STATISTICS, DOCUMENT

Proposed indicators for the Welsh Index of Multiple Deprivation (WIMD): 2025

Report describing proposed indicators for the Welsh Index of Multiple Deprivation (WIMD) 2025 with accompanying feedback survey.

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Introduction

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.

The last index was published in 2019. We are currently planning for an updated index to be published in late 2025. The individual indicators underlying WIMD are the building blocks for the whole index and, following a review of available data, we propose to update most indicators and potentially add some new indicators for WIMD 2025. We are seeking user views on these indicator proposals.

Since the lead-up to the last index in 2019, there has been significant change to the context and data sources for a small area measure of deprivation in Wales. Our review of indicators considered the impact of the coronavirus (COVID-19) pandemic on data availability and trends, as well as changes to the policy landscape which underpins certain indicators, such as the rollout of Universal Credit (UC) and the new Curriculum for Wales. Elsewhere, data developments including Census 2021 results have led us to propose improvements or additions to WIMD for 2025.

We also want to know which of our outputs (reports, datasets and other analytical tools) were the most useful for our last index, and what outputs you would like to see for WIMD 2025.

The survey begins on 11 November 2024, closes on 16 December 2024, and is open to all individuals and organisations. A summary of responses received to this survey will be published in spring 2025.

The questions we seek feedback on are on the SmartSurvey website, and

are also presented at the appropriate point within this report and listed together in annex 3. Respondents are not required to answer all questions. **Responses should be made via SmartSurvey**. If you need any support in responding, please get in touch via **stats.inclusion@gov.wales**.

A webinar (online seminar) will be held on 20 November and 3 December. This will include a presentation on the proposals together with an opportunity to ask questions. **Please visit the WIMD website to register**.

Background

What does WIMD measure?

WIMD is the Welsh Government's official measure of relative deprivation for small areas in Wales. It is an accredited Official Statistic and is produced by statisticians at the Welsh Government. It is designed to identify those small areas where there are the highest concentrations of several different types of deprivation. As such, WIMD is a measure of multiple deprivation that is both an area-based measure and a measure of relative deprivation. These key terms are defined more fully below.

Deprivation is the lack of access to opportunities and resources which we might expect in our society. WIMD is currently made up of eight separate domains (or types) of deprivation, each compiled from a range of different indicators. 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, covering:

- income
- employment
- health
- education

- access to services
- community safety
- physical environment
- housing

The index indicates relative deprivation, providing a way of identifying areas in the order of least to most deprived, rather than a measure of the absolute level of overall deprivation in an area. This also means that ranks should not be directly compared across multiple iterations of the index, as an area could experience a change in relative rank despite no change in absolute levels of deprivation in that area.

Uses and limitations

Knowing how deprivation is distributed across Wales is important for many organisations when developing area-based policies, programmes, and funding. WIMD can be used (often alongside other information) to inform these decisions and give a greater understanding of deprivation patterns within Wales. WIMD is also widely used as a research tool for analysis of inequality of outcomes, most commonly by analysing other datasets including location by decile or quintile of area deprivation.

However 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 deprivation at a small area level. Crucially, it does not identify all 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.

Overall WIMD ranks and scores are not comparable with the indices of multiple deprivation from other UK countries. We continue to work with the relevant governments and departments to explore opportunities for alignment where

possible.

For more information on what WIMD is, how it can and cannot be used, see the WIMD 2019 guidance report.

How the index is constructed

WIMD is calculated for all Lower layer Super Output Areas (LSOAs) in Wales. As part of the Census 2021 update, the Office for National Statistics (ONS) made some changes to Output Area geographies, and we will produce WIMD 2025 on the new basis. There is now a total of 1,917 LSOAs in Wales compared with 1,909 LSOAs after Census 2011 (and used in WIMD 2019). 1,837 of the Welsh LSOAs remained unchanged, 45 have been merged into 22 new LSOAs, and 27 have been split into 58 new LSOAs.

The three main components of the index

1. The underlying indicators, which are directly measurable, and which are combined to create the domain ranks.
2. The ranks of the eight types of deprivation, or domains, from which the overall Index is constructed.
3. The index itself, which is a set of ranks.

All these components are calculated for each of the small areas (LSOAs) in Wales. **The overall WIMD ranks, ranks of the eight domains of deprivation, and indicator datasets are published on the StatsWales website**.

The preferred method for combining indicators within domains, applicable where there are three or more indicators, is to use a statistical technique called factor analysis. This seeks to find a single underlying construct or factor for the domain by analysing the correlation between indicators.

There is more detail on how domains are combined into the overall index, including the broad approach proposed for WIMD 2025, in the section on weighting of domains.

More detailed information on the methodology behind WIMD can be found in the WIMD 2019 technical report and its annexes.

Development of proposals

There are three over-arching groups shaping plans for WIMD 2025. A steering group of senior Welsh Government policy officials sets the policy direction. A project board of senior analysts oversee the plans, production, and dissemination. An external advisory group provides expert advice on proposals.

To explore and quality assure indicators for WIMD 2025, we have established seven separate expert domain groups, with income and employment grouped together. Each domain group includes analytical experts from the Welsh Government, local authorities, other public bodies (e.g. Natural Resources Wales (NRW), Public Health Wales (PHW)) and academics along with policy representatives from the Welsh Government where appropriate.

Each group considered the WIMD 2019 indicators for the domain, the issues raised in the 2019 consultation, and potential new data sources. A full list of WIMD 2019 indicators is shown in annex 2, with detailed technical information in the **WIMD 2019 technical report**.

The domain groups have considered whether proposed indicators meet a list of indicator criteria. This is detailed in full in annex 1, but in summary WIMD indicator data need to be robust at small area (LSOA) level and cover the whole of Wales. Ideally indicators should directly measure a form of deprivation that affects a reasonable number of people and should be able to be regularly

updated.

Work to develop indicators for WIMD 2025 has included consideration of the **national indicators** defined under the Well-being of Future Generations Act (Wales) 2015. The national indicators aim to assess national progress towards achieving the seven well-being goals put in place by the same Act. Their purpose is different to that of indicators underlying an index of deprivation, and many are survey-based or otherwise do not lend themselves to measurement at a small area level. However, where links can be made between the national indicators and WIMD indicators, this is referenced in the sections that follow.

Domain and indicator proposals

The following sections provide a summary of the current proposals for each of the eight domains and pose the **survey questions that are summarised for response on SmartSurvey**, and are listed together in annex 3. We welcome responses to questions in some or all of these areas.

In some places we describe on-going work to explore the suitability of potential indicators for WIMD 2025, rather than fully formed indicator descriptions, at this stage.

We would value feedback on how well you think our new proposals would capture deprivation relevant to the specific domain, whether they add value to existing indicators for the domain, and any evidence in support of this.

We are interested to know where indicators may have wider potential uses, and what those might be.

We also want to identify areas of weakness to improve on for WIMD 2025 or future indices.

Summary of proposals

This section summarises the proposals for each domain at a high level.

Our research has identified several new datasets that could potentially provide robust small area indicators for several of the domains of deprivation. In the below summary, these are prefaced with 'New' for ease of reference.

If these new indicators prove feasible, implementing them would involve a significant amount of work for the team of statisticians who produce WIMD, and potential costs. We would need to consider the strength of existing measures within a domain, the added value of an indicator (since the more indicators involved, the more complex the index becomes), and the potential wider use of the indicator dataset.

We welcome views on how we should prioritise the proposed areas, if necessary.

Income and employment domains

The weight given to both the income and the employment domains in WIMD 2019 was 22% each. We will review the weights for WIMD 2025.

The introduction of UC has a significant impact on the measurement of these domains of WIMD. In the face of these challenges, work led by the English indices of deprivation team at the Ministry of Housing, Communities and Local Government (MHCLG) and the Department for Work and Pensions (DWP) is underway to develop a recommendation for income and employment deprivation indicators for small areas.

We propose to collaborate with MHCLG on this, and to adopt the approach that

will be recommended by DWP and MHCLG unless there is good reason not to. The intention is to continue to base both the domains on administrative data drawn from the benefits system, and in the case of income, the tax credits systems and Home Office data on supported asylum seekers.

Health domain

WIMD 2019 weight was 15%, which we will review for 2025.

Indicators that are related to children

- We plan to update the measures of low birth weight and children with obesity.
- New: we are exploring a new measure of uptake of childhood vaccinations.

Indicators that capture specific diagnosed conditions

- We plan to update the indicators on chronic conditions and mental health conditions diagnosed by GPs, and cancer incidence.

Indicators that capture the status of the population's health more broadly

- We plan to update the indicators of premature deaths and self-reported limiting long-term illness.
- New: we are exploring a new measure of dental health.

Education domain

WIMD 2019 weight was 14%, which we will review for 2025.

School outcome / absenteeism indicators

- We propose to update the Key Stage 4 (KS4) average point score (APS) and develop separate repeat absenteeism indicators for primary and secondary education.
- We are unable to update the indicators on Key Stage 2 (KS2) and foundation phase APS, so these former indicators will not be included in WIMD 2025.

Post-compulsory education / wider population indicators

- We propose to update indicators for the proportion of KS4 leavers entering higher education and the proportion of working age adults with no qualifications and explore expanding the scope of both.

Access to services domain

WIMD 2019 weight was 10%, which we will review for 2025.

Indicator proposals

- We plan to update travel times to the eight services using public transport and nine services using private transport used in WIMD 2019.
- We plan to update the measure of access to broadband services.
- New: we are exploring an additional measure of travel times to childcare services.

Housing domain

WIMD 2019 weight was 7%, which we will review for 2025.

Indicator proposals

- We plan to update the indicator of overcrowding (Census 2021 based bedroom measure).
- New: if possible, we will include an indicator of energy inefficiency using data from Energy Performance Certificate (EPC) records.
- New: we are exploring a potential measure of housing affordability, expressed as the inability to afford to enter owner occupation or the private rental market.

