Stats NZ
Tatauranga Aotearoa

ANZLIC metadata for statistical area 2, 2018

New Zealand Government

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Contents

Identification

Title	Statistical Area 2 2018 (SA22018)
Date	1 January 2018 (publication)
Language	eng
Character set	UTF-8

Abstract	This dataset is the definitive set of statistical area 2 (SA2) boundaries for 2018 as defined by Stats NZ.
	
	Statistical area 2 (SA2) is a new output geography that provides higher aggregations of population data than can be provided at the statistical area 1 (SA1) level. The SA2 geography aims to reflect communities that interact together socially and economically. In populated areas, SA2s generally contain similar sized populations.
	
	The SA2 should:
	
	• form a contiguous cluster of one or more SA1s
	• excluding exceptions below, allow the release of multivariate statistics with minimal data suppression
	• capture a similar type of area, such as high-density urban areas, farmland, wilderness areas, and water areas
	• be socially homogeneous and capture a community of interest. It may have, for example:
	  ○ a shared road network
	  ○ shared community facilities
	  ○ shared historical or social links, or
	  ○ socio-economic similarity
	• form a nested hierarchy with statistical output geographies and administrative boundaries. It must:
	  ○ be built from SA1s
	  ○ either define or aggregate to define urban rural areas, territorial authorities, and regional councils.
	
	SA2s in city council areas generally have a population of 2,000–4,000 residents while SA2s in district council areas generally have a population of 1,000–3,000 residents.
	
	In rural areas, many SA2s have fewer than 1,000 residents because they are in conservation areas or contain sparse populations that cover a large area, for example, Fiordland.
	
	SA2s have been created in urban areas for areas that contain significant business and industrial activity, for example ports, airports, industrial, commercial, and retail areas. These areas have fewer than 1,000 residents and are useful for analysing business demographics, labour markets, and travel-to-work patterns.
	
	In major urban areas, an SA2 or a group of SA2s often approximates a single suburb. A small urban area containing up to 5,000 residents may be represented by a single SA2. In rural areas, rural settlements are included in their respective SA2 with the surrounding rural area.
	
	Some SA2s with nil or nominal populations have been created to ensure that the SA2 geography covers all of New Zealand and aligns with New Zealand's topography and local government boundaries. These types of SA2s are described below.

	SA2s with nil or nominal resident populations are created to represent inland water, inlets or oceanic areas and include: • inland lakes larger than 50 km^2 (lakes smaller than 50 km^2 are included with the surrounding land SA2) • harbours larger than 40 km^2 • major ports • other non-contiguous inlets and harbours defined by territorial authority • contiguous oceanic areas defined by regional council. Stewart Island and Chatham Islands are represented by separate SA2s. To minimise suppression of population data, small islands with nil or low populations close to the mainland are generally included with their adjacent land-based SA2. SA2s have been created for populated single islands or groups of islands which are some distance from the mainland, or to separate large unpopulated islands from urban areas. These SA2s are: • Three Kings Islands • Barrier Islands (includes Great Barrier and Little Barrier Islands, and other nearby islands) • Gulf Islands (includes Motutapu, Rangitoto, and other islands in the Hauraki Gulf) • Islands Thames Coromandel District • Islands Bay of Plenty Region (Motiti Island, Mayor Island, Moutohora Island, and White Island) • Bare Island (in the Bay of Plenty region but outside the territorial authority area) • Matanaka Island • Kapiti Island • Mana Island • Islands Tasman District (Best Island, Bell Island, and Rabbit Island) In rural areas where territorial authority boundaries straddle regional council boundaries, SA2s have been created to maintain the statistical geography and administrative area hierarchy. These SA2s each have fewer than 200 residents and are: Arahiwi, Tiroa, Rangataiki, Kaimanawa, Taharua, Te More, Ngamatea, Whangamomona, and Mara. The SA2 classification is a flat classification. As at 2018, there are 2,253 SA2s, including 2,237 digitised SA2s and 16 non-digitised SA2s. Each SA2 is a single geographic entity with a name and a numeric code. The name refers to a geographic feature or a recognised place name or suburb. In some instances where place names are the same or very similar, the SA2s are differentiated by their territorial authority, for example, Gladstone (Invercargill City) and Gladstone (Carterton District). SA2 codes have six digits. North Island SA2 codes start with a ‘1’ or ‘2’ and South Island SA2 codes start with a ‘3’. They are numbered approximately north to south within their respective territorial authorities. In 2018, the last two digits of each code is 00, and when SA2 boundaries change in the future, only the last two digits of the code will change to ensure the north-south pattern is maintained. Digital boundary data became freely available on 1 July 2007.

