2023 Locality to 2021 Statistical Area Level 2 (SA2) Coding Index

Description

The 'Locality to SA2 Coding Index' is a text based list of 2023 Localities with ASGS Edition 3 (2021) SA2s that are associated with them. The objective of this coding index is to aid the linking of Suburb/Locality geocoded data to ASGS Edition 3 SA2s. In cases where users have unit record data that does not contain whole addresses but does contain a combination of Suburb/Locality and Australia Post postcode information, an association with SA2 can be obtained. In this instance the postcode is important as Locality names are not necessarily unique, even within a State/Territory – the postcode aids in identifying the correct Locality.

The index functions by searching for a Locality/Postcode/State combination to see which SA2 is associated with that Locality. In cases where a Locality/Postcode/State combination covers more than one SA2, the boundary with the greater population is chosen as the associated SA2. Care should be taken when applying coding indexes, as the transformed areas may not be wholly within their associated SA2 region. Coding indexes do not apportion data – they assign whole areas to the most appropriate region within the SA2 geography. As a general rule, small areas can be assigned more accurately than large areas.

Format

The 'Locality to SA2 Coding Index' is provided as a delimited text file. Commas are used as the delimiter and double quotes are used to identify text.

Format of the 'Locality to SA2 Coding Index':

"LOCALITY_ID","LOCALITY_NAME","LOCALITY_TYPE","POSTCODE","STATE","SA2_CODE_2021","SA2_NAME_2021"

"loc6f02f098e82d","ACTON","GAZETTED LOCALITY","2601","ACT","801051049","Acton"

"loc6f02f098e82d","ANU","ALIAS LOCALITY","2601","ACT","801051049","Acton"

"loc6f02f098e82d","AUSTRALIAN NATIONAL UNIVERSITY","ALIAS LOCALITY","2601","ACT","801051049","Acton"

"loc6f02f098e82d","SPINNAKER ISLAND","ALIAS LOCALITY","2601","ACT","801051049","Acton"

"loc6f02f098e82d","SPRINGBANK ISLAND","ALIAS LOCALITY","2601","ACT","801051049","Acton"

"ABS195","ACTON PARK","EXTRA LOCALITY","2601","ACT","801051123","Black Mountain"

"loc8af26acb532d","AINSLIE","GAZETTED LOCALITY","2602","ACT","801051050","Ainslie"

Source Data

The source of localities and Aliases for the 'Locality to SA2 Coding Index' are detailed below:

Localities are sourced from:

- Geoscape Gazetted Localities
- ABS Extra Localities

Aliases are sourced from:

- Geoscape Aliases
- ABS Aliases

The attributes for the 'Locality to SA2 Coding Index' are as follows:

Data Item	Source	Description
LOCALITY_ID	May 2023 Geoscape edition of Gazetted Localities and common aliases. ABS Extra Localities and ABS Aliases file.	ID associated with the Locality, also indicates the different datasets that the Locality is sourced from.
LOCALITY_NAME	May 2023 Geoscape edition of Gazetted Localities and common aliases. ABS Extra Localities and ABS Aliases file.	The Name of the gazetted Locality, alias or extra Locality.
LOCALITY_TYPE	May 2023 Geoscape edition of Gazetted Localities and common aliases. ABS Extra Localities and ABS Aliases file.	Indicates whether the Locality is: Gazetted Locality, Alias Locality or Extra Locality.
POSTCODE	Several sources are used to derive postcodes.	The Australia Post Postcode associated with each gazetted Locality, alias or extra Locality.
STATE	ASGS Edition 3	State/Territory Abbreviation
SA2_CODE_2021	ASGS Edition 3	Code for the 2021 Statistical Area Level 2 (SA2) of the ASGS.
SA2_NAME_2021	ASGS Edition 3	Name for the 2021 Statistical Area Level 2 (SA2) of the ASGS.

The Process

The 'Locality to SA2 Coding Index' is built from an FME script that is used to process population weighted Mesh Block (MB) grid based correspondences. This population weighted correspondence method comprises a series of grid points that represent the underlying geographical distribution of the weighting unit, which in this case is the MB total population. Each grid point is assigned a value based on this weighting. The next step in this process is to determine the proportion that the Locality, as the FROM unit, is donating to the respective SA2 TO units. The proportion is calculated by dividing the population found in each of the TO regions by the total population of the FROM region.

Unlike the FME process for population weighted grid based correspondences which outputs all ratios for statistical boundaries covering a given Locality/State/Postcode combination, the Locality to SA2

Coding Index method assigns only the Locality with the largest ratio of population for the given SA2. This means where a Locality is covered by two or more SA2s, the Locality has been allocated to the SA2 where most of its population are located according to the underlying grid. This ensures a specific gazetted Locality/alias/extra Locality entry is represented only once in the file and is allocated wholly to a specific SA2.

For further information or advice regarding the method for creating or using coding indexes, please email geography@abs.gov.au.