistically still some time off, the Statistics Bill will allow us access to individual data to link for statistical purposes – which is not currently possible.*

2.5 - takes the recommended steps to ensure that comparisons can be made between individual and area-based measure on a valid basis.

The Executive accepts this recommendation.

***Achieved*** in that the income and employment domains can be used as a proxy for individual deprivation.

***Ongoing*** - OCS will continue to monitor new data sources and developments - see above.

### 3. SCOTTISH CONTEXT

#### RECOMMENDATION

3.1 - continues to draw on work on deprivation undertaken in the rest of Britain, given the fundamental similarities between Scotland and the rest of Britain in terms of the nature of deprivation, its underlying causes, social perceptions of the minimum acceptable standards and the institutional context.

3.2 - continues its approach of developing measures of deprivation which cover the whole of Scotland.

#### 2003 SCOTTISH EXECUTIVE RESPONSE

The Executive accepts this recommendation, which it will progress as part of its ongoing liaison with the other administrations. It will consider whether more formal arrangements for co-ordination of work on deprivation are desirable.

The Executive accepts this recommendation. There are no implementation implications.

#### 2008 SCOTTISH GOVERNMENT UPDATED POSITION

*This will be retained as a general principle to inform future work.*

*Ongoing. The SG meets every six months with representatives involved in measuring deprivation in England, Wales and Northern Ireland to share experience and best practice.*

*This will be retained as a general principle to inform future work.*

#### 4. DEVELOPING AREA-BASED MEASURES

##### RECOMMENDATION

4.1 - develops a national area deprivation index based on domains for: current income, other financial resources, housing, health, education, crime and social disorder, physical environment, geographic access and telecommunications, and social relations and social capital.

4.2 - makes the detailed changes to the relevant indicators specified in Section 4.1 and follows up on longer term actions

##### 2003 SCOTTISH EXECUTIVE RESPONSE

The Executive accepts this recommendation in principle. It will work to phase in the full set of domains as soon possible, but this is unlikely to be before 2006 and may take longer.

Responses are set out in the following section.

##### 2008 SCOTTISH GOVERNMENT UPDATED POSITION

***Work in progress:** Other parts of the SG are working on developing physical environment, financial inclusion, housing and social capital indicators. In order to be included in any future SIMD, the data must be judged against whether they add value to the output and conceptual framework of Townsend defined aspects of deprivation.*

##### ***Achieved:***

- *A crime domain was included in the SIMD in 2006, however, the SG will continue to develop this domain.*
- *Substantial improvements to geographic access domain were made in the 2006 SIMD with the inclusion of public transport times.*

##### ***Investigated and not being pursued further:***

*Having investigated telecommunications data for inclusion in the Access domain, the SG have concluded that available data are not appropriate for use in the SIMD (see 5.1.9).*

##### ***Ongoing***

4.3 - retains the use of wards for now but looks at moving to smaller "data zones" in future, possible using a two-tier approach

The Executive will aim to move to data zones as the analysis unit for the 2004 area-based measure. This will be subject to resolving issues on the supply and release of data. If it is not possible to resolve these in time to ensure the release of the 2004 measure in spring 2004, the Executive will continue the use of wards as the analysis unit.

**Achieved.** *Intermediate zones also created as locally appropriate aggregations of data zones – which, through their larger size are especially useful for allowing analysis of more potentially disclosive data together with SIMD.*

4.4 - summarises results using both domain and life-stages approaches and ensures that individual indicators can be disaggregated by life-stage groups and gender on a consistent basis

The Executive accepts the usefulness of the life-stage approach and will introduce this in 2004. The results may be released slightly later than the domain approach.