Topic category	Boundaries
Spatial representation type	Vector

Extent

Description	Twelve-mile New Zealand territorial limit

Geographic box

West bound longitude	165.905646
East bound longitude	179.855610
North bound latitude	-33.826584
South bound latitude	-47.841491

Extent – temporal

Description	Data represents SA2 polygons dissolved from meshblocks starting from 2018
Begin date	2018-01-01
End date	2018-01-01
Access constraints	None. Data is freely downloadable from the Stats NZ website.
Use constraints	These conditions of supply apply to all users of Stats NZ digital boundaries effective 1 July 2007. **Permitted uses** Stats NZ must be acknowledged as the source of the boundaries. **Uses not permitted** Users are not permitted to change the accuracy of the boundaries and supply them to another party. **Liability** While care has been taken to compile these boundary coordinates, Stats NZ gives no warranty that the data supplied is free from error. Stats NZ shall not be liable for any loss suffered through the use, directly or indirectly, of any information, product or service.
Maintenance and update frequency	The meshblock pattern and associated hierarchies are maintained on a regular basis. 2018 is the first pattern available.
Date of next update	December 2018
Update scope	Dataset

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Distribution information

Distribution format	GIS ESRI Shapefile GeoPackage / SQLite ESRI Geodatabase MapInfo TAB CAD (.dwg) Google Earth (KML) CSV PDF
Distribution version	1.0
Online resource linkage	https://datafinder.stats.govt.nz
Online resource description	Online data service providing the geographic boundaries. Can be used to search, browse, and download digital geographic boundaries. Download is available in a range of spatial and non-spatial formats. This online data service is provided by Stats NZ's technology partner Koordinates. SA2s are part of the bundle of boundaries Stats NZ makes available.

Reference system information

Title	New Zealand Transverse Mercator 2000 (NZTM2000)
Date	1 July 2001
Edition	
Code	19971

Data quality information scope

Hierarchy level	Dataset
Description	New Zealand Statistical Area 2 Boundaries

Lineage

Statement (general explanation of the data producer's knowledge about the lineage of a dataset)	SA2s are based on the meshblock pattern. Non-alignment of meshblock to cadastral boundaries is one of a number of reasons for meshblock boundary adjustments. Other reasons include requests from local authorities, Local Government Commission, Electoral Representation Commission, and to make census enumeration processes easier. From the meshblock pattern, higher geographies, including the 2018 statistical area 2 pattern, were dissolved using the dissolve tool in the Arc GIS suite. To derive the SA2 boundaries clipped to the coastline, meshblock polygons were dissolved to exclude meshblocks with a land/water attribute of Inlet or Oceanic.
Description (detailed description of the level of the source data)	**Deriving output files** The original vertices delineating the meshblock boundary pattern were digitised in 1991 from 1:5,000 scale urban maps and 1:50,000 scale rural maps. The magnitude of error of the original digital points would have been in the range of +/- 10 metres in urban areas and +/- 25 metres in rural areas. Where meshblock boundaries coincide with cadastral boundaries the magnitude of error will be within the range of 1–5 metres in urban areas and 5–20 metres in rural areas, this being the estimated magnitude of error in Landonline. The creation of high definition and generalised meshblock boundaries for the 2018 digital pattern and the dissolving of these meshblocks into other geographies/boundaries were completed at Stats NZ using ESRI's ArcGIS desktop suite with the following process: 1. Align the meshblock boundary pattern to the current LINZ cadastre. 2. Run geometry checks and repairs. 3. Run topology checks on all data (Must Not Have Gaps, Must Not Overlap, Area Boundary Must Be Covered By Boundary Of [Meshblock]). 4. Generalise the meshblock layers to a 1-metre tolerance to create generalised dataset. 5. Clip the meshblock layers to the coastline, detailed below. 6. Dissolve meshblock datasets (clipped and unclipped) to higher geographies to create the following output data layers: Statistical Area 1,

	Statistical Area 2, Territorial Authority, Regional Council, Urban Rural, Community Board, Territorial Authority Subdivision, Ward, Constituency or General Constituency, Māori Constituency. 7. Complete a frequency analysis to determine that each code only has a single record. 8. Quality assurance of files. **Clipping of layers to coastline** The feature class was clipped to the coastline. The coastline was defined as features within the supplied LANDWATER indicator with codes and descriptions as follows: **11**- Island – included **12**- Mainland – included **21**- Inland water – included **22**- Inlet – excluded **23**- Oceanic – excluded **31**- Other – included. Non-digitised meshblocks were excluded from this process. Features were clipped using ArcGIS.

Metadata

File identifier	2538-0044-2018
Language	eng
Character set	UTF-8
Hierarchy level	dataset
Hierarchy level name	Dataset - Statistical Area 2 - 2018
Date stamp	2017-12-07
Metadata standard name	ANZLIC Metadata Profile
Metadata standard version	1.1

Metadata author

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