Should the development of robust measures of energy inefficiency or housing affordability prove unfeasible, we propose to reuse some of the modelled poor housing quality data produced for WIMD 2019.

Community safety domain

WIMD 2019 weight was 5%, which we will review for 2025.

Indicator proposals

- We plan to update the existing indicators in this domain, for categories of police-recorded crime and anti-social behaviour incidents, and for fire incidents.
- New: we propose to introduce a new indicator on police-recorded sexual violence, provided the data meets the WIMD indicator criteria.

Physical environment domain

WIMD 2019 weight was 5%, which we will review for 2025.

Flood risk

- We plan to update the proportion of households at risk of flooding indicator.

Air quality

- We plan to update the three air quality score indicators (Nitrogen Dioxide, PM10 and PM2.5).

Green space

- We propose to update the ambient green space indicator.
- We propose to update the indicator on lack of proximity to accessible natural green space and include national long distance trails in the destinations dataset.

Potential new indicators

- New: we are exploring a heat hazard indicator which would measure average heat risk score.
- New: we are exploring a noise pollution indicator which would measure noise pollution from road, rail and industry based on 2022 strategic noise maps.

Issues for response

- Please rank, in priority order in terms of what would add the most value to the index, the proposed new indicators for inclusion in WIMD 2025.
- Please explain your rationale for your above ranking and provide any other comments on proposed new indicators for inclusion in WIMD 2025.

Income domain

For WIMD 2019, the purpose of the income domain was to measure the proportion of people with income below a defined level. For WIMD 2025, we will review how we describe the domain once we have determined the best indicator definition. It is possible that the purpose will be described with reference to low income being used as a proxy for material deprivation.

Overview of proposals

The introduction of UC has a significant impact on the measurement of the income domain of WIMD. In the face of these challenges, work led by the English indices of deprivation team at MHCLG and DWP is underway to develop recommendations for income and employment deprivation indicators for small areas. We propose to continue to collaborate with MHCLG on this, and to adopt the approach that will be recommended by DWP and MHCLG unless there is good reason not to. Further detail on current thinking is given below. We also support better comparability between indices for different nations of the UK, where appropriate.

WIMD 2019 indicator

The income domain for WIMD 2019 contained a single composite indicator, a cross-sectional snapshot of people in income deprivation as measured by receipt of certain income-related benefits or tax credits. It was made up of four different types of claimants, which were:

- income-related benefit claimants, including Income Support claimants, Jobseeker's Allowance claimants, Pension Credit claimants, and Income-related Employment and Support Allowance claimants, and their dependent

children (sourced from DWP)

- people on UC and their dependent children, excluding those who were 'working with no requirements' according to the dataset's 'conditionality' marker (sourced from DWP)
- children and adults within families in receipt of Working Tax Credit and Child Tax Credit, with an income which was less than 60% of the median income for Wales before housing costs (sourced from His Majesty's Revenue & Customs (HMRC))
- supported asylum seekers i.e. those who were supported under Section 95 of the Immigration and Asylum Act, and their dependent children (sourced from the Home Office)

Within DWP datasets, the above were counts of unique individuals (i.e. those who claim multiple benefits were only counted once). The indicators were summed and expressed as a percentage of the total population for the LSOA.

Impact of UC

The introduction of UC has had a significant impact on the measurement of both the income and employment domains of WIMD, since UC is replacing most benefits and tax credits inputting to these domains. At the time of production of WIMD 2019, the latest datasets available for use related to financial year 2016-17, when UC was (mostly) payable to single jobseekers in Wales. This provided a simple read across with equivalent legacy benefits. However this is no longer the situation, and the full UC roll-out has not yet been completed across all benefits and all areas of the country. We therefore need to consider what measures can be derived from the administrative data available at this time.

DWP produce quarterly updates on the ongoing move to UC. Whilst UC is still being rolled out, with a significant number of benefit claimants still on legacy benefits in the **latest benefits statistics (DWP, as at August 2024)**, it is not

straightforward to update our measures of income and employment deprivation. Since progress on migration from legacy benefits to UC will vary between different areas, and UC eligibility is different to eligibility for legacy benefits, we may not be comparing like with like at a given point during the rollout.

Our indices of deprivation counterparts for England (at MHCLG) are also planning their next indices update for 2025. MHCLG have begun work with the key data suppliers, DWP, to develop appropriate indicator data for the income and employment domains. This will take account of changes to the policy landscape as described above, but also changes to the data landscape at DWP.

Since the relevant data sources for the two nations are the same, and the concepts measured in respective 2019 income and employment domains were very similar, our view is that the most efficient and robust way of achieving an update to our indicators is to adopt the approach that will be recommended by DWP and MHCLG. We plan to collaborate with them on this work and to be involved in shaping the options and recommendations.

Proposed approach and indicator

As outlined above, work led by MHCLG and DWP is underway to develop a recommendation for an income deprivation indicator. MHCLG have conducted an extensive conceptual review and continue to collaborate with DWP on empirical tests to determine the most appropriate approach. They have concluded that we cannot directly replicate and update the 2019 income domain for England or Wales. However the intention is still to base the domain on administrative data drawn from the benefits and tax credits systems, and from the Home Office for supported asylum seekers.

There has also been an opportunity to revisit the original conceptualisation of this domain, and the current working definition is the percentage of the

population who are likely to be experiencing material deprivation due to having low income. This is in line with Peter Townsend's conceptualisation of material deprivation (**Poverty in the United Kingdom, 1979 (Poverty and Social Exclusion (PSE)**), that people are income deprived if they lack income to pay for socially perceived necessities.

The two options currently under exploration, detailed below, both involve non-overlapping counts of DWP and HMRC means-tested benefits/tax credits, similar to the 2019 approach. But they differ in that option 1 involves no income or earnings threshold, whereas option 2 would apply an earnings threshold.

Considering option 1, it could be argued that the benefit means-test is more nuanced than an equivalised income threshold as a means-test accounts for additional costs for basic needs such as health, care, and housing.

However an earnings threshold (option 2) would be appropriate if there are 'higher earning' UC claimant families who would not be regarded as 'deprived' in this domain, and tests are ongoing with DWP to explore earnings distributions amongst UC claimant families. Using a threshold for overall income, rather than earnings, would be inappropriate, as means-tested benefit income is for specific needs (e.g. poor health, care, housing), and not for purchasing socially perceived necessities to alleviate material deprivation.

Option 1

All adults and children in benefit units claiming the following means-tested benefits in October 2024:

- UC [in payment]
- Income Support
- Income-based Jobseeker's Allowance
- Income-related Employment and Support Allowance

- Pension Credit (Guarantee)
- Housing Benefit (to ensure consistency between UC and residual claimants of legacy benefits)
- Asylum seekers in receipt of subsistence support, accommodation support, or both (Home Office)

Option 1 does not include those in receipt of tax credits since managed migration from tax credits to UC should be largely complete by October 2024.

Option 2

Apply an earnings threshold to adults and children in benefit units claiming the following means-tested benefits or tax credits at the end of March 2023, using their earnings over the entirety of financial year 2022-23 (note that, since earnings data are required for this option, the latest full tax year in the required database is 2022-23):

- UC [in payment]
- Income Support
- Income-based Jobseeker's Allowance
- Income-related Employment and Support Allowance
- Pension Credit (Guarantee)
- Working Tax Credit and Child Tax Credit (if the 2022-23 tax year is used for the earnings data, this will predate the end of managed migration for these claimants and therefore tax credit families will need to be included)
- Housing Benefit
- Asylum seekers in England in receipt of subsistence support, accommodation support, or both (Home Office)

Initial testing looking at the impact of variation in the 'income/earnings threshold' approach to the domain is being carried out for England. When completed, the final set of tests will be carried out for Wales and likely other UK nations. We

expect to be able to provide firmer details of the final approach in our next report in spring 2025.

We will continue to work with MHCLG, DWP and others on options for a suitable indicator using data on UC claimants in future indices, as managed migration reaches completion.

Other indicators discussed

The ONS experimental admin-based income statistics for England and Wales (ABIS) are still in development and therefore unsuitable for WIMD 2025. A recent research paper provides **information on the strengths and limitations of the current ABIS, and the direction of travel for future development (ONS)**.

ONS' small area model-based income estimates (SAIEs), modelled from survey data and updated in autumn 2023, are only available down to Middle-layer Super Output Area (MSOA) level.

Impact of the cost of living crisis: unfortunately, this domain cannot fully reflect steep increases in the cost of living that many people have experienced over recent years. Robust, small area data about household expenditure, which would capture the impact of inflation, are not currently available to enable this.

Indicator weighting

Our proposal is for only one indicator to be included in the domain.

Issues for response

- Given the likely changes described for the indicators within this domain, do

you think the domain weight within the overall index should be higher, lower or the same as the weight used in 2019, which was 22%?

- Please explain your rationale for the above response and provide any other comments on the proposals for the income domain.

Employment domain

The purpose of the employment domain is to capture lack of employment. This covers involuntary exclusion of the working-age population from work, including those people who cannot work due to ill-health or who are unemployed but actively seeking work. For WIMD 2025, we will review how we describe the domain once we have determined the best indicator definition. For example, we may add reference to caring responsibilities as a further reason for exclusion from work if the indicator is extended to cover Carer's Allowance, which it has not done previously.

Overview of proposals

As described in the section on the income domain, we also plan to adopt the approach that will be recommended by DWP and MHCLG for the employment domain unless there is good reason not to. Further detail on current thinking is given below.

WIMD 2019 indicator

The employment domain for WIMD 2019 contained a single composite indicator, a cross-sectional snapshot of people in employment deprivation as measured by receipt of DWP unemployment-related benefits. It was made up of four different types of claimants, which were:

- Jobseeker's Allowance (JSA) claimants
- Employment and Support Allowance (ESA) claimants
- Incapacity Benefit (and Severe Disablement Allowance) claimants
- UC claimants who were not in employment

Those who claim multiple benefits were only counted once, and the indicator was expressed as a percentage of the working age population (all aged 16 to 64) for the LSOA.