**Investigated and not being pursued further:**  
*OCS developed a child measure of area deprivation but, due to various limitations, outlined in a paper published in November 2005, the MDAG agreed that this approach will not be pursued any further by the SG.*  
<http://www.scotland.gov.uk/Resource/Doc/933/0022483.pdf>

*The Scottish Government are using the HMT/DWP measure for combined low income and material deprivation of children to measure individual deprivation.*

*Issues around the impact of poverty and deprivation by life stage and gender are picked up in the "Discussion Paper on Tackling Poverty, Inequality and Deprivation in Scotland".*

4.5 - publishes as many of the individual indicator scores as possible in order that people can assess absolute changes over time as well as being able to explore the relationships between each indicator and the overall index

The Executive accepts this recommendation in principle for implementation from 2004 onwards, but will need to ensure that the confidentiality of individuals is respected. The interaction with

**Achieved:** *Indicators are published at data zone level where possible within the constraints of disclosure control. This will continue as a **General Principle***

introducing a smaller geographic unit of analysis, the data zone, may impose constraints on which data can be released. If individual indicators can be released, they will be included in Scottish Neighbourhood Statistics.

4.6 - uses the same set of indicators from year to year but updates the set periodically and, in the change years, publishes results using both old and new sets of variables.

The Executive accepts this recommendation: its implementation will be affected by the timescale for introducing the full set of changes recommended in section 4.1.

*It is a **General Principle** that the same indicators will be used year on year as far as possible, however, quality issues and changes to data sets out with the SG's control (for example to the benefits system) results in it being impossible to re-run the SIMD using both old and new variables. Not only is it difficult to see the policy need for an old and new version of the index, it could also result in more disclosure control needing to be applied on the new variables due to overlapping time periods.*

4.7 - uses the same set of weights from year to year when combining indicators to determine domain scores but updates the weights periodically (at the same time as new data is brought in to the index) and, in the change years, publishes results using both old and new weights.

The Executive accepts this recommendation: its implementation will be affected by the timescale for introducing the full set of changes recommended in section 4.1.

*It is a **General Principle** that the same weights should be used each year as far as possible.*

***Ongoing.** The SIMD 2004 and 2006 used broadly similar weightings with the exception of the introduction of the crime domain, which resulted in a down-weighting of the housing domain. Sensitivity analysis took place to look at the effects of the change in weighting. In order to include new domains clearly the weighting will require periodic adjustment and the MDAG will re-assess the weights each time the SIMD is updated.*

4.8 - commissions further work to consider improving the "shrinkage" technique applied to scores for small

The Executive will aim to commission research on the "shrinkage" technique in 2003, but it is unlikely that results

***Achieved.** The University of Glasgow carried out a full evaluation of SIMD 2004 methodology. Among some of its recommendations was the removal of the shrinkage*

areas and re-considers the use of factor analysis for combining indicators into domain scores.

will available in time for the 2004 work. Any improvements suggested by the research would be included in the next update. The Executive will re-consider the use of factor analysis for the 2004 work.

*technique. This was accepted and the SIMD 2006 was calculated without shrinkage. Full recommendations on the methodology can be found at:*  
[www.scotland.gov.uk/simd2004evaluation](http://www.scotland.gov.uk/simd2004evaluation)

## 5.1 DOMAINS AND INDICATORS

### 5.1.1 Current income

#### RECOMMENDATION

- Retains benefits take-up rates as the means of identifying the population on low income in the short term, with the list of benefits updated to include Working Tax Credit and Pension Credit,

#### 2003 SCOTTISH EXECUTIVE RESPONSE

Working Tax Credit and Pension Credit will be introduced in 2003. As the 2004 measure will use 2002 data, these tax credits would be included in subsequent updates. The list of benefits/tax credits will be reviewed for each update and amended to reflect the current tax/benefit system.

#### 2008 SCOTTISH GOVERNMENT UPDATED POSITION

##### ***Ongoing:***

*SIMD 2004 income domain included Working Family tax credits. Before the compilation of 2006 SIMD this benefit was replaced by Working Tax and Child Tax credits but due to lack of data it was not possible to include these in SIMD 2006. WTC and CTC will be considered for inclusion in the next SIMD.*

*Working with DWP and HMRC, an alternative method of measuring the number of people on income related benefits and their dependants was agreed. The SG continues to work with HMRC and DWP to use the most up to date and most appropriate benefits and method of identifying dependents of people on benefits at each time period.*

***Achieved:*** *Pension credits were included in the 2006 Income domain.*

- Commissions research to explore how benefit take-up rates vary between areas with the aim of producing correction factors so that take-up rates can be used to estimate eligibility rates in the medium term,

The Executive will discuss this recommendation with the Department for Work and Pensions, which is responsible for the benefit system, and the Inland Revenue, which is responsible for tax credits. Changes are unlikely before 2006.

