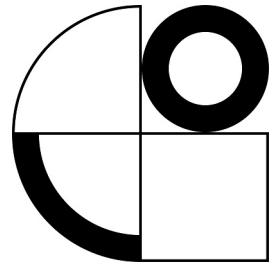


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Electoral Boundaries

1.0

Geoscape

19 January 26

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Overview

1.1 Delivery Organisation - Geoscape Australia

Geoscape is the digital Australia – a comprehensive representation of our built environment. It is consistently formatted spatial data that describes the addresses, land, buildings and transport networks across Australia’s complex cities, regional centres and rural communities.

Geoscape Australia is the trading name of PSMA Australia Limited, a self-funded public company owned by the governments of Australia. The organisation’s first major initiative was to support the 1996 Census through the provision of Australia’s first national digital basemap at street-level.

We were incorporated in 2001 and tasked with collating, transforming and delivering national spatial datasets. Our establishment reflected the desire of Australian governments to work together to establish national, location information infrastructure to advance the emerging information economy. Geoscape Australia is now a trusted source of essential national location data, with a diverse ecosystem of data partners.

The value of Geoscape data is in its richness. It enables a range of innovations and applications. To support broad use of the data, it is available through online subscription services in business-ready formats, as well as customised enterprise plans. Geoscape Australia has a network of solution partners that integrate Geoscape data into other products and services. The partner network includes traditional geospatial specialists and data engineers, as well as software developers, marketing service providers, systems integrators and consultancies.

1.2 Data Product Specification Title

Electoral Boundaries Product Description

1.3 Data Scope

Electoral Boundaries is a digital dataset representing Commonwealth and State Electoral Boundaries across Australia. There will be a Release Report provided with each update which will detail the specific update areas and any issues contained within Electoral Boundaries.

1.4 Reference Date

February 2024

1.5 Responsible Party

PSMA Australia Limited, trading as Geoscape Australia

ABN: 23 089 912 710

Unit 6, 113 Canberra Avenue, GRIFFITH ACT 2603 Australia

T: +61 2 6260 9000

E: info@geoscape.com.au

URL: www.geoscape.com.au

1.6 Language

English

1.7 Topic Category

Boundaries for electoral areas within Australia.

1.8 Informal Description of the Data Product

Electoral Boundaries is a national digital dataset of Australia's electoral divisions or electorates. The Electoral Boundaries dataset has two layers: Commonwealth Electoral Boundaries (CEB) and State Electoral Boundaries (SEB).

Electoral Boundaries are based on government data provided by the appropriate authorities. The Commonwealