National Centre for Pastoral Research

Socio-Economic Indexes for Areas 2016 (SEIFA)

Background information from the website of the Australian Bureau of Statistics

for users of

the indexes for Catholic parishes and dioceses

July 2020

Indexes for Catholic Parishes and Dioceses 2016

Index of Relative Socio-economic Advantage and Disadvantage (IRSAD)

Index of Relative Socio-economic Disadvantage (IRSD)

Index of Economic Resources (IRE)

Index of Education and Occupation (IEO)

with Catholic population, total population and per cent Catholic for each parish

Derived by the National Centre for Pastoral Research of the Australian Catholic Bishops Conference from Indexes calculated for each Statistical Area 1 (SA1) by the Australian Bureau of Statistics

For additional information about SEIFA, go to:

https://www.abs.gov.au/AUSSTATS/abs@.nsf/Lookup/2033.0.55.001Main+Features12016?OpenDocument

(or search abs.gov.au for 'SEIFA 2016').

For technical information about the construction of the Indexes, see Australian Bureau of Statistics (2016) *SEIFA 2016 Technical Paper*. Cat No 2033.0.55.001. This publication is available for download from the above site.

The file '2016 SEIFA scores by dioceses and parishes.xlsx' can be obtained from the National Centre for Pastoral Research

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Background Information About SEIFA

Before using the Socio-Economic Indexes for Areas (SEIFA) derived by the Australian Bureau of Statistics (ABS) from 2016 Census data, please read the information in this document, most of which comes from the ABS website.

The National Centre for Pastoral Research has taken the ABS SEIFA scores for each Statistical Area 1 (SA1) and aggregated them to parish and diocese level using the best available match of SA1s to parishes as determined by each diocese.

Note that the Excel file '2016 SEIFA scores by dioceses and parishes.xlsx' contains four worksheets:

- Introduction
- SEIFA for parishes
- SEIFA for diocese
- Statistics and graphs

Each Index has been constructed by ABS so that it has a mean value of 1000 and a standard deviation of 100. As areas are aggregated, the variation between them is reduced, since larger areas typically incorporate areas with a wide range of SEIFA scores: the larger the area, the wider the range, and so dioceses will demonstrate less variation than parishes and parishes will demonstrate less variation than SA1s. This can be seen on the 'Statistics and graphs' worksheet which shows that the standard deviations for the Indexes are less than 100 for parishes and smaller still for dioceses. This means that SEIFA scores are more useful for comparing parishes than they are for comparing dioceses.

SEIFA is a tool for ranking areas, but not for calculating a ratio between areas. ABS puts it this way: "SEIFA is a tool that compares an area with other areas. It can be likened to a football premiership table. Just as a team that finished the season with 40 points cannot claim to be twice as good as a team that finishes the season with 20 points, so an area that has a SEIFA score of 1200 cannot claim to be twice as advantaged as an area that scored 600."

In the same way, a parish with, for example, an Index of Economic Resources score of 1200 cannot be regarded as having one and a half times the economic resources of a parish with a score of 800.

In practical terms, this characteristic of SEIFA scores means that they should not be used, for example, in a mathematical formula for calculating diocesan levies to be paid by parishes.

According to ABS, comparison with previous indexes is not recommended. See the ABS SEIFA Technical Paper (see Internet address above) for further details about this.

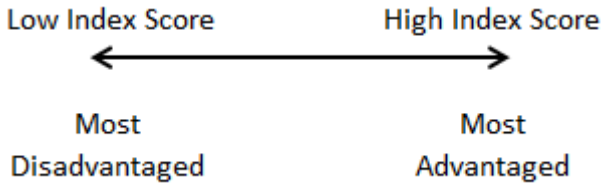
For suggestions on situations where SEIFA scores might be used, and for the content of each Index, please refer to the following pages. See also the notes below the parish and diocesan tables in the Excel file.

The Index of Relative Socio-economic Advantage and Disadvantage (IRSAD)

Source:
https://www.abs.gov.au/ausstats/abs@.nsf/Lookup/by%20Subject/2033.0.55.001~2016~Main%20Features~IRSAD~20

IRSAD

The Index of Relative Socio-economic Advantage and Disadvantage (IRSAD) summarises information about the economic and social conditions of people and households within an area, including both relative advantage and disadvantage measures.



Interpretation of Index Scores (IRSAD)

A **low** score indicates relatively greater disadvantage and a lack of advantage in general. For example, an area could have a low score if there are:

- many households with low incomes, or many people in unskilled occupations, AND
- few households with high incomes, or few people in skilled occupations.

A **high** score indicates a relative lack of disadvantage and greater advantage in general. For example, an area may have a high score if there are:

- many households with high incomes, or many people in skilled occupations, AND
- few households with low incomes, or few people in unskilled occupations.