Proposed approach and indicator

As outlined previously, work led by MHCLG and DWP is underway to develop a recommendation for an employment deprivation indicator. We expect to be able to provide firmer details in our next report in spring 2025. However some initial thinking is described below.

Current proposals, which are subject to change pending further consideration and data analysis, are to:

- use a 2022-23 timepoint, which would pre-date managed migration (that is, the process of moving those claiming legacy benefits to UC, avoiding complications in terms of comparability of data between small areas, and post-date the key impacts of the COVID-19 pandemic on the employment domain
- use twelve separate monthly timepoints from April 2022 to March 2023, to capture seasonality of work, and those cycling in and out of work, including those in insecure work and zero hours contracts
- modify the definition of 'working age' to 18 to 66 (for WIMD 2019 we used 16 to 64) to reflect the change in retirement age up to that time, and for comparability with England

Latest thinking is that the domain should cover the following workless benefits:

- Jobseeker's Allowance/New Style Jobseeker's Allowance
- Employment and Support Allowance/New Style Employment and Support Allowance
- Income Support (this group may be involuntarily excluded from the labour market due to health and caring responsibilities, and require inclusion to maximise consistency with the proposed UC conditionality categories below)
- Invalid Care Allowance/Carer's Allowance
- Incapacity Benefit/Severe Disablement Allowance
- UC claimants in the following conditionality groups:
  - No work requirements
  - Planning for work (to cover those involuntarily excluded due to caring responsibilities)
  - Preparing for work (includes those with limited capability to work due to health conditions or a child aged 2)
  - Searching for work

The indicator would be expressed as a percentage of those aged 18 to 66 for the LSOA.

Note that the proposed inclusion of Carer's Allowance (and equivalent) claimants is new for the WIMD employment domain, but in line with the England approach in previous indices. Some data for Wales on this basis has already been released in the collaborative output '**Indices of Deprivation 2019: income and employment domains combined for England and Wales' (MHCLG)**, and comparisons with data underpinning WIMD 2019 suggests very little impact on the relative employment deprivation ranks of areas.

We will continue to work with MHCLG, DWP and others on options for a suitable indicator using data on UC claimants in future indices, as managed migration reaches completion.

Other indicators discussed

Job quality and related factors: there are currently no datasets available that would enable robust measures of employment quality to be produced at small area level. We are not aware of a standard agreed definition of quality of employment which could be applied; and this would necessitate a change to the current conceptual framework of the domain, which is focused on those involuntarily excluded from the labour market, rather than the quality of any employment.

Indicator weighting

Our proposal is for only one indicator to be included in the domain.

Issues for response

- Given the likely changes described for the indicators within this domain, do you think the domain weight within the overall index should be higher, lower or the same as the weight used in 2019, which was 22%?
- Please explain your rationale for the above response and provide any other comments on the proposals for the employment domain.

Health domain

The purpose of this domain is to measure lack of good health in all people, and to capture predictors of future health based on deprivation experienced in childhood. Some indicators in this domain are age-sex standardised to account for population differences across small areas.

Unlike many other domains there is a wide range of health data available from which we can construct small area indicators. However we will only include indicators that are judged to add value to the health domain, and do not dilute the impact of those indicators that best capture health deprivation.

Overview of proposals

We have chosen to present the proposed indicators in three categories below:

- indicators that are related to children
- indicators that capture specific diagnosed conditions
- indicators that capture broader population health status

Most of the proposed indicators are unchanged from the previous index and two are new. There is still development work underway for the health domain, and we will elaborate on any new indicators to be taken forward in our report on survey responses in spring 2025.

We are mindful of the potential impact of the COVID-19 pandemic on the datasets for this domain. As we begin to compile the datasets, we will review availability and quality of data carefully with the health domain group, assess the impact this may have on the index, and make any adjustments necessary such as omitting certain years of data.

A summary of our proposals under each heading follows, with more detail in sections below.

Indicators that are related to children

- We plan to update the measures of low birth weight and children with obesity.
- We are exploring a new measure of uptake of childhood vaccinations.

Indicators that capture specific diagnosed conditions

- We plan to update the indicators on chronic conditions and mental health conditions diagnosed by GPs, and cancer incidence.

Indicators that capture the status of the population's health more broadly

- We plan to update the indicators of premature deaths and self-reported limiting long-term illness.
- We are exploring a new measure of dental health.

Proposed indicators that are related to children

Low birth weight

This indicator is the percentage of live single births less than 2.5kg (5.5lbs). We propose to update this indicator using data from 2014 to 2023, sourced from **maternity and birth statistics**. This data is in line with the low birth weight national indicator 1.

Children aged 4 to 5 with obesity

This indicator was included for the first time in WIMD 2019. We are pursuing data updates from PHW. Since data collection was disrupted by the pandemic, we will include data from both pre and post pandemic to ensure there is sufficient sample size.

Child vaccination uptake

Routine vaccination uptake is linked to **lower health risks for young children (Royal College of Paediatrics and Child Health)**. In line with the definition of this domain which includes capturing predictors of future health issues, we are investigating the inclusion of a new indicator to measure the uptake of all routine immunisations at four years of age. This indicator would be based on data from the national community child health database (managed by Digital Health and Care Wales (DHCW)).

Whilst we need to evaluate the value added to the health domain by such an indicator alongside existing indicators relating to babies and children, it could be argued that childhood vaccination uptake has a more immediate link to the future health of young children than low birth weight and obesity.

Whilst this data is likely to be robust at LSOA level and therefore could be used as a building block for WIMD rank calculations, we are unlikely to have permission to publish the indicator data at LSOA level due to privacy concerns. Therefore WIMD datasets for this potential indicator would be at MSOA and above, similar to the approach taken for the children with obesity indicator in WIMD 2019.

Proposed indicators that capture specific diagnosed conditions

Cancer incidence

This indicator is the number of people diagnosed with cancer (all malignancies excluding non-melanoma skin cancer) per 100,000 people in Wales and is indirectly standardised for the age and sex profile of the population. The data source for this indicator is the Welsh Cancer Intelligence & Surveillance Unit

(WCISU).

The inclusion of data on the stage of cancer at diagnosis was discussed by the health domain group as a reflection of effective screening, health literacy and access to health services in an area, which could be proxies for wider health deprivation. There are currently ten years of data on stage of cancer available, however issues with the data availability and quality (such as different time periods, different cancer types, and some missing or incomplete data) mean producing a suitable indicator would be challenging. For this reason we do not plan to introduce an indicator based on stage at diagnosis for WIMD 2025.

Cancer mortality was also considered as a potential alternative to incidence as it better captures the overall cancer burden. However the data was not found to be robust at a small area level and there were concerns around overlap with the premature death rate, as cancer is the leading cause of death in Wales.

The cancer incidence indicator is usually a 10 year average, and we will have data up to 2021 to use in WIMD 2025. We will examine the impact of the COVID-19 pandemic on the cancer data and decide with the health domain group whether to include or exclude certain years from the indicator due to data quality issues.

GP recorded chronic and mental health conditions

In WIMD 2019 new indicators were introduced for the percentage of people with a GP-recorded diagnosis of a chronic condition, or a mental health condition. Full details of the conditions covered are in the **WIMD 2019 technical report**.

Data for these indicators were drawn together from GP practice systems by DHCW using the data extraction tool Audit+. This software is being withdrawn in March 2025, and there is currently uncertainty around plans and timing for a replacement.

The ideal reference period for updated indicators would be spring 2025, following a review of the conditions to capture in the data, but there is a risk that we will not be able to update the data in the period between discontinuation of the current software (March 2025) and implementation of a replacement (TBC).

Therefore, DHCW have provided a data update as at July 2024 following the same specification as for WIMD 2019, and we are progressing data quality assurance with a view to using this data in WIMD 2025. As the situation with the replacement data extraction tool becomes clearer, we will assess whether it is possible to compile a 2025 update, however given timescales involved this is unlikely.

We will review the technical descriptions of these indicators in WIMD 2025 reports, to ensure that we highlight the limitations of the GP-derived indicators as a measure of need (rather than supply).

Proposed indicators that capture the status of the population's health more broadly

Long term limiting illness

For WIMD 2019, the number of people per 100,000 with a limiting long-term illness, indirectly standardised for the age and sex profile of the population, was sourced from Census 2011. We will update this indicator with new data from Census 2021. A limiting long-term illness covers any long-term illness, health problem or disability that limits daily activities or work.

The wording of the census question was updated between 2011 and 2021 to better align with the social model of disability. However an analysis of the data shows a high degree of correlation between the 2011 and 2021 data suggesting this has not significantly changed the nature of the indicator.

Premature death rate

A death is defined as premature if it occurred before the age of 75. This indicator was included in WIMD 2019, based on 10 years of death registrations data from the ONS. This indicator is age-sex standardized and is presented as the rate per 100,000. We plan to include this indicator using more recent data and will explore with the health domain group which years to use, considering in particular the impact of the COVID-19 pandemic.

Avoidable mortality (ONS) means deaths from causes that are considered avoidable in the presence of timely and effective healthcare or public health interventions. This concept was considered for inclusion in WIMD 2025 as an alternative to premature deaths. However, as well as lacking robustness at a small area level, avoidable mortality is quite a complex concept to define and is subjective which makes it less desirable for inclusion in WIMD, relative to the premature death rate.

Dental health

We are exploring new patient-level data from oral health assessments performed during NHS dental contacts. The data includes assessments of patient's tooth decay, periodontal health, and/or plaque scores. The data includes age, which could be important in creating a potential indicator as dental health needs are different for adults and children, and a higher percentage of the child population receive NHS dental health treatments than adults.

Patient level data is available from 2021-22 to 2023-24. However we are not yet in a position to make a fully informed appraisal as there are outstanding methodological issues to resolve before we can confidently derive accurate counts from the new dataset. We expect that by early 2025 we will have the analysis required to decide whether a suitable WIMD indicator could be created.

