

Summary of Key Index Changes from WIMD 2005 to WIMD 2019

This paper summarises changes to the Welsh Indices of Multiple Deprivation between 2005 and 2019. During this time there have been five full WIMD updates published in 2005, 2008, 2011, 2014 and 2019.

The general structure and methodology of WIMD has remained relatively constant since it was first produced in 2000 by the Department of Social Policy and Social Work at the University of Oxford. However, the design of each index iteration has varied slightly to give the best possible snapshot of relative deprivation at the time of publishing. This paper only looks at changes since WIMD 2005 as this was the first Index based on the current geography of Lower Layer Super Output Areas (LSOAs).

Most of the design changes since 2005 can be described as either changes to the

Domains (types) of deprivation and/or the weight that they contribute to the overall index

Or;

Underlying indicator data included in each domain.

Lower Layer Super Output Areas (LSOAs)

There have also been changes to the small areas (Lower Layer Super Output Areas) that have been assigned WIMD ranks since 2005. This is due to boundary changes to some of these areas following the 2011 Census. There were 1,896 LSOAs defined following the 2001 Census and 1,909 LSOAs defined following the 2011 Census.

More information on LSOAs can be found on the <u>Census Geography page of the Office for</u> <u>National Statistics website</u>. Descriptions of the types of LSOA boundary changes between the 2001 and 2011 Census can be found in the <u>WIMD 2014 Report</u>, and more detailed descriptions on the <u>data.gov.uk webpages.</u>

Summary of Index Changes

The table below provides a summary of high-level changes implemented in each index iteration since WIMD 2005.

Detailed information on the design of each WIMD iteration can be seen in their respective Technical Reports, found in the <u>WIMD Index Guidance and Historical Data Archives</u> on the Welsh Government website. The <u>guidance article on analysing indicator data</u> provides information on comparability of indicators over time.

The Consultation documentation published for the <u>WIMD 2014</u> and <u>WIMD 2019</u> updates provides information on why data changes were made and the issues that were considered in making these changes.

For full information on WIMD, please visit <u>gov.wales/wimd</u> For queries, please contact <u>stats.inclusion@gov.wales</u>

Summary of Index Changes from WIMD 2005 to WIMD 2019

WIMD Index	LSOA boundaries	Changes to Domains since previous index	Changes to the underlying indicator data since the previous index ¹
<u>2005</u>	2001 Census	Baseline index year	Baseline index year
2008	2001 Census	Community Safety domain added to index; 5% weighting in overall index. Income and Employment domain weights reduced from 25% to 23.5% each. Health and Education domain weights reduced from 15% to 14% each.	 Income and Employment domains Minimal methodological change but changes to the welfare system mean that eligibility thresholds and criteria for some benefits have changed. Health domain New indicator: Singleton Low Birth Weight. Education domain New indicators: Primary School Absence Rate, Proportion of people aged 16-17 not in Further Education (FE) & Proportion of people not entering Higher Education (HE) aged 18-19 (formerly part of a combined indicator measuring people aged 16-18 in Further or Higher Education). Access to Services domain New indicator: Average travel time to Transport Nodes (transport services) Methodological changes: Average times used to calculate indicator values, as opposed to threshold times. Physical Environment domain

¹ Small changes to the numerators, denominators and methodology used to calculate each indicator, as well as changes to the indicator weights within each domain, are not included in this summary. This information is included in the Technical Report for each index.

WIMD Index	LSOA boundaries	Changes to Domains since previous index	Changes to the underlying indicator data since the previous index ¹
			Methodological changes: Improvements were made to the Air Pollution, Flood Risk
			and Proximity to Waste Disposal & Industrial Sites indicators.
			Community Safety domain
			New domain with four indicators: Police Force Recorded Crime (burglary, criminal
			damage, theft, and violent crime), Percentage of Youth Offenders, Percentage of Adult
			Offenders, Fire Incidence.
<u>2011</u>	2001 Census	No changes	Minimal change - No methodological changes, except where data limitations made
			this unavoidable. ²
<u>2014</u>	2011 Census	No changes	Income and Employment domains
			Minimal methodological change but changes to the welfare system mean that eligibility
			thresholds and criteria for some benefits have changed.
			Education domain
			New indicators: Key Stage (KS) 4 Level 2 Inclusive (L2I), KS4 Capped Point Score
			(CPS), Repeat Absenteeism.
			Dropped indicators: KS3 Average Point Score (APS), KS4 APS, Primary School
			Absence Rate and Secondary School Absence Rate.
			Access to Services domain
			New indicators: Average travel times (in minutes) by private and public transport to a
			Pharmacy, Average travel times by private transport to a Secondary School, Food

² Ranks for the Access to Services and Housing domains were the same in 2008 and 2011 as data was not updated for these domains when the 2011 index was produced.

WIMD Index	LSOA boundaries	Changes to Domains since previous index	Changes to the underlying indicator data since the previous index ¹
			Shop, GP Surgery, Post Office, Primary School, Public Library, Leisure Centre and Petrol Station.
			<i>Dropped indicators:</i> Average travel times by public transport to an NHS Dentist and Transport Nodes.
			Community Safety domain
			New indicators: Anti-Social Behaviour.
			Dropped indicators: Percentage of Adult Offenders, Percentage of Youth Offenders.

WIMD Index	LSOA boundaries	Changes to Domains since previous index	Changes to the underlying indicator data since the previous index ¹
2019	2011 Census	Income and Employment domain weights reduced from 23.5% to 22% each. Health domain weight	Income and Employment domains Changes to the welfare system mean that eligibility thresholds and criteria for some benefits have changed. From the 2016 indicator data update, some Universal Credit claimants were included (and in 2017, their dependents). ³ Health domain
		increased from 14% to	<i>New indicators:</i> GP-recorded Chronic Conditions, Premature Death Rate, GP- recorded Mental Health Conditions, Children aged 4-5 who are Obese.
		Housing domain weight increased from 5% to 7%	 Dropped indicator: All-Cause Death Rate (for all ages). Education domain New indicators: Foundation Phase APS, KS4 APS, Proportion of KS4 leavers entering HE. Dropped indicators: KS4 L2I, KS4 CPS, Proportion of people not entering HE aged 18-19.
			Access to Services domain New indicators: Average travel times by public and private transport to Sport Facilities (replacing travel times to Leisure Centres due to a change in definition), Percentage unavailability of broadband at 30Mb/s. Methodological changes: New methodology for calculating travel times. Housing domain

³ Some indicators are updated between full index updates; see the <u>guidance article on analysing indicator data</u> for more details.

WIMD Index	LSOA boundaries	Changes to Domains since previous index	Changes to the underlying indicator data since the previous index ¹
			New modelled indicator: Likelihood of Poor Quality Housing
			Dropped indicator: Lack of Central Heating (from 2011 Census)
			Physical Environment domain
			<i>New Indicators:</i> Population Weighted Average Concentration Value for Nitrogen Dioxide (NO ₂), Particulates <10µm, and Particulates <2.5 µm, Proximity to accessible Natural Green Space, Ambient Green Space Score.
			<i>Dropped Indicators:</i> Air Quality Concentrations, Air Emissions and Proximity to Waste Disposal and Industrial Sites.
			Methodological Changes: Surface water flooding now included in Flood Risk indicator.