**Ongoing.** *DWP are only able to provide take-up rates at UK level and this, together with lack of a suitable methodology for applying any adjustment in the context of constructing a small area index mean that OCS has no means of taking this forward. Work has also been carried out by the National Audit Office to model benefit take up for Pension Credit but again this cannot be used at data zone level*

*Research by Professor Glen Bramley shows that once you take account of age structure and poverty, rural areas do not appear to have any lower take up rates than other areas. This suggests it's an older people, rather than a rural issue. It looks like a rural problem because rural areas have an aging population.*

*Issues around benefit take up are covered in the "Discussion Paper on Tackling Poverty, Inequality and Deprivation in Scotland" and will be taken forward through this forum. A necessary condition for the SIMD to use take up rate analysis would be systematic and reliable evidence on the differences between eligibility and take up by age, sex, urban/rural etc.*

- Monitors developments in estimating local income distributions as a potential replacement for benefits data as the basis for this element in the longer term,

The Executive accepts this recommendation, and will include such monitoring in its on-going programme, but results are unlikely to be available before 2006.

**Ongoing:** *Concerns over the robustness of early work on this type of estimation rules out its use in Scotland. However, OCS continue to monitor work being carried out, initiated by the Department for Communities and Local Government, estimating income for England, Wales and Northern Ireland. The SG may decide to undertake similar work for Scotland if the results from this project suggest it is feasible – including resolution of methodology problems.*

- Adds its voice to calls for the Inland Revenue to make data on incomes and wealth available for small areas
- The Executive has already supported moves to make a wider range of Inland Revenue data available, and will continue to do so.

***Ongoing.** SG continually liaises with HMRC and this has been raised with HMRC as part of wider data sharing agreements. SG have also responded to the Statistics Commission Review of Tax data use for Statistical Purposes and are playing an active role in the data sharing opportunities presented by the Statistics Bill.*

## 5.1.2 Other financial resources

### RECOMMENDATION

### 2003 SCOTTISH EXECUTIVE RESPONSE

### 2008 SCOTTISH GOVERNMENT UPDATED POSITION

- |   |  |   |
|---|--|---|
| <ul style="list-style-type: none"><li>• Discusses with DWP the possibility of providing estimates of numbers who have been on low income benefits for more than one year;</li></ul> | <p>The Executive will discuss with DWP: it is possible that information might be available for 2004, but 2006 is more likely.</p>                      | <p><i><b>Work in progress.</b> This information is now available and the conceptualisation and impact of using duration and the durations of interest will be considered for the next SIMD.</i></p>   |
| <ul style="list-style-type: none"><li>• Explores acquisition of commercial data on debt and savings levels;</li></ul>   | <p>The Executive will explore this, with the aim of including information in 2006.</p>   | <p><i><b>Ongoing.</b> There are currently no appropriate data sources, however, OCS will continue to monitor developments in this area with a view to including them in the future.</i></p>   |
| <ul style="list-style-type: none"><li>• Considers modelling incidence of financial stress and savings from household surveys;</li></ul>   | <p>The Executive will consider this, with the aim of including information in 2006.</p>  | <p><i><b>Investigated and not being pursued further:</b> Due to methodological difficulties such as circularity, OCS wishes to avoid using modelled survey data in the SIMD wherever possible. Household survey information can be used in combination with the SIMD to assess the financial stress on those living in deprived areas as a whole in comparison with the rest of Scotland.</i></p>   |
| <ul style="list-style-type: none"><li>• Considers the development of local cost of living measure in the longer term</li></ul>  | <p>The Executive will consider this, but this is a difficult and complex area, with a number of issues to resolve, and rapid progress is unlikely.</p> | <p><i><b>Investigated and not being pursued further:</b> Following investigation OCS has no plans to develop a cost of living indicator. This is partly due to the fact that issues such as differences between urban and rural areas are unlikely to be resolved by such a measure; but also indicators such as house price are not highly correlated and do not have a linear relationship with multiple deprivation – making such data difficult to apply to SIMD.</i></p> |

- Monitors the development of standardised money advice systems as a potential source of data on debt problems in future

The Executive will monitor this, with the aim of including information in 2006.

***Ongoing.** There are currently no appropriate data sources, however, OCS will continue to monitor developments in this area with a view to including them in the future.*

### 5.1.3 Housing

#### RECOMMENDATION

- focuses the housing domain on direct measures of inadequacy of housing, covering physical conditions, suitability and security of tenure;
- uses the Census in the short term to provide indicators of physical conditions and overcrowding;
- examines data on origins of homeless people applying to local authorities once it becomes available;

#### 2003 SCOTTISH EXECUTIVE RESPONSE

The Executive accepts this recommendation. There are no implementation implications.

The Executive will use 2001 Census data in the housing domain for the 2004 measure. In the longer term, indicators of physical condition should take into account the proposed Scottish Social Housing Standard (see <http://www.scotland.gov.uk/consultations/housing/mssh-03.asp> and any other current guidance on housing standards.

The Executive will implement this recommendation for 2004.

#### 2008 SCOTTISH GOVERNMENT UPDATED POSITION

*Work in progress.* The SIMD 2006 contained the same housing data as the SIMD 2004 as no data sources had become available at that time. The SG is currently working to identify and develop housing data sources that could be used in the next update to the SIMD.

*Achieved*

*Work in progress.* Suitable data were not available for SIMD 2004 or SIMD 2006 but may be available for the next update. The housing working group referred to below will look into this.

- gives the Housing Working Group within the Neighbourhood Statistics project the responsibility to develop appropriate measures of housing deprivation in the longer term.
- The Executive accepts this recommendation. There are no implications for the forward programme of work to develop deprivation measures.

***Work in progress.*** *The ScotStat Housing group no longer meets, however, the SG has set up a new working group to develop small area housing data including representatives from Housing Statistics, the new Planning Statistics Branch, Communities Scotland, GROS and Office of the Chief Statistician. It is hoped that this group will help us achieve the above recommendations.*

## 5.1.4 Health

### RECOMMENDATION

- specifies the aim of the domain as identifying areas with health problems attributable to deprivation;
- commissions further work to explore whether it is necessary to adjust all the health indicators to control for population structure;
- extends the Comparative Mortality Factor to cover the population over 75;
- adopts Census data on limiting long-term illness and general health as the basis of the Comparative Illness Factor (CIF) in the short term, and uses the SHS to update this in future years;

### 2003 SCOTTISH EXECUTIVE RESPONSE

The Executive accepts this recommendation. There are no implications for the forward programme of work to develop deprivation measures.

The Executive will explore this, with the aim of including adjustments, if required, in 2006.

The Executive will implement this recommendation for 2004.

The Executive will use 2001 Census in the 2004 measure, and will consider how this might be updated in future years.

### 2008 SCOTTISH GOVERNMENT UPDATED POSITION

*Achieved.*

*Achieved.* Colleagues in ISD Scotland have done some work looking at the correlation of the health indicators with age and sex structures. As a result, the hospital admissions indicators (emergency admissions, alcohol admissions and drugs admissions) were age-sex standardised in the SIMD 2006.

*Achieved.* The CMF, now known as the Standardised Mortality Factor includes all age groups.

*Achieved.* Census 2001 data were used in the CIF in SIMD 2004. In order to update the CIF, benefits data were used in the SIMD 2006. Benefits data for attendance allowance, disability living allowance, severe disablement allowance and incapacity benefit are very highly correlated with census data on limiting long term illness and general health. It is recognised that there may be take up rate issues with using benefits data however there is not enough evidence available to allow us to model this effect.

- monitors the development of small area data on life expectancy and healthy life expectancy as alternatives to existing mortality and morbidity indicators;

The Executive will monitor this, but it is unlikely that information will be available before 2006 and a longer timescale may be more realistic.

***Investigated and not being pursued further:*** ISD produce healthy life expectancy, however it is derived from the Household Survey and not available at data zone level.

*GROS produce life expectancy, more work is required to determine how reliable the data are at data zone level. This concept is essentially being covered by the mortality indicator anyway.*
- seeks to include an additional indicator on smoking rates.

The Executive will monitor this, but it is unlikely that information will be available before 2006 and a longer timescale may be more realistic.

***Investigated and not being pursued further:*** OCS has looked in to this and small area data on smoking rates are not currently available, below the modelled Intermediate Geography figures on SNS. The SG will continue to monitor progress in this area – as part of the general development of the evidence base.

### 5.1.5 Education, skills and training

#### RECOMMENDATION

- specifies that the focus of this domain should be on low educational achievement or low skills as both an outcome and a cause of poverty and deprivation;
- bases the pupil exam performance indicator on an average for three years;
- improves the indicator on absence rates by taking advantage of new pupil-level data on this area;
- replaces the indicator on qualifications for working age adults by direct figures from the Census and, in future, updates these figures using a revised method;

#### 2003 SCOTTISH EXECUTIVE RESPONSE

The Executive accepts this recommendation. There are no implications for the forward programme of work to develop deprivation measures.

The Executive will implement this recommendation for 2004.

Pupil level information on attendance will first be collected for the 2003-4 school session and will not be available in time for the 2004 measure. The Executive will implement this recommendation for the 2006 update.

The Executive will use 2001 Census data for 2004, and probably also for 2006, but will aim to introduce a revised method thereafter.

#### 2008 SCOTTISH GOVERNMENT UPDATED POSITION

*Achieved.*

*Achieved.*

*Achieved. In SIMD 2006 was extended to all school pupils, not just secondary schools.*

*Work in progress. Census data on working age adults with no qualifications were used in SIMD 2004 and again in SIMD 2006. Labour Force Survey data are not reliable enough at data zone level to use in the SIMD. In future OCS is likely to adjust census 2001 proportions using local authority estimates from the LFS to account for changes in this indicator since 2001.*

- improves coverage of the working age and older population by estimating the proportion of adults with poor literacy or numeracy.

The Executive will consider how this might be done, but it is unlikely that information will be available until after 2006.

*Investigated and not being pursued further: The availability of Literacy and numeracy data at small area level was investigated by OCS for the SIMD, without success. This is now a National Performance Framework Indicator and data will be developed for monitoring, however it is unlikely that this will go down to data zone level.*

### 5.1.6 Employment

#### **RECOMMENDATION**

- considers whether the domain is intended as a measure of "exclusion from the world of work" (as at present) or as an indirect measure of deprivation;
- if the latter) measures the opposite of the (full-time equivalent) employment rate;
- (if the former) retains the existing benefits-based measure;
- in any case, uses benefits data averaged over four successive quarters to remove problems of seasonal fluctuations in unemployment;

#### **2003 SCOTTISH EXECUTIVE RESPONSE**

The Executive will retain the employment domain, as a measure of exclusion from the world of work, and continue the use of the existing measures. In the longer term, the domain will move to measuring long-term or persistent unemployment, using a definition of long-term employment consistent with other measures. The Executive will review the available information on seasonal fluctuations in unemployment and consider whether averaging would be helpful.

#### **2008 SCOTTISH GOVERNMENT UPDATED POSITION**

*Achieved. The employment domain continues to be a measure of exclusion from the world of work and claimant count data are averaged over 12 months. This has been one of the most stable domains and SG will continue to maintain it as such whilst monitoring the possible inclusion of persistent unemployment.*

### 5.1.7 Crime and social order

#### RECOMMENDATION

- bases the domain on a combination of crime incidence data, fear of crime measures, incidence of social disorder or incivilities, and fire service data on malicious fires and false call-outs;
- estimates crime incidence from police recorded crime statistics and crime survey data;
- works with police forces to make recorded crime statistics available for small areas on a consistent basis in the longer term;

#### 2003 SCOTTISH EXECUTIVE RESPONSE

The Executive accepts this recommendation. There are no implications for the forward programme of work to develop deprivation measures.

The Executive will consider this, but it is unlikely that information will be available before 2006 and a longer timescale may be more realistic.

The Executive will consider this, but it is unlikely that information will be available before 2006 and a longer timescale may be more realistic.

#### 2008 SCOTTISH GOVERNMENT UPDATED POSITION

***Work in progress:** A major achievement for the SIMD 2006 was that it included, for the first time, recorded crime rates from police data. Crime survey data are not appropriate for use in the SIMD due to small sample sizes.*

*OCS will continue to monitor improvements to small area fire data.*

*Antisocial behaviour and incivilities data are not currently available at the small area level and OCS will continue to monitor developments in this area.*

*Fear of crime data are available from surveys only and are not correlated with incidence of crime. OCS will not be pursuing fear of crime data for the SIMD.*

***Achieved.***

*– see above*

***Ongoing.** The SG will continue to work with police forces to quality assure and develop small area crime data and to improve consistency across forces.*

- estimates fear of crime and incidence of social disorder or incivilities using survey data modelled to small area level;

The Executive will consider this, but it is unlikely that information will be available before 2006 and a longer timescale may be more realistic.

***Investigated and not being pursued further:*** *Fear and incidence of crime are not highly correlated. Survey data are not reliable for use at data zone level.*
- works with the fire service to secure data on malicious fires and false call-outs.

The Executive will consider this, and it may be possible to secure data for 2004. However, the data should be included in an area-based measure only when the complete domain can be introduced. In the meantime, data can be released through Scottish Neighbourhood Statistics.

***Work in progress.*** *Small area fire data were not available for SIMD 2004 or SIMD 2006. It is possible that data may be available for the next SIMD update. OCS will continue to monitor its availability.*

### 5.1.8 Physical environment

#### RECOMMENDATION

- bases the domain on measures of air, water or noise quality, as well as proximity to positive or negative features;
- looks to develop a measure of access to open space or play areas for children.

#### 2003 SCOTTISH EXECUTIVE RESPONSE

The Executive accepts this recommendation in principle and will aim to introduce a physical environment domain. There are links to environmental justice which need to be considered. The soonest a physical environment domain could be developed is for 2006 and a longer timescale may be more realistic.

The Executive will consider this, but it is unlikely that information will be available before 2006 and a longer timescale may be more realistic.

#### 2008 SCOTTISH GOVERNMENT UPDATED POSITION

*Work in progress.* Air quality and proximity to polluting sites and derelict land were available at data zone level in 2006, however, issues around the quality of these data and their suitability for inclusion in the SIMD prevented their inclusion in the SIMD 2006. These data were made available in SNS.

*As outlined in section 4.1 above the SG will continue to monitor developments in environment data for the next update to the SIMD.*

*Work in progress.* Small area data on access to open space are not currently available, however, it is likely that these can be developed for future updates to the SIMD and the SG will continue to monitor developments in this area.

### 5.1.9 Geographic access and telecommunications

#### RECOMMENDATION

- changes the name of the domain to "geographic access and telecommunications", reflecting the broader focus;
- changes the list of services to which distance is calculated as discussed;
- moves to measuring distance in terms of drive or travel times rather than road/ferry distance in the short term, and consider the use of generalised travel costs in the longer term;

#### 2003 SCOTTISH EXECUTIVE RESPONSE

The Executive accepts this recommendation. There are no implications for the forward programme of work to develop deprivation measures.

The Executive will implement this recommendation for 2004.

The Executive will move to measuring distance in terms of travel times for 2004 and will consider the use of generalised travel costs for 2006, though a longer timescale may be more realistic.

#### 2008 SCOTTISH GOVERNMENT UPDATED POSITION

*Investigated and not being pursued further:* Reference to telecommunications was removed from this domain in SIMD 2006. Upon investigation, it was found that telecommunications data e.g. access to broadband, are not suitable for use at the data zone level. In addition current coverage is almost 100% across Scotland and improvement to such indicators is unlikely due to physical obstacles such as the motorways and remoteness.

*Achieved.* The list of services was reviewed by a working group for the SIMD 2006. Secondary schools and shopping facilities were added, from a list of recommended services. Other recommended services were not feasible due to data quality and availability

*Achieved.* Road travel times were used in SIMD 2004. In SIMD 2006, this was expanded to incorporate ferry waiting times and public transport travel times.

- includes a measure of geographic access to employment and measures of the availability of telecommunications infrastructure;

The Executive will aim to implement this recommendation for 2006.