We have some concerns that this indicator may not properly capture the overall dental health of the population because the distribution and utilisation of available NHS dental care is uneven across Wales. A significant number of people are either unable to access NHS dental care or use private dentists. We will consider this further as data becomes available.

Other indicators discussed

We have explored the student health and wellbeing survey of secondary schools conducted by the **School Health Research Network**, with potential scope for measures of mental wellbeing and physical activity in 11 to 16 year olds. However due to limitations around consent for use of the data for different purposes, there are currently insufficient numbers of responses including appropriate geographic home location that we could use to provide robust data at small area level. We will work with the survey owners to keep this under review for future iterations of the survey and index.

Indicator weighting

Within the health domain, factor analysis is used to determine the weightings of the constituent indicators, and we propose to continue with this approach.

However, it is possible that the factor analysis may assign low weights to some indicators. This will mean that these indicators will not add significant information to the measurement of deprivation in this domain. Therefore, in such instances, we will consider omitting them from the index.

Issues for response

- Please rate the relevance to the health domain of the potential new indicator

on childhood vaccinations: the uptake of all routine immunisations at four years of age.

- Please rank the following in order, in terms of how you would prioritise the three indicators relating to babies and children for inclusion in WIMD 2025 (low birth weight, children who are obese, and childhood vaccinations (potential new indicator)).
- Please rate the relevance to the health domain of the potential new indicator on dental health.
- Please explain your rationale for the above responses and provide any other comments on the proposals for the health domain.

Education domain

The purpose of this domain is to capture the extent of deprivation relating to education, training, and skills. It is designed to reflect educational disadvantage within an area in terms of lack of qualifications and skills. The proposed indicators capture low attainment among children and young people and the lack of qualifications in adults.

Overview of proposals

Since the publication of WIMD 2019 schools in Wales have been impacted by the pandemic and have started the transition to the new curriculum. Because of this some of the schools-related indicators used previously are not available or where data is available it is limited.

For primary education, the regular collection of attainment data (at foundation phase and KS2) ceased in 2018/19. This, coupled with the staggered introduction of the new curriculum post pandemic, means there is not sufficiently consistent or robust data to update the primary school attainment indicators

used in 2019.

There is more data on secondary education. Key Stage 3 (KS3) data collection continued through the pandemic but ceased in 2023/24. GCSE data is available for all years. Primary and secondary school attendance data is also available for all years.

However we have reservations about using data collected during the pandemic. Data collected from schools during the pandemic was adapted to meet the challenges of the pandemic. For example, attendance data was collected weekly using different definitions of absence and public examination grades were awarded based on a centre determined or centre assessed grade model. Data collected during this time may not be representative of deprivation relating to education more generally due to the pandemic conditions. For this reason we will not be using data collected during the height of the pandemic (2019/20, 2020/21 and 2021/22) for the school-related indicators in WIMD 2025.

We have chosen to notionally group the proposed indicators into two categories, and a summary of our proposals for each category follows, with more detail below.

School outcome / absenteeism indicators

- We propose to update the KS4 APS and develop separate repeat absenteeism indicators for primary and secondary education.

Post-compulsory education / wider population indicators

- We propose to update indicators for the proportion of KS4 leavers entering higher education and the proportion of working age adults with no qualifications and explore expanding the scope of both to better reflect educational deprivation.

Proposed indicators

KS4 APS

This indicator was included in 2019. It measures the average point score (APS) of Year 11 pupils based on the grades achieved in the core subjects of GCSE English or Welsh, GCSE Mathematics and GCSE Science. The data source for this indicator is the Pupil Level Annual School Census (PLASC) and the Welsh Examinations Database (WED).

In 2019 this measure was used because the capped nine score (the headline attainment measure used by Welsh Government) was new and there was not sufficient data to form robust estimates. We propose continuing the use of the core subject APS rather than the capped nine score because:

- core subject APS may be a more reliable measure of deprivation given the potential high level of variability between schools due to the pandemic
- the capped nine scores are an interim performance measure and may not exist by the next iteration of WIMD
- an analysis of the two measures showed a high degree of correlation suggesting the choice will not significantly impact WIMD scores

In 2019 three years' worth of data was combined to produce the indicator. We propose to use two years of data (2022/23 and 2023/24) to capture deprivation from after the pandemic however if additional data is necessary to ensure sufficient coverage at small area level data from 2018/19 will be used.

The WIMD 2019 indicator incorporated data from the Department for Education (DfE) relating to Welsh-domiciled year 11 pupils at English schools. We will liaise with DfE to obtain updated data to input into this indicator.

Repeat absenteeism rate primary

This indicator is new however it is similar to the repeat absenteeism rate used in WIMD 2019. The principal difference being that in 2019 the primary and secondary attendance data was combined to form one indicator and for WIMD 2025 we propose splitting primary and secondary absenteeism into two indicators. This approach provides a primary-specific indicator to address the gap created by the lack of data on foundation phase and KS2 attainment. This approach also means that any difference in primary and secondary repeat absenteeism can be identified.

The other difference, compared with WIMD 2019, is a change to the threshold for repeat absenteeism. In 2019 the threshold was missing 15% or more of half day school sessions. For 2025 we plan to use a threshold of 10% or more of half day sessions, bringing WIMD in line with Welsh Government's official definition of 'persistent absenteeism.' An analysis of existing repeat absenteeism data taken at a 10% and 15% threshold showed a high degree of correlation.

For primary aged children data from 2022/23 and 2023/24 would be used. The data source for this indicator is PLASC and Attendance Data Collection.

Repeat absenteeism rate secondary

Secondary school repeat absenteeism rates would follow the same methodology as the primary school indicator. Due to differences in the timing of data available the secondary school absenteeism rate could potentially use data from 2024/25 in addition to 2022/23 and 2023/24.

An analysis between primary and secondary school data showed some degree of correlation but in our view, there is enough variation to support splitting the indicator.

KS4 leavers entering higher education

Pupil-level data from PLASC will be matched to Higher Education Statistics Authority (HESA) and Lifelong Learning Wales Record (LLWR) data to measure the proportion of KS4 pupils who, at some point in the subsequent 4 years after leaving Year 11, entered higher education. This indicator was used in 2019 but for WIMD 2025 we plan to use a four year window after leaving year 11 (rather than three). This change will allow for the inclusion of people who took a gap year or are delayed for another reason.

We are also considering whether to include other destinations, such as wider learning or sustained employment outcomes, by linking data to the Longitudinal Educational Outcomes Study.

Adults aged 25 to 64 with no or low qualifications

This is the only proposed measure of educational deprivation amongst the adult population. This indicator is similar to national indicator 8, the percentage of adults with qualifications at the different levels of the National Qualifications Framework. However, the data source will be Census 2021 instead of the Annual Population Survey (APS).

This indicator was included in WIMD 2019 but for 2025 we plan to include those whose highest qualification level is 'low' as well as those with no qualifications. Low qualifications mean **level one as defined by the ONS**.

The inclusion of those with low qualifications is necessary as the number of people with no qualifications has been decreasing over the last two decades which impacts the robustness of this indicator for small areas.

Other indicators discussed

Foundation phase APS

This indicator was included in WIMD 2019 but due to issues around data collection as a result of the pandemic there is no suitable data. For this reason we are not considering this indicator for WIMD 2025.

KS2 APS

This indicator was included in WIMD 2019. Similar to the foundation phase APS collection of this data was disrupted by the pandemic and the transition to the new curriculum. Due to this it will not be possible to use KS2 scores as an indicator.

On-entry assessments of pupils in reception class indicator

This indicator was considered but not included in WIMD 2019. Post-pandemic on entry data is no longer routinely collected and so we are not considering this for an indicator.

Adaptive personal assessments

Pupils aged 2 to 9 take adaptive personal assessments for reading and numeracy. These have replaced national tests which were phased out between 2018 and 2020. We do not propose to use adaptive personal assessment data for WIMD since they have the following drawbacks:

- pupils are only tested on a part of the knowledge and skills that pupils are

expected to learn under the national curriculum and the tests do not therefore provide a rounded picture of the ability of the pupils in the same way that teacher assessments do

- the assessments provide a snapshot of a pupil's ability on a single given day of the academic year and many factors that are not related to deprivation can influence the mark achieved in the test on that day

- the adaptive nature of the assessments makes reporting a challenge and we are wary of expanding their use as they are intended for use by the teacher rather than as a proxy for performance

KS3 assessments

Unlike KS2 and foundation phase, KS3 data continued to be collected during the pandemic. We considered using KS3 data as a proxy for a KS2 indicator however after analysing the data it was found that the KS3 and KS2 data showed little correlation. We also have concerns about double counting and the robustness of the data. Some of the older cohorts present in the KS3 data would have moved into KS4 and so their results would be included in both indicators. For these reasons we do not plan to include a KS3 attainment indicator.

Young people not in education, employment, or training (NEET)

Conceptually, young people who are NEET would be a suitable measure of educational deprivation. However, as the number of those who are NEET is collected from the Annual Population Survey, it is not possible to derive an indicator at a small area level.

Indicator weighting

Within the education domain, factor analysis is used to determine the weightings

of the constituent indicators, and we propose to continue with this approach for WIMD 2025. However, it is possible that the factor analysis may assign low weights to some indicators. This will mean that these indicators will not add significant information to the measurement of deprivation in this domain. In such instances, we will consider omitting them from the index.

Issues for response

- To what extent do you agree with the following proposed changes to the education domain indicators?
  - Split the repeat absenteeism indicator into two separate indicators, one for primary school and one for secondary school repeat absenteeism
  - Use threshold of missing 10% (rather than 15%) or more of half day school sessions for repeat absenteeism
  - Include other destinations, such as wider learning or sustained employment outcomes, in the KS4 leavers indicator
  - Include those with level 1 qualifications, as well as those with no qualifications, in the expanded indicator 'adults with no or low qualifications'
- Given the likely changes described for the indicators within the education domain, do you think the domain weight should be higher, lower or the same as the weight used in 2019, which was 14%?
- Please explain your rationale for the above responses and provide any other comments on the proposals for the education domain.

Access to services domain

The purpose of this domain is to capture deprivation as a result of a household's inability to access a range of services considered necessary for day-to-day living, both physically and online. This covers both material deprivation (for

example not being able to get food) and social aspects of deprivation (for example not being able to attend after-school activities).

Overview of proposals

The current measure of the access to services domain is not, like the other seven domains, a direct measure of deprivation that can be used on its own; rather it is a contributory factor that becomes important as an aspect of multiple deprivation. That is, poor access to services is a factor which can compound other types of deprivation that exist in an area.

The domain has historically had a relatively low weighting in the overall deprivation index but is often used on its own as a measure of sparsity for analysis or to contribute to funding formulae.

In WIMD 2019, this domain measured physical access through travel times to eight services using public transport (public bus, public train, foot, and national coach) and nine services using private transport (private car). A digital services indicator was newly added in WIMD 2019, measuring access to superfast broadband.

For WIMD 2025, we plan to update the previous indicators, and are exploring an additional indicator on travel times to childcare services.

The description of proposed indicators below is split into two parts. The first part includes services where we will measure travel time for physical access, while the second part includes the access to online services indicator.

Proposed indicators for physical access to services

Our proposal is to implement minimum change to the list of services that we measure travel times to in WIMD 2019 and explore adding in a new indicator

measuring travel times to childcare services.

More technical information on the existing indicators and how the calculations are made is available in the **WIMD 2019 technical report**. Enhancements will be made where possible.

Food shops (previously included)

A store where you can purchase bread and milk. This includes convenience stores, independent supermarkets, frozen food retailers and supermarkets.

GP surgeries (previously included)

Facilities where NHS GPs are registered to practice.

Sports facilities (previously included)

A non-private and/or non-commercial (i.e. free or pay-for-play) site containing either one of the following: sports hall, studio, grass pitch, synthetic turf pitch, swimming pool and health and fitness suite, or two or more of the following (can be in conjunction with one of previous): squash court, outdoor tennis court, outdoor bowling green, indoor tennis centre, indoor bowls.

Petrol stations (previously included)

Only included in the private transport element of the indicator.

Pharmacies (previously included)

A store where medicinal drugs are dispensed and sold, this includes pharmacies within a larger complex or supermarket.

Post office (previously included)

Includes all static post offices.

Primary schools (previously included)

Schools that deliver education to 5 to 11 year olds (including middle schools). Travel times included in the calculation are limited to those where a child within the postcode was enrolled at a primary school. School enrolment data are sourced from PLASC.

Public library (previously included)

Libraries that are open to the public and often serve as digital hubs. Mobile libraries are not included, due to a lack of geographical data.

Secondary schools (previously included)

Schools that deliver education to 11 to 16 year olds (including middle schools). Travel times included in the calculation are limited to those where a child within the postcode was enrolled at a secondary school. School enrolment data are sourced from PLASC.

Childcare (new)

Access to childcare may open up employment opportunities for parents, particularly those with pre-school age children, which are likely to reduce both material and social deprivation of household members. We are exploring the viability of including an indicator on proximity to childcare services registered with Care Inspectorate Wales (CIW).

CIW registered childcare providers can be classified as childminders or day care services, with the latter having several sub-classifications: full day care, sessional day care, out of school care, creche and open access play provision. While full day care services and childminders were considered the most important services in the context of providing employment opportunities, we will explore the suitability of each of these sub-classifications in contributing to the indicator.

To assess the need for childcare at a small area level, we are investigating Census 2021 data to identify output areas with reasonable number of children aged 0 to 4, approximating pre-school age. This may help to identify areas where parents with young children are likely to live (as opposed to areas with predominantly student or retired populations for example). We will explore the impacts of excluding areas with low numbers of children on the indicator.

Proposed indicators for access to digital services

In WIMD 2019, digital access was measured though access to superfast broadband (speeds of at least 30Mbs), with the indicator being the proportion of residential properties in an LSOA unable to achieve these speeds. This speed is considered the minimum required to be able to carry out online tasks essential to day-to-day life. **Data is publicly available from Ofcom**.

The number of LSOAs which have full superfast coverage has increased since WIMD 2019, from 34% to 43.5%. While this makes the data less suitable for ranking as many LSOAs will have the same scores, it does still allow for the ranking and analysis of the most deprived areas with respect to superfast broadband.

We have considered whether an additional metric could be introduced as a "tiebreaker" for those LSOAs unable to be ranked on superfast unavailability, such as average download speed or proportion of properties unable to achieve a higher speed (also available from Ofcom). However these measures were considered conceptually weaker as measures of deprivation, having elements of consumer choice, or exceeding typical daily requirements. We will investigate the impacts of using such measures when the next Ofcom dataset is published.

Other indicators discussed

Access to electric vehicle charging points

Access to electric vehicle (EV) charging points was raised as a potential indicator given the increasing importance and prevalence of electric vehicles and renewable energy in recent years.

While EV ownership has been increasing over the last decade and this increase has accelerated in recent years, **Department for Transport and DVLA statistics** show that the percentage of private, licensed vehicles in Wales that were plug-in vehicles (road using vehicles that use a plug-in technology to connect to a source of electricity) was 1.1% in the third quarter of 2023. This indicates that a lack of EV charging points would not have a significant effect on most people in Wales and therefore fails to meet the WIMD indicator criteria.

This indicator will be reviewed in future updates to the index.

Digital affordability and skills

It is recognised that access to infrastructure, as measured in the current digital access indicator, is just one aspect of digital inclusion. The **Towards a Welsh Minimum Digital Living Standard final report** highlights the need for a holistic approach considering barriers beyond infrastructure, such as affordability, skills and risk awareness.

While no LSOA level dataset exists representing the affordability of digital access, this measure is indirectly captured through the income domain of WIMD. With regards to digital skills, Welsh Government is developing a Minimum Digital Living Standard which represents the ability to communicate, connect and engage with opportunities safely and with confidence. Work on measuring progress towards this is ongoing through the National Survey for Wales, however the survey does not provide robust LSOA estimates as required in WIMD.

We will monitor developments in this topic area for future updates to the index.

Mobile data services

In the past there has been support for including an indicator on areas with no mobile signal in Wales. We have analysed Ofcom data to determine the proportion of premises that have over 99% or 100% coverage from all operators, for both 4G services only and data services overall.

This data is available for indoor premises, outdoor premises, and all UK landmass. Advice from Ofcom suggests that data on outdoor premise access is of better quality than indoor premise access for the purposes of the index, as people are more likely to used fixed broadband when indoors and usage will be naturally lower outside of settlements in the landmass dataset. However, it is

likely that large proportions of LSOAs in Wales have over 99% coverage for outdoor premises, making this measure unsuitable as a WIMD indicator.

Other potential developments

Measuring access to physical services is an area of active investigation across a number of government departments, and academia. We are monitoring developments in this space closely and while we have no immediate plans to adopt an alternative measure for WIMD, we will consider the progress and suitability of these measures in early 2025.

Indicator weighting

For WIMD 2019, the travel time indicators were weighted averages of the private and public transport times to each service (with the exception of petrol stations). The weights were calculated for each small area using data from Census 2011 on car ownership and the number of adults aged 17 and over, which will be updated to use data from Census 2021 for WIMD 2025. Factor analysis was used to combine the resulting indicators for each service.

In WIMD 2019, the travel time indicators collectively were weighted as 90% of the overall domain, and the digital services indicator was weighted 10%.

With the potential inclusion of a new indicator on childminder and the increasing importance of digital access, we will review these weightings with our access to services domain group.

Issues for response

- Please rate the relevance to the access to services domain of the potential

new indicator measuring travel times to childcare services.
- Please explain your rationale for the above responses and provide any other comments on the proposals for the access to services domain.

Housing domain

Conceptually, the purpose of the housing domain is to identify inadequate housing, in terms of physical and living conditions and availability. Here, living condition means the suitability of the housing for its inhabitant(s), for example in terms of health and safety, and necessary adaptations.

Housing as a component of multiple deprivation is different to most other domains, so we would not always expect measures of housing deprivation to correlate strongly with overall deprivation. However, as with poor access to services, the compounding effect of poor housing along with other components of deprivation, such as health, can be significant, and is important to capture.

The 2019 domain was made up of two equally weighted indicators, which were:

- an indicator on overcrowding measuring the percentage of people living in overcrowded households (Census 2011 based bedroom measure)
- a new modelled indicator on poor quality housing which measured the likelihood of housing being in disrepair or containing serious hazards (for example, risk of falls or cold housing), and was calculated from a mixture of survey and administrative data sources by the Building Research Establishment (BRE)

Overview of proposals

Our preferred option is to include the following indicators in the 2025 domain:

- overcrowding (Census 2021 based bedroom measure) to capture availability and to some extent living condition
- if possible, a measure of energy inefficiency (using data from EPC records), capturing physical and living conditions
- if possible and appropriate, a measure of housing affordability, expressed as the inability to afford to enter owner occupation or the private rental market

If these new indicators prove feasible, we will consider whether the value they add to the domain justifies the resources needed to develop them. We would value feedback on how well you think the new proposals capture housing deprivation as defined above, and any evidence to support this. We are interested to know where indicators may have wider potential uses, and what those might be.

Should the development of robust measures of energy inefficiency or housing affordability prove unfeasible, we propose to reuse some of the modelled poor housing quality data produced for WIMD 2019, as described above. Despite being a little out of date (and an update is not feasible at present), we would consider this data to remain a reasonable representation of relative housing deprivation for small areas, in the absence of better alternatives.

Proposed indicators

Overcrowding

The WIMD 2019 indicator on overcrowding measured the percentage of people living in overcrowded households (bedroom measure) from Census 2011. **The definitions of overcrowding are fully explained on the ONS website (Census 2021 metadata)**. As for WIMD 2019, it is proposed that an indicator based on the bedroom measure is used for WIMD 2025.

Updated data are available based on Census 2021, however the breakdowns needed for WIMD are only available on a household basis and no longer on a resident basis, i.e. there is data on the percentage of households that are overcrowded, rather than the percentage of people in overcrowded households.

We have compared overcrowding data for LSOAs on a household vs resident basis using Census 2011 outputs (which include both definitions) and found there to be a high level of correlation, so changing between these definitions has little impact on ranks for the housing domain. We therefore propose to modify the definition for WIMD 2025 to measure overcrowding as the percentage of households that are overcrowded. This has the advantages of increased transparency and accessibility (being based on data already published by ONS), comparability with the approach for England, and potential for added value in terms of allowing users to access additional breakdowns of the indicator data from **Census 2021 custom tables on the ONS website**.

Proportion of dwellings with poor energy performance

We are exploring the use of data on EPCs to derive a measure of housing quality. There is a related national indicator that measures the percentage of dwellings with adequate energy performance (indicator 33).

Homes with poor energy efficiency performance are more difficult and expensive to heat, and there are **potential health impacts of living in a cold home (House of Commons Library)**. We acknowledge that the impact of a property's energy performance on its residents is not straightforward, since other factors such as the characteristics of household residents and their ability to afford adequate heating also matter. However income deprivation is measured elsewhere in WIMD, and our view is that this measure does capture information about the physical condition of properties that helps to build a picture of housing-related deprivation.

MHCLG are currently exploring this for their next English indices of deprivation

update, also expected in 2025. They are considering developing a new indicator on energy inefficient properties, based on Standard Assessment Procedure (SAP) ratings derived from EPC Data. Since around 40% of properties do not have a valid EPC, development work is underway to explore ways of improving coverage (via imputation of data, drawing on linked datasets), and to test data quality and robustness. This work could be extended to Wales, and we plan to collaborate with MHCLG and others on this.

Housing affordability

For the English indices of deprivation, MHCLG procure data on housing affordability from Heriot-Watt University, measuring difficulty of access to owner-occupation or the private rental market, expressed as the inability to afford to enter owner occupation or the private rental market.

These are modelled estimates based on lower quartile house prices and private rents by dwelling size in the relevant housing market area (designed to reflect the areas in which people seek housing) and modelled household incomes at LSOA level. In past iterations estimates have focussed on younger households to best capture those entering the housing market. There is more information on the previous method in the English indices of deprivation **technical report for 2019 (MHCLG)**.

MHCLG propose retaining the 'housing affordability' indicator(s) since this is recognised as an increasing area of societal and policy concern, and local authorities have responsibilities to develop plans and programmes to address needs arising from housing affordability constraints, which this data could potentially inform. The method is under review for the 2025 English indices, with a number of proposed enhancements to the methodology and data sources. MHCLG would like to extend the measure to take into consideration those aged over 40, to reflect the rising number of older adults with a lack of access to affordable housing.

On the recommendation of the housing domain group, and since this a relevant and high priority topic, we are exploring whether this method could be applied to produce a similar indicator for Wales. We are considering data quality, relevance to areas with a high proportion of social housing, and what housing market areas to use. We are interested in user views on the suitability of such an indicator for WIMD.

Other indicators discussed

Poor quality housing

As mentioned above, for WIMD 2019 we commissioned BRE to produce modelled indicators of housing quality which measured the likelihood of housing being in disrepair or containing serious hazards. For further details, please see the **data tables at LSOA level (StatsWales)** (higher level also available), and the description of what these measure in the **technical report chapter and annex on housing**.

We cannot update these indicators for this iteration of the index, since there is not yet an update to the Welsh Housing Conditions Survey which provided national data to benchmark the modelled dataset.

Whilst using data from 2019 would not be ideal, the WIMD housing domain group felt that the picture for these variables may not have changed much since their original estimation in 2019, and considered the option of reusing relevant data for the next WIMD to be reasonable if better alternatives are not available. Once other possibilities for the domain are firmed up, we will review whether to proceed without these two indicators for 2025, or to use some or all of the 2019 data, adjusting for LSOA boundary changes.

To feed into such a review, we are interested to hear whether and how people

and organisations have used the poor-quality housing indicators from 2019, and whether it would be of value for us to refresh the data in future, when feasible.

Private outdoor space

The natural capital team at ONS have recently produced and published statistics relating to private gardens (private outdoor space) down to MSOA level for the whole of Great Britain (GB). These statistics were derived from the Ordnance Survey (OS) AddressBase Plus database (and include 'non-green' private outdoor spaces at the front, back and side of properties, as well as 'green' garden space). There is scope to develop this work to produce a measure reflecting the presence/absence of private outdoor garden space for every residential property across England and Wales at LSOA level.

MHCLG are considering using this as the basis for an indicator for their next indices, although there is still work to be done on conceptual issues such as how to treat balcony space for flats, communal space etc. We are not currently planning to include such an indicator, as we are not convinced of a strong link between lack of outdoor space and housing deprivation as defined for WIMD. Substantial private outdoor space may be considered a disadvantage to some householders (in terms of its maintenance), and we already include measures of green space in the physical environment domain. However we are interested to hear user views on this possible indicator.

Fuel poverty

Fuel poor households are defined as households who spend 10% or more of their income on energy costs in order to adequately heat their homes, and fuel poverty has a significant impact on the health, social and economic well-being of householders. However data is not available at small area level. Also, measurement of fuel poverty is influenced by energy prices and household

income as well as features of the home itself. This means that the concept does not meet our desired indicator criteria of being specific to one domain.

Homelessness

Homelessness can be considered to be the most extreme form of deprivation in relation to access to housing. However data relating to homelessness is currently only collected and published at local authority level. Furthermore, it is difficult to incorporate in an index of small areas. This is because careful consideration would need to be given to which LSOA we attribute an occurrence of homelessness: it could reflect housing deprivation in the area in which the homeless person previously lived or the area in which he or she is recorded as being homeless. Welsh Government is developing a new collection of individual level homelessness data in Wales, but this is unlikely to yield any robust data until well beyond WIMD 2025 timescales.

Climate change considerations

We acknowledge that due to climate change and the focus on a just transition, what constitutes housing deprivation may change in future (e.g. access to solar panels, batteries, sufficient cooling etc). We have not identified suitable measures to meet our indicator criteria for WIMD 2025 but will review this for future indices.

Indicator weighting

There is some uncertainty over the exact indicators that will be feasible to include and more development work to be done. However we expect to have overcrowding and one or two other indicators in this domain. We would begin with a proposal of equal weighting of the two or three indicators, and review this

considering relevance, data quality and sensitivity of ranks to changes in weights. The weighting of the domain itself (increased to 7% in 2019) will also be reviewed in light of any changes to indicators.

Issues for response

- Please rate the relevance to the housing domain of the potential new indicator on dwellings with poor energy performance (subject to increasing the coverage of the EPC dataset).
- Please rate the relevance to the housing domain of the potential modelled indicator of housing affordability (subject to data quality assurance).
- To what extent have you made use of the modelled indicators of poor housing quality, published and included in the WIMD 2019 housing domain?
- If you have made use of the modelled indicators of poor housing quality, please describe how you used them and provide any other feedback.
- Please rate the relevance to the housing domain of a measure of private outdoor space for properties as an indicator of housing deprivation.
- Please explain your rationale for the above responses and provide any other comments on the proposals for the housing domain.

Community safety domain

This domain is intended to consider deprivation relating to living in a safe community. It covers actual experience of crime and fire, as well as perceptions of safety whilst out and about in the local area.

Overview of proposals

Since the publication of WIMD 2019, there has been continued focus on the

quality of crime recording by the police. In 2014 the UKSA removed the National Statistics designation and since this time there has been improved compliance with the National Crime Recording Standard (NCRS). **In May 2024, a further review was published as the first step towards the statistics being considered for reaccreditation (OSR)**.

We propose minor changes to the existing indicators in this domain. These relate to changes in the relevant Home Office codes and switching from a 2 year to 3 year average. We also propose to introduce a new indicator on police-recorded sexual violence, provided the data meets the WIMD indicator criteria.

Proposed indicators

In WIMD 2019, all indicators in this domain used a two financial year average from the most recent available data. For WIMD 2025, we propose using the averages of three financial years for increased data robustness.

An overview of each of the indicators including proposed additions and changes can be found below. Unless stated otherwise, in each case the indicator will capture the same crime categories as detailed in the **WIMD 2019 technical report** and will seek to use the most recent and appropriate codes.

For the police-recorded crime and anti-social behaviour indicators, incidents are recorded by the four police forces in Wales (North Wales, Dyfed Powys, South Wales, and Gwent). Recorded incident locations are allocated to the appropriate LSOA.

Police recorded burglary

The indicator covers residential, business and community burglaries and includes attempted burglaries.

Some codes have changed since WIMD 2019, such as the breakdown of residential burglary codes into crimes relating to burglary of the home and burglary of an unconnected building. This does not affect the crimes included in the indicator.

Police recorded criminal damage

The indicator covers arson, criminal damage to buildings and vehicles, criminal damage which is racially or religiously motivated and threat to commit criminal damage.

Police recorded theft

The indicator covers thefts from vehicles and people, theft of vehicles and interfering with a vehicle.

The indicator will capture broadly the same crime categories as in WIMD 2019, but subject to data quality tests, we will explore the possibility of adding a few extra notifiable offence categories (e.g. theft by an employee) to reflect updated Home Office Counting Rules. We do not anticipate that this will have a major impact on the results, but it should help to strengthen the indicator by addressing some gaps in the current specification.

Police recorded violent crime

The indicator covers murder/manslaughter, wounding, endangering life, assault, harassment, possession of firearms, child cruelty offences and robbery.

The indicator will capture broadly the same crime categories as in WIMD 2019, but subject to data quality tests, we will explore the possibility of adding a few extra notifiable offence categories that have recently been introduced in Home

Office counting guidance (e.g. stalking and controlling or coercive behaviour). We do not anticipate that this will have a major impact on the results, but it should help to strengthen the indicator by addressing some gaps in the current specification.

Police recorded sexual offences

We are investigating the feasibility of including a new indicator for police recorded sexual offences in WIMD 2025 in collaboration with MHCLG.

It is acknowledged that this type of crime may have higher rates of underreporting in comparison to non-sexual offences. If the data is found to be sufficiently robust and meet the WIMD indicator criteria, we propose adding this indicator.

Anti-social behaviour

The indicator will capture the same type of incidents as in WIMD 2019. Anti-social behaviour is defined as 'behaviour by a person which causes, or is likely to cause, harassment, alarm or distress to persons not of the same household as the person'. Anti-social behaviour is classed in three strands, physical, nuisance or environmental.

Fire incidence

In WIMD 2019, incidents of primary fires, secondary fires and chimney fires were collected as counts by LSOA. The domain group proposes to similarly include all incidents of fire for WIMD 2025.

Other indicators discussed

Domestic abuse

The crime data collected by police forces includes a marker for domestic abuse to indicate where this was a factor in a particular crime. However, the majority of crimes flagged as domestic abuse are violent crimes already covered by a WIMD indicator. The proposed sexual offences indicator may also capture domestic abuse incidents.

Further to this, there is evidence that a significant proportion of domestic abuse incidents are not reported to the police. **The Crime Survey for England and Wales (ONS)** estimates that of those who were victims of partner abuse in the year ending March 2023, 18.9% reported the abuse to the police.

Therefore an indicator for domestic abuse will not be included in WIMD 2025.

Hate crime

As with domestic abuse, the police recorded crime data collected by police forces includes a marker for hate crime to indicate where this was a factor in a particular crime. However, similarly to domestic abuse, there would be a notable overlap between crimes flagged as hate crimes and crimes already included in the current indicators such as violent crime.

There is also evidence to suggest some disparity in recording practices across police forces as well as **evidence that a significant proportion of hate crimes are not reported to the police (Home Office)**. Therefore an indicator for hate crime will not be included in WIMD 2025.

Fraud and cyber crime

Fraud and cyber-crime data is published by ONS and includes National Fraud Intelligence Bureau (NFIB) data.

Of the fraud categories published, only 'door to door sales and bogus tradespeople' offences were considered relevant to the community safety domain of WIMD, due to it being a crime that physically occurs with both perpetrator and victim in the same small area. From the available data it was found that the numbers of such crimes are too small at the LSOA level to provide a robust indicator.

Cyber-crime has been highlighted as an emerging area of crime and therefore considered as a potential indicator. However **underreporting is a known issue with cyber-crime (Department for Science, Innovation and Technology)** and it was felt that cyber-crime was unlikely to impact a person's assessment of the safety of their local community, given that perpetrators of these crimes often remain anonymous and are likely to be physically distanced from the victim's area of residence. Therefore such an indicator will not be included in WIMD 2025.

Road traffic casualties/collisions

The inclusion of road collisions or casualties has been considered for previous iterations of WIMD. Living in an area with a high prevalence of collisions may affect perceptions of safety which would seem to fit with the remit of the domain.

However the number of recorded casualties and collisions have trended downwards in recent years and numbers are too small at LSOA level to allow for a robust indicator. We are prevented from addressing this by pooling multiple years of data, since a number of recent and upcoming changes in recording

practices and travel patterns (such as the COVID-19 pandemic and the introduction of 20 mile per hour speed limits) impact the comparability of the data over time. Therefore the indicator will not be included in WIMD 2025.

Indicator weighting

Indicators are combined using factor analysis to determine how much weighting each indicator should have within the domain.

Issues for response

- Please rate the relevance to the community safety domain of the potential new indicator on police-recorded sexual violence.
- Please explain your rationale for the above responses and provide any other comments on the proposals for the community safety domain.

Physical environment domain

The purpose of this domain is to measure factors in the local area that may impact on the wellbeing or quality of life of those living in that area.

Overview of proposals

In WIMD 2019 the domain was broken down into three sub-domains: flood risk (one indicator), air quality (three indicators) and green space (two indicators).

Flood risk

- We plan to update the proportion of households at risk of flooding indicator using May 2025 data.

Air quality

- We plan to update the three indicators (Nitrogen Dioxide, PM10 and PM2.5) making up the sub-domain using 2023 data.

Green space

- We propose to update the ambient green space indicator.
- We propose to update the indicator on lack of proximity to accessible natural green space and include national long distance trails in the destinations dataset.

Potential new indicators

- We are exploring a heat hazard indicator which would measure average heat risk score using data from the summers of 2019, 2020 and 2021.
- We are exploring a noise pollution indicator which would measure noise pollution from road, rail, and industry based on 2022 strategic noise maps.

Proposed indicators

Heat hazard score

This indicator would capture the average heat risk score for each LSOA. Heat risk has an impact on health and well-being, and there is **some evidence that this has a greater impact on the most deprived populations (UKHSA)**.

We are investigating using **heat hazard data sourced from 4 Earth Intelligence**, created using archive satellite data from summer months during 2019, 2020 and 2021 across GB. Several satellite images were processed each year to produce several land surface temperature values for each location in GB. The data was then combined and statistically analysed to produce an average heat hazard value (peak temperature) for every 30 metre square at multiple time points throughout the year.

Noise pollution

This indicator would capture sources of noise which would deprive people of a good environment in which to live. **Excess noise has been linked to poorer health outcomes and those in deprivation are likely to be impacted disproportionately (World Health Organization).** This indicator was considered for inclusion in previous indices but rejected on the grounds that no appropriate data source that met the WIMD indicator criteria could be found.

The Welsh Government appointed Noise Consultants Ltd (NCL) to generate strategic noise maps for Wales in 2022, using a new Noise Modelling System developed by NCL for Defra. **These maps include calculated sound levels from road, rail and industry consistently across Wales and are available on DataMapWales**.

This indicator would measure the average sound level in decibels (dB) around the clock with extra weighting given to the evening and night periods. These sound levels are modelled rather than measured and include sources of road traffic, railway, and industrial noise.

Proximity to an accessible natural green space

This indicator, introduced for WIMD 2019, measures the proportion of households in each LSOA that are within a 5 minute walk / 300 metres of an accessible natural green space. **Natural green space (NRW)** is considered to have a positive influence on people's wellbeing. See the **WIMD 2019 technical report** for further details on how this indicator was calculated.

We propose adding **National Trails (Long Distance Walkers Association)** to the destinations dataset for this indicator, to enhance the coverage of accessible, natural green spaces included.

Some concerns were raised in the WIMD 2019 consultation on the proximity to green space indicator, in particular the use of Euclidian distances ("as the crow flies") in measuring proximity and the quality of green spaces being accessed. We investigated using proximity to green space access points as a potential improvement to this indicator, however the OS access point datasets are not yet of sufficient quality to use for routing in WIMD.

We have also investigated proximity to the public right of way network; however these datasets are held by local authorities with varying levels of robustness and will not be possible to include in WIMD 2025.

We considered measures of green space quality (e.g. littering, available facilities and biodiversity), but there is a lack of robust small area data on these factors, which prevents them from being integrated into the indicator.

Ambient green space

Introduced in WIMD 2019, this indicator measures the ambient greenness within each LSOA. It is calculated as the mean Normalised Difference Vegetation Index (NDVI) within a 300 metre Euclidean buffer around each residential dwelling and will be updated for WIMD 2025. While the source of the satellite imagery used to calculate the NDVI scores has changed since WIMD 2019, we do not anticipate this having an impact on the indicator.

Other indicators discussed

Coastal erosion

Coastal erosion was considered as a potential addition to this domain given its potentially devastating impact on homes affected.

It was deemed unsuitable as an indicator in its own right due to the small proportion of properties at risk (around 400 homes), but we investigated including it as part of the flood risk indicator. However it is not possible to integrate the risk of coastal erosion into the current methodology of the flood risk indicator (Weighted Average Annual Damages) so we will not be including coastal erosion in WIMD 2025.

Tranquillity

Related to noise pollution is the concept of tranquillity. The NRW Tranquillity & Place Programme describes tranquillity as associated with the degree to which places and ecosystems deliver a state of quiet, calm, peace, and well-being. This can be described as a relative abundance, perception or experience of nature, natural landscapes and features and/or a relative freedom from

unwanted visual disturbance, signs of human influence and artificial noise. Tranquillity has limited resilience, subtle changes in noise, visual intrusion and light pollution may have marked effects on natural settings and tranquillity.

The NRW nationally consistent terrestrial Tranquillity & Place resource includes six themes. Theme four relates to the two part geographic analysis of sound environments in Wales, where natural sounds may be expected to be more prominent than noise and are appropriate to context. Part 1 is based on metrics such as the presence of natural sounds, moving water and proximity to the sea as well as the lack of manmade sounds. Part 2 builds upon the 2022 strategic noise maps to calculate relative tranquillity scores and develops a combined part 1 and part 2 map.

The physical environment domain group felt that as this analysis was new and complex, it was not suitable for inclusion in this iteration of WIMD. However its development will be monitored ahead of future updates. Further information on this analysis including results and methodology can be found on the **Tranquility and Place story map**.

Indicator weighting

As a new indicator in 2019, the green space sub-domain was given a smaller weighting (20% of the overall domain compared to 40% for air quality and flood risk). We will consider the weightings of these indicators, in addition to any new indicators, with our domain group.

Issues for response

- Please rate the relevance to the physical environment domain of the potential new indicator on heat risk.
- Please rate the relevance to the physical environment domain of the

potential new indicator on noise pollution.
- Please explain your rationale for the above responses and provide any other comments on the proposals for the physical environment domain.

Weighting of domains

This section covers how the domains are weighted together – see the **WIMD 2019 technical report** and its annexes for more details on methodology.

The index ranks are calculated from a weighted sum of the scores for each domain, and final weights are determined by the WIMD project board taking account of views of the domain, advisory and steering groups. The domain weights reflect the importance of the domain as an aspect of deprivation, and the quality of the indicators available for that domain.

For WIMD 2019, the weights used are listed below:

- 22% income
- 22% employment
- 15% health
- 14% education
- 10% access to services
- 7% housing
- 5% community safety
- 5% physical environment

For WIMD 2025, we will review the weighting once the final set of indicators within domains is known. In particular, although we would seek to retain the highest relative weightings on income and employment as key aspects of deprivation, we will look closely at data for the proposed indicators (which by necessity will differ somewhat from previously) before determining whether to

reduce the absolute level of weights for either or both domains during this period of continued migration to UC. We will also carefully consider the weight of the housing domain pending progress on two potential new indicators.

Issues for response

Please provide any comments on the proposed approach to weighting domains for WIMD 2025.

WIMD outputs

We would like to know which of our outputs (reports, datasets and other analytical tools) were the most useful for our last index, and what outputs you would like to see for WIMD 2025.

Our SmartSurvey asks about frequency of use for a range of statistical products provided when WIMD 2019 was released, and asks which you would like to see produced again for WIMD 2025. The list of statistical products is shown as part of annex 3.

Annex 1: indicator criteria

Indicators included in WIMD should meet a number of criteria to ensure their accuracy and relevance in measuring deprivation, as described below.

- Each indicator chosen should be relevant to an area based measure of concentrations of deprivation (as defined for the purposes of WIMD). Wherever possible it should relate to an 'enforced lack', arising when a person cannot acquire a good or service because they don't have the

financial or other means to do so.

- Each indicator chosen should be included in one of the agreed domains of deprivation only.
- Within domains, wherever possible, indicators should be chosen that represent major features of that form of deprivation rather than deprivation affecting a very small number of people or areas. This allows the degree of deprivation to be identified as opposed to a simple 'present/not present' approach.
- Indicator data should be available at small area level and collected on a consistent basis for the whole of Wales.
- Indicators should be statistically robust at the small area level. Where cases or incidences are low, aggregates over longer time periods should be included to ensure indicators are not dominated by one-off or uncharacteristic events.
- Indicator data should be able to be updated on a regular basis and should be as up to date as possible.
- Ideally, indicators within each domain should be direct measures of that form of deprivation. Where there are insufficient direct measures, good proxy measures can be used (e.g. although the data from administrative systems are not always direct measures of deprivation, they are often excellent proxies, and have the benefit that they allow the calculation of detailed small area statistics).
- Modelled measures should only be used in conjunction with a good range of non-modelled indicators. The form of modelling should try to ensure that changes over time are reflected in the modelled variable.
- Indicators should adhere to the expected properties of a good performance indicator e.g. if there are real changes over time, that these are reflected in the indicators; any changes in the indicator can be explained.

The purpose of the indicators is to collectively provide the best possible measure of concentration of deprivation. Our aim is to identify the optimum number of indicators to help achieve this. The more indicators involved, the more complex

the index becomes.

The set of indicators underlying WIMD does not need to be exhaustive in terms of reflecting all aspects of deprivation. So in addition to the above criteria, we will assess (often using factor analysis) whether a specific indicator within a domain will add enough new information to justify its inclusion alongside the other domain indicators.

A new indicator may turn out to be closely related to an existing one, with similar areas showing similar amounts of deprivation according to those two indicators. In such cases we would consider excluding one of those indicators from WIMD, to achieve the optimum number of indicators without over-complicating the index.

Annex 2: WIMD 2019 indicators

Income

- Percentage of the population in receipt of income-related benefits or Tax Credits (including dependent children) when they live in a household with an income less than 60% of the Wales median or who are supported asylum seekers.

Employment

- Percentage of the working-age in receipt of employment-related benefits (job-seekers allowance, employment support allowance, or UC and not in employment).

Health

- People with a GP-recorded diagnosis of a chronic condition.
- Limiting long-term illness.
- Premature death rate (death of those under the age of 75).
- People with a GP-recorded diagnosis of a mental health condition.
- Cancer incidence.
- Low birth weight, single births (live births less than 2.5 Kg).
- Children aged 4 to 5 with obesity.

Education

- Foundation phase APS.
- KS2 APS.
- KS4 APS for core subjects.
- Repeat absenteeism.
- Proportion of KS4 leavers entering higher education.
- Percentage of adults aged 25 to 64 with no qualifications.

Access to services

- Average return travel times to key services by public and private transport: food shops, GP surgeries, primary schools, secondary schools, post office, public library, pharmacy, sports facility, petrol station (private transport only).
- Percentage unavailability of broadband at 30Mb/s.

Housing

- Percentage of people living in overcrowded households (bedroom measure).

- Likelihood of poor quality housing (being in disrepair or containing serious hazards).

Community safety

- Police recorded criminal damage.
- Police recorded violent crime.
- Police recorded anti-social behaviour.
- Police recorded burglary.
- Police recorded theft.
- Fire incidents.

Physical environment

- Population weighted average concentration values of Nitrogen dioxide (NO2).
- Population weighted average concentration values of Particulates < 10 µm (PM10).
- Population weighted average concentration values of Particulates < 2.5 µm (PM2.5).
- Proximity to accessible, natural green space – measuring the proportion of households within 300 metres of an accessible, natural green space.
- Ambient green space score – measuring the mean household Normalised Difference Vegetation Index (NDVI).
- Flood risk.

Annex 3: issues for response

The questions we seek feedback on are on the SmartSurvey website, are

presented at the appropriate point within this report, and are listed together in this annex. Respondents are not required to answer all questions. **Responses should be made via SmartSurvey**. If you need any support in responding, please get in touch via **stats.inclusion@gov.wales**.

Summary of proposals

- Please rank, in priority order in terms of what would add the most value to the index, the proposed new indicators for inclusion in WIMD 2025.
- Please explain your rationale for your above ranking, and provide any other comments on proposed new indicators for inclusion in WIMD 2025.

Income

- Given the likely changes described for the indicators within the income domain, do you think the domain weight within the overall index should be higher, lower or the same as the weight used in 2019, which was 22%?
- Please explain your rationale for the above response and provide any other comments on the proposals for the income domain.

Employment

- Given the likely changes described for the indicators within the employment domain, do you think the domain weight within the overall index should be higher, lower or the same as the weight used in 2019, which was 22%?
- Please explain your rationale for the above response and provide any other comments on the proposals for the employment domain.

Health

- Please rate the relevance to the health domain of the potential new indicator on childhood vaccinations: the uptake of all routine immunisations at four years of age.
- Please rank the following in order, in terms of how you would prioritise the three indicators relating to babies and children for inclusion in WIMD 2025 (low birth weight, children who are obese, and childhood vaccinations (potential new indicator)).
- Please rate the relevance to the health domain of the potential new indicator on dental health.
- Please explain your rationale for the above responses and provide any other comments on the proposals for the health domain.

Education

- To what extent do you agree with the following proposed changes to the education domain indicators?
    - Split the repeat absenteeism indicator into two separate indicators, one for primary school and one for secondary school repeat absenteeism
    - Use threshold of missing 10% (rather than 15%) or more of half day school sessions for repeat absenteeism
    - Include other destinations, such as wider learning or sustained employment outcomes, in the KS4 leavers indicator
    - Include those with level 1 qualifications, as well as those with no qualifications, in the expanded indicator 'adults with no or low qualifications'
- Given the likely changes described for the indicators within the education domain, do you think the domain weight should be higher, lower or the same as the weight used in 2019, which was 14%?

- Please explain your rationale for the above responses and provide any other comments on the proposals for the education domain.

Access to services

- Please rate the relevance to the access to services domain of the potential new indicator measuring travel times to childcare services.
- Please explain your rationale for the above responses and provide any other comments on the proposals for the access to services domain.

Housing

- Please rate the relevance to the housing domain of the potential new indicator on dwellings with poor energy performance (subject to increasing the coverage of the EPC dataset).
- Please rate the relevance to the housing domain of the potential modelled indicator of housing affordability (subject to data quality assurance).
- To what extent have you made use of the modelled indicators of poor housing quality, published and included in the WIMD 2019 housing domain?
- If you have made use of the modelled indicators of poor housing quality, please describe how you used them and provide any other feedback.
- Please rate the relevance to the housing domain of a measure of private outdoor space for properties as an indicator of housing deprivation.
- Please explain your rationale for the above responses and provide any other comments on the proposals for the housing domain.

Community safety

- Please rate the relevance to the community safety domain of the potential new indicator on police-recorded sexual violence.

- Please explain your rationale for the above responses and provide any other comments on the proposals for the community safety domain.

Physical environment

- Please rate the relevance to the physical environment domain of the potential new indicator on heat risk.
- Please rate the relevance to the physical environment domain of the potential new indicator on noise pollution.
- Please explain your rationale for the above responses and provide any other comments on the proposals for the physical environment domain.

Weighting of domains

- Please provide any comments on the proposed approach to weighting domains for WIMD 2025.

WIMD outputs

The following are statistical products which were provided when WIMD 2019 was released (or as follow-up analyses).

- Please indicate how frequently, if at all, you have used the following outputs.
- To what extent would you like to see these products produced again for WIMD 2025?
- Please explain your rationale for the above responses and let us know if you have any other comments or suggestions relating to outputs for WIMD 2025.

List of outputs

- **guidance report**
- **technical report**
- **guide to analysing indicator data**
- **results report**
- **interactive mapping tool**
- **report on deprivation analysis relating to children**
- **report on deprivation indicators for areas of deep-rooted deprivation**
- **analysis of population characteristics by area deprivation (Census 2021)**
- **index and domain ranks by small area (StatsWales)**
- **index and domain ranks by small area (spreadsheet)**
- **deprivation profiles for larger geographies (StatsWales)**
- **indicator data by small area and larger geographies (StatsWales)**
- **indicator data split by age (StatsWales)**
- **data underlying the analysis of deep-rooted deprivation (StatsWales)**
- **LSOA to various geographies look-up (StatsWales)**
- **postcode to geography lookup (StatsWales)**
- **postcode to WIMD rank lookup (StatsWales)**
- **WIMD geospatial information on DataMapWales**
- **static LSOA domain maps (StatsWales)**

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