This index is recommended in situations where the user:

- wants a general measure of advantage and disadvantage in their particular analysis
- is not looking at only disadvantage and lack of disadvantage
- wants advantage to offset disadvantage in their analysis.

For example, IRSAD may be applicable when a user:

- believes the topic being analysed is likely to be affected by both advantage and disadvantage.

IRSAD is not recommended if the user:

- is only interested in disadvantage
- is using the index in an analysis with information that has already been included in the index, such as suburbs with a high proportion of dwellings paying high levels of rent.

FINAL VARIABLE LIST FOR IRSAD

The following variables are considered to be indicators of disadvantage. INC_LOW is the strongest indicator of disadvantage in the index.

- INC_LOW: % People with stated annual household equivalised income between $1 and $25,999 (approx. 1st and 2nd deciles)
- NOYR12ORHIGHER: % People aged 15 years and over whose highest level of education is Year 11 or lower. Includes Certificate I and II
- OCC_LABOUR: % Employed people classified as 'labourers'
- NONET: % Occupied private dwellings with no internet connection
- CHILDJOBLESS: % Families with children under 15 years of age who live with jobless parents
- DISABILITYU70: % People aged under 70 who have a long–term health condition or disability and need assistance with core activities
- UNEMPLOYED: % People (in the labour force) unemployed
- ONEPARENT: % One parent families with dependent offspring only
- LOWRENT: % Occupied private dwellings paying rent less than $215 per week (excluding $0 per week)
- OCC_DRIVERS: % Employed people classified as Machinery Operators and Drivers
- SEPDIVORCED: % People aged 15 and over who are separated or divorced
- OCC_SERVICE_L: % Employed people classified as Low Skill Community and Personal Service Workers
- CERTIFICATE: % People aged 15 years and over whose highest level of educational attainment is a certificate III or IV qualification
- NOEDU: % People aged 15 years and over who have no educational attainment
- NOCAR: % Occupied private dwellings with no cars
- OVERCROWD: % Occupied private dwellings requiring one or more extra bedrooms (based on Canadian National Occupancy Standard)
- OCC_SALES_L: % Employed people classified as Low Skill Sales

The following variables are considered to be indicators of advantage. INC_HIGH is the strongest indicator of advantage in the index.

- INC_HIGH: % People with stated annual household equivalised income greater than $78,000 (approx 9th and 10th deciles)
- HIGHMORTGAGE: % Occupied private dwellings paying mortgage greater than $2,800 per month
- OCC_PROF: % Employed people classified as Professionals
- DIPLOMA: % People aged 15 years and over whose highest level of education attainment is a diploma qualification
- OCC_MANAGER: % employed people classified as Managers
- HIGHRENT: % Occupied private dwellings paying rent greater than $470 per week
- HIGHBED: % Occupied private dwellings with four or more bedrooms
- ATUNI: % People aged 15 years and over at university or other tertiary institution

Excluded variables

The following variable was initially considered for the index, but was excluded due to being highly correlated with other variables.

- DEGREE: % People aged 15 years and over whose highest level of educational attainment is a bachelor degree or higher qualification

The following variables were initially considered for the index, but were excluded when the analysis showed that they were weak indicators of relative disadvantage in this data. For more information, please refer to Chapter 4.3 in the SEIFA 2016 Technical Paper, which is available from the website specified at the beginning of this document.

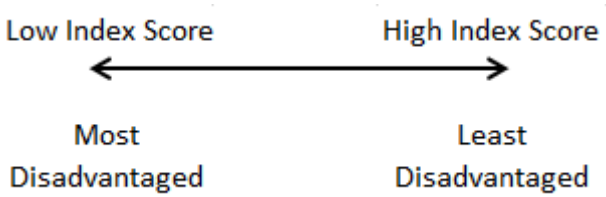
- FEWBED: % Occupied private dwellings with one or no bedrooms
- OWNING: % Occupied private dwellings owning dwelling without a mortgage
- ENGLISHPOOR: % People who do not speak English well
- SPAREBED: % Occupied private dwellings with one or no bedrooms
- HIGHCAR: % Occupied private dwellings with three or more cars

The Index of Relative Socio-economic Disadvantage (IRSD)

Source:
https://www.abs.gov.au/ausstats/abs@.nsf/Lookup/by%20Subject/2033.0.55.001~2016~Main%20Features~IRSD~19

IRSD

The Index of Relative Socio-economic Disadvantage (IRSD) is a general socio-economic index that summarises a range of information about the economic and social conditions of people and households within an area. Unlike the other indexes, this index includes only measures of relative disadvantage.



Interpretation of Index Scores (IRSD)

A **low** score indicates relatively greater disadvantage in general. For example, an area could have a low score if there are:

- many households with low income,
- many people with no qualifications, or
- many people in low skill occupations.

A **high** score indicates a relative lack of disadvantage in general. For example, an area may have a high score if there are:

- few households with low incomes,
- few people with no qualifications, or
- few people in low skilled occupations.

This index is recommended in situations where the user:

- wants to look at disadvantage and lack of disadvantage
- wants a broad measure of disadvantage, rather than a specific measure (such as low income).

For example, IRSD may be applicable when a user:

- wants to ensure an allocation of funds goes to disadvantaged areas.

IRSD is not recommended if the user:

- wants to look at both advantage and disadvantage
- is using the index in an analysis with information that has already been included in the index, such as the proportion of households with low income.

FINAL VARIABLE LIST FOR IRSD

The variables used in the index are listed below. All variables in this index are indicators of disadvantage. INC_LOW is the strongest indicator of disadvantage.

- INC_LOW: % of people with stated household equivalised income between $1 and $25,999 per year
- CHILDJOBLESS: % of families with children under 15 years of age who live with jobless parents
- NONET: % of occupied private dwellings with no internet connection
- NOYEAR12ORHIGHER: % of people aged 15 years and over whose highest level of education is Year 11 or lower
- UNEMPLOYED: % of people (in the labour force) who are unemployed
- OCC_LABOUR: % of employed people classified as Labourers
- LOWRENT: % of occupied private dwellings paying rent less than $215 per week (excluding $0 per week)
- ONEPARENT: % of one parent families with dependent offspring only
- DISABILITYU70: % of people under the age of 70 who have a long-term health condition or disability and need assistance with core activities
- SEPDIVORCED: % of people aged 15 years and over who are separated or divorced
- OCC_DRIVERS: % of employed people classified as Machinery Operators and Drivers
- OCC_SERVICE_L: % of employed people classified as low skill Community and Personal Service workers
- NOCAR: % of occupied private dwellings with no cars
- OVERCROWD: % of occupied private dwellings requiring one or more extra bedrooms
- NOEDU: % of people aged 15 years and over who have no educational attainment
- ENGLISHPOOR: % of people who do not speak English well

Excluded variables

The following variables were initially considered for the index, but were excluded when the analysis showed that they were weak indicators of relative disadvantage in this data. For more information, please refer to Chapter 4.3 in the SEIFA 2016 Technical Paper, which is available from the website specified at the beginning of this document.

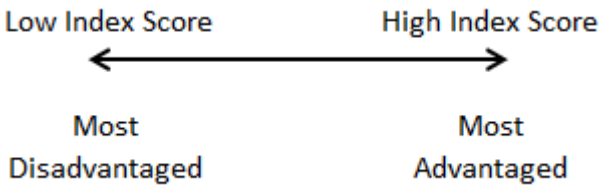
- FEWBED: % occupied private dwellings with one or no bedrooms
- CERTIFICATE: % of people aged 15 years and over whose highest educational attainment is a certificate III or IV qualification
- OCC_SALES_L: % of employed people classified as Low-Skill Sales

The Index of Economic Resources (IER)

Source: https://www.abs.gov.au/ausstats/abs@.nsf/Lookup/by%20Subject/2033.0.55.001~2016~Main%20Features~IER~21

IER

The Index of Economic Resources (IER) focuses on the financial aspects of relative socio-economic advantage and disadvantage, by summarising variables related to income and wealth. This index excludes education and occupation variables because they are not direct measures of economic resources. It also misses some assets such as savings or equities which, although relevant, could not be included because this information was not collected in the 2016 Census.



Interpretation of Index Scores (IER)

A **low** score indicates a relative lack of access to economic resources in general. For example, an area may have a low score if there are:

- many households with low income, or many households paying low rent, AND
- few households with high income, or few owned homes.

A **high** score indicates relatively greater access to economic resources in general. For example, an area may have a high score if there are:

- many households with high income, or many owned homes, AND
- few low income households, or few households paying low rent.

This index is recommended in situations where the user:

- is specifically analysing access to economic resources.

For example, IER may be applicable when a user:

- is interested in wealth as well as income for analysis.

IER is not recommended if the user:

- is only interested in disadvantage, as this index measures both advantage and disadvantage
- is interested in a more general measure of advantage and disadvantage, such as IRSAD
- is using the index in an analysis with information that has already been included in the index, such as household income.

FINAL VARIABLES LIST FOR IER

The variables used in the index are listed in this section.

The following variables are considered to be indicators of disadvantage. INC_LOW is the strongest indicator of disadvantage in the index.

- INC_LOW: % People with stated annual household equivalised income between $1 and $25,999 (approx. 1st and 2nd deciles)
- NOCAR: % Occupied private dwellings with no cars
- LOWRENT: % Occupied private dwellings paying rent less than $215 per week (excluding $0 per week)
- LONE: % Occupied private dwellings who are lone person occupied private dwellings
- ONEPARENT: % One parent families with dependent offspring only
- UNEMPLOYED1: % People aged 15 years and over who are unemployed
- OVERCROWD: % Occupied private dwellings requiring one or more extra bedrooms (based on Canadian National Occupancy Standard)
- GROUP: % Occupied private dwellings who are group occupied private dwellings

The following variables are considered to be indicators of advantage. HIGH_BED is the strongest indicator of advantage in the index.

- HIGHBED: % Occupied private dwellings with four or more bedrooms
- HIGHMORTGAGE: % Occupied private dwellings paying mortgage greater than $2,800 per month
- MORTGAGE: % Occupied private dwellings owning dwelling (with a mortgage)
- INC_HIGH: % People with stated annual household equivalised income greater than $78,000 (approx 9th and 10th deciles)
- UNINCORP: % Dwellings with at least one person who is an owner of an unincorporated enterprise
- OWNING: % Occupied private dwellings owning dwelling without a mortgage

The following variable was initially considered for the index, but was excluded when the analysis showed that it was a weak indicator of relative disadvantage in this data. For more information, please refer to Chapter 4.3 in the SEIFA 2016 Technical Paper, which is available from the website specified at the beginning of this document.

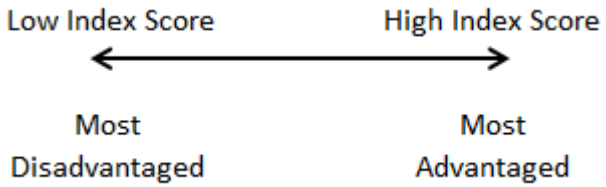
- HIGHRENT: % Occupied private dwellings paying rent greater than $470 per week

The Index of Education and Occupation (IEO)

Source:
https://www.abs.gov.au/ausstats/abs@.nsf/Lookup/by%20Subject/2033.0.55.001~2016~Main%20Features~IEO~22

IEO

The Index of Education and Occupation (IEO) is designed to reflect the educational and occupational level of communities. The education variables in this index show either the level of qualification achieved or whether further education is being undertaken. The occupation variables classify the workforce into the major groups and skill levels of the Australian and New Zealand Standard Classification of Occupations (ANZSCO) and the unemployed. This index does not include any income variables.



Interpretation of Index Scores (IEO)

A **low** score indicates relatively lower education and occupation status of people in the area in general. For example, an area could have a low score if there are:

- many people without qualifications, or many people in low skilled occupations or many people unemployed, AND
- few people with a high level of qualifications or in highly skilled occupations.

A **high** score indicates relatively higher education and occupation status of people in the area in general. For example, an area could have a high score if there are:

- many people with higher education qualifications or many people in highly skilled occupations, AND
- few people without qualifications or few people in low skilled occupations.

This index is recommended in situations where the user:

- is interested in only education and occupation variables
- is interested in an index that does not include income.

For example, IEO may be applicable when a user:

- is analysing the relationship between income and the index.

IEO is not recommended if the user:

- is only interested in disadvantage (not advantage)

- is interested in a more general measure of advantage and disadvantage, such as IRSAD
- is using the index in an analysis with information that has already been included in the index, such as unemployment.

FINAL VARIABLE LIST FOR IEO

The variables used in the index are listed in this section.

The following variables are considered to be indicators of disadvantage. NOYR12ORHIGHER is the strongest indicator of disadvantage in the index.

- NOYR12ORHIGHER: % People aged 15 years and over whose highest level of education is Year 11 or lower. Includes Certificate I and II
- OCC_SKILL5: % Employed people who work in a Skill Level 5 occupation
- OCC_SKILL4: % Employed people who work in a Skill Level 4 occupation
- CERTIFICATE: % People aged 15 years and over whose highest level of educational attainment is a certificate III or IV qualification
- UNEMPLOYED: % People (in the labour force) unemployed
- NOEDU: % People aged 15 years and over who have no educational attainment

The following variables are considered to be indicators of advantage. OCC_SKILL1 is the strongest indicator of advantage in the index.

- OCC_SKILL1: % Employed people who work in a Skill Level 1 occupation
- DIPLOMA: % People aged 15 years and over whose highest level of education attainment is a diploma qualification
- ATUNI: % People aged 15 years and over at university or other tertiary institution
- OCC_SKILL2: % Employed people who work in a Skill Level 2 occupation

Excluded variables

The following variable was initially considered for the index, but was excluded due to being highly correlated with other variables.

- DEGREE:% People aged 15 years and over whose highest level of educational attainment is a bachelor degree or higher qualification

The following variable was initially considered for the index, but was excluded when the analysis showed that it was a weak indicator of relative disadvantage in this data. For more information, please refer to Chapter 4.3 in the SEIFA 2016 Technical Paper, which is available from the Downloads tab.

- ATSCHOOL: % People aged 15 years and over who are still attending secondary school

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