*Telecomms – see above.*

**Ongoing.** *Employment was investigated for SIMD 2006, however, a suitable definition and data set for the location of centres of employment was not available at that time. The issues are not just around employment centres as the levels of qualifications of those looking for employment and the skills level of actual vacancies would need to be taken into account. The SG will continue to monitor progress in this*
- continues to explore how wider issues of access to services, service quality and service availability might be captured.

The Executive will consider this, but it is unlikely that information will be available before 2006 and a longer timescale may be more realistic.

**Ongoing** *The SG will continue to consider this.*

### 5.1.10 Social relations and social capital

#### RECOMMENDATION

- monitors the work led by ONS to develop measures of social capital for small areas and considers including all or some of those measures within the index.

#### 2003 SCOTTISH EXECUTIVE RESPONSE

The Executive is already represented on the Working Group overseeing the ONS work to develop measures of social capital and will continue to be involved. It will consider whether such measures can be introduced for 2006 but a longer timescale may be more realistic.

#### 2008 SCOTTISH GOVERNMENT UPDATED POSITION

*Ongoing. Suitable small area data were not available for the SIMD 2006.*

*Some of the elements covered by the “Discussion Paper on Tackling Poverty, Inequality and Deprivation in Scotland” and any resulting framework may be relevant for inclusion in the SIMD and OCS will continue to monitor the work of other areas of the SG in this area. OCS will also continue to monitor work being taken forward by the UK Government on wellbeing, and would consider including this in the SIMD provided it meets the relevance and reliability criteria.*

## 6. DEVELOPING INDIVIDUAL MEASURES

### RECOMMENDATION

- 6.1 - determines the most appropriate standard to use to assess levels of deprivation (the list of "necessities") following original qualitative and quantitative research in Scotland;
- 6.2 - recognises the high level of demand for data on individual deprivation down to the level of local authority areas and, consequently, collects data on deprivation through the Scottish Household Survey and publishes it annually;
- 6.3 - tracks change over time using a range of thresholds or cut-off points to determine levels of deprivation;
- 6.4 - uses a single standard to measure deprivation for all adults and a separate standard to measure deprivation for children;
- 6.5 - ensures that it is possible to disaggregate results (at national level) by age, gender, household type, ethnicity, and (if possible) disability and sexual orientation;
- 6.6 - carries out further research on the demand for separate standards for individual groups once the results of using a single standard have been published;
- 6.7 - maintains the same standard for consecutive years but reviews the standard periodically (at least every five years).

### 2003 SCOTTISH EXECUTIVE RESPONSE

The Executive accepts these recommendations in principle.

However, the development of the approach will take several years. We will need to take into account developments in the UK or Europe, for comparability. It is unlikely that it could be introduced before 2006 and a longer timescale may be more realistic.

The lead time for developing new surveys or changing existing ones can be considerable, with a further period before results become available and fit for purpose.

The costs of developing the approach will also need to be considered.

The Executive believes that results for the area-based and individual measures should be released and updated on the same timescales. This implies that the standard might be updated at 6 yearly intervals, rather than the 5 years suggested in R6.7.

### 2008 SCOTTISH GOVERNMENT UPDATED POSITION

*See section 2 (Individual and area approaches)*

*This does not fit with the primary purpose of SIMD - to measure deprivation at the small area level. Agreed definitions of poverty and deprivation at individual level are in use in the Scottish government. Future work on tackling these issues will be developed by the SG through the development of a framework resulting from the "Discussion Paper on Tackling Poverty, Inequality and Deprivation in Scotland".*

## 7. RELATIONSHIPS WITH OTHER MEASURES

### RECOMMENDATION

- 7.1 - liaises with the Department of Work and Pensions over the proposed inclusion of child deprivation indicators in the Family Resources Survey to ensure compatibility with any measure of child deprivation developed in Scotland, if appropriate;
- 7.2 - monitors development of the work on deprivation indicators by Eurostat.

### 2003 SCOTTISH EXECUTIVE RESPONSE

The Executive has established arrangements for liaison with the Department for Work and Pensions. It will continue to keep in touch with its work to develop measures of child deprivation.

The Executive will monitor such developments as part of its continuing programme of work.

### 2008 SCOTTISH GOVERNMENT UPDATED POSITION

*Ongoing*

*Ongoing*