

Welsh Index of Multiple Deprivation 2014 (WIMD 2014)

Guidance on use

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What is WIMD?

The Welsh Index of Multiple Deprivation (WIMD) is the Welsh Government's official measure of relative deprivation for small areas in Wales. It is designed to identify those small areas where there are the highest concentrations of several different types of deprivation. It is a National Statistic and is produced by statisticians at the Welsh Government.

What is an Index?

An index is a group of separate measurements which are combined into a single number. They are designed to show changes in a complicated variable like industrial output, prices or in this case deprivation. An index then allows comparisons between different values – in the case of WIMD, the comparison is between small areas (see below).

WIMD ranks all small areas in Wales from 1 (most deprived) to 1,909 (least deprived).

What does WIMD measure?

WIMD is a measure of multiple deprivation that is both an area-based measure and a measure of relative deprivation.

WIMD is currently made up of eight separate domains (or types) of deprivation. Each domain is compiled from a range of different indicators.

- a) Income
- b) Employment
- c) Health
- d) Education
- e) Access to Services
- f) Community Safety
- g) Physical Environment
- h) Housing

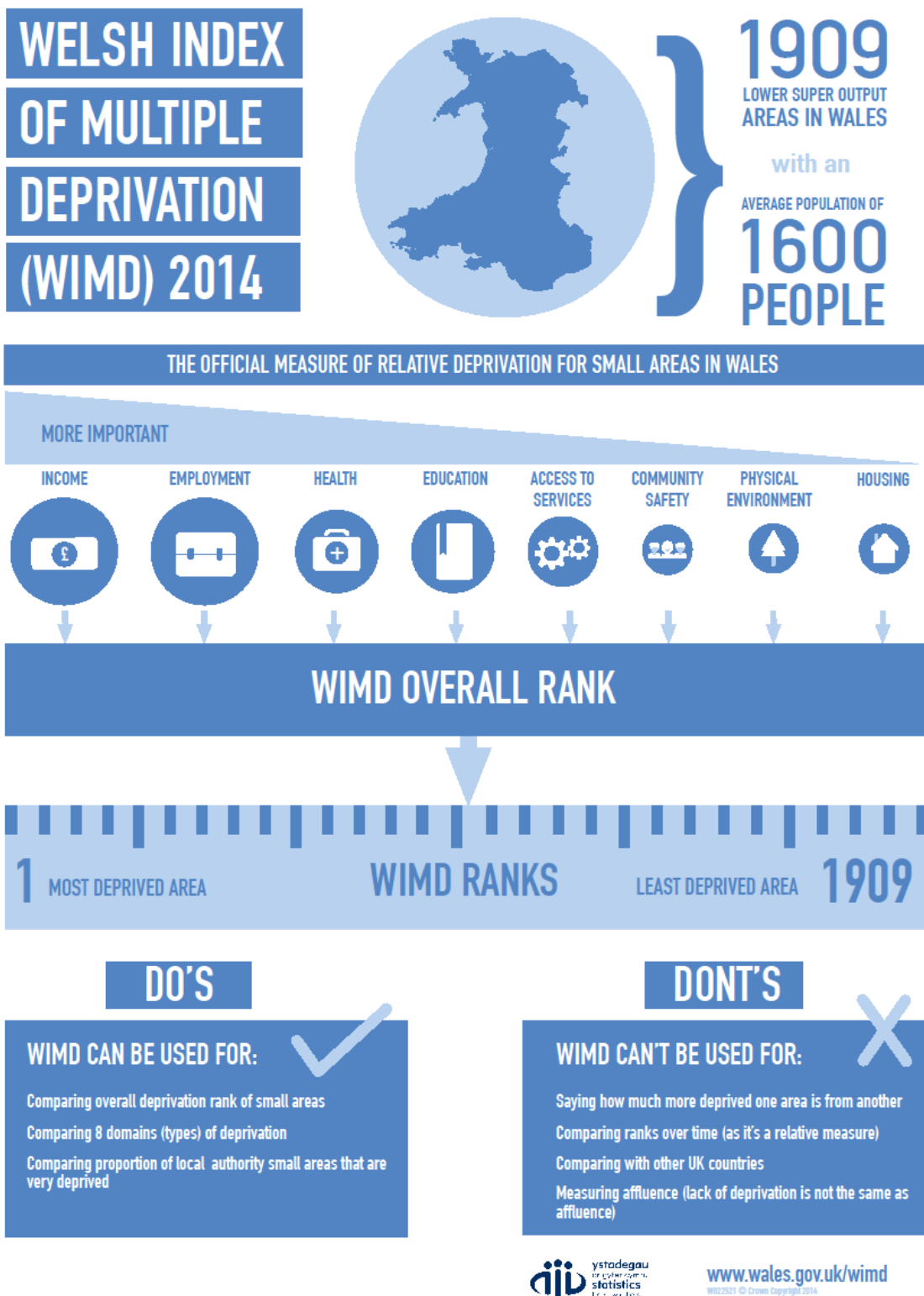
Deprivation is the lack of access to opportunities and resources which we might expect in our society. The domains listed above relate to both material and social aspects of deprivation. Material deprivation is having insufficient physical resources – food, shelter, and clothing – necessary to sustain a certain standard of life. Social deprivation refers to the ability of an individual to participate in the normal social life of the community.

Multiple Deprivation refers to more than one type of deprivation. An area is multiply deprived if, for more than one of these domains, the area has a concentration of people experiencing that type of deprivation. Generally speaking, the greater the number of domains for which there are high concentrations of deprivation then the greater the overall deprivation in an area. This does not necessarily mean that the *same* people suffer multiple types of deprivation in the area, although we would expect there to be significant overlap.

Area-based measure: WIMD is calculated for all small areas (Lower layer Super Output Areas – LSOAs) in Wales. Following the 2011 Census, 1909 LSOAs were defined in Wales and they have an average population of 1600 people. WIMD is based on indicators that consider the aggregate characteristics of the people living in the area and, in some cases, the characteristics of the area itself (for example, the Physical Environment domain).

Relative measure: The Index provides a way of identifying areas in the order of least to most deprived. It does not provide a measure of the level of deprivation in an area, but rather whether an area is more or less deprived relative to all other areas in Wales; so we can identify which areas are more (or less) deprived than others, but not by how much.

How is WIMD constructed?



What can WIMD be used for?

WIMD can be used for:

- Comparing overall deprivation ranks for each small area or a group of them (like those in a Local Authority), so that they can be put in order from the most to the least deprived;
- Comparing ranks among the separate domains of deprivation for the small areas;
- Comparing two or more local authorities (or other groups of aggregated small areas) by looking at the proportion of the small areas in the Local Authority in the most deprived (say) ten per cent in all of Wales;
- By using the underlying indicator data (although not the WIMD rankings themselves) it is possible to analyse change over time (published on StatsWales).

Important applications of previous indexes include:

- Development and monitoring of the Communities First programme;
- Calculation of school families and as a contextual factor in annual school value added calculations;
- Measurement of health inequalities;
- Local government needs assessments;
- Planning of neighbourhood police resourcing.

What are the limitations of WIMD?

It is important to remember that WIMD is not the only way to measure deprivation. WIMD has been developed for a particular purpose which is; to measure concentrations of several types of deprivation at a small area level.

Deprived individuals: There can be individuals in deprived areas that would not be considered deprived; and there can also be individuals that would be considered deprived in the least deprived areas. Around 1 in 5 of the people in income benefit households live in the most deprived 10 per cent of areas in Wales. This means that although it is true to say that deprivation is much more concentrated in some areas than others, 4 out of 5 people in income benefit households live outside these areas. This is important to remember when targeting resources, as targeting those 'most deprived' areas leads to some households in those areas who may not be deprived being included and many deprived households living in less deprived areas missing out.

Individuals who are deprived in several ways: WIMD does not identify individuals who are deprived in several ways, rather, it identifies areas where there are concentrations of several different types of deprivation. At present, we are not able to link the data included in the Index at an individual person level in order to understand the extent of multiple deprivation for individuals.

Absolute deprivation: WIMD doesn't give a measure of the amount of deprivation in an area, for example it does not allow for statements such as "area A is twice as deprived as area B". The ranks can only be used to say "area A is more deprived than area B". This also means that even if an area's rank remains the same in successive WIMD publications, the level of deprivation in that area could have gone up or down but just not enough to affect the comparison with other areas. However, the analysis of the individual indicators within WIMD does allow for such comparisons between areas and over time.

Affluence: It is important to remember that a lack of deprivation is not the same as affluence. The least deprived area is not necessarily the most affluent area in Wales. This also means that the ability of WIMD to discriminate effectively between areas is strongest for the most deprived areas and extreme care should be taken in drawing conclusions about the differences between less deprived areas.

Deprivation across the UK: Ranks are not comparable with the Indices of Multiple Deprivation (IMD) from the other UK countries. Further information on the issue of comparing IMDs across the UK can be found on the Neighbourhood Statistics website¹.

Comparisons over time: As the WIMD is a relative index, it's important not to compare ranks from one edition of WIMD to another. WIMD indicator data is published annually on StatsWales, where possible, in order to allow comparison over time.

Aggregating to larger geographies

It is not possible to aggregate the ranks to larger geographies by taking an average of the ranks of the small areas. This is because of the way in which the Index is constructed. There are two ways of comparing larger geographies:

- (a) Calculate the proportion of small areas in a larger geography which are in the most deprived (say) 10 or 20 per cent of areas in Wales. This has been done for local authorities in our analysis and interactive product.
- (b) Use the underlying individual indicators, which can be aggregated (as published on StatsWales).

¹<http://www.neighbourhood.statistics.gov.uk/dissemination/Info.do?page=analysisandguidance/analysisarticles/indices-of-deprivation.htm>

What are the deprivation scores?

The overall Index and domain ranks are the main output for WIMD. As part of the process for calculating these ranks, scores are produced. These are published for two reasons only:

- For transparency (so that users have access to all stages of construction);
- So that users can experiment with different weighting systems for the Index, if required.

The WIMD scores are a stage in the construction of the Index and not a product. The scores do not represent a *level* of multiple deprivation (for example, if area A has twice the score of area B, this does not necessarily mean that area A is twice as deprived as area B). This means that scores do not contain any more information on levels of multiple deprivation than the ranks do. For levels of deprivation, underlying indicator data must be used.

How does WIMD 2014 differ from WIMD 2011?

The methodology used within WIMD hasn't changed. The domains have also stayed the same. There have been a small number of changes to individual indicators (or the inclusion of new indicators) within the Education, Access to Services, Community Safety and Housing domains. Full detail is available in the publication and technical report.

Further Information

Information on WIMD will be published on 26 November 2014 at:

www.wales.gov.uk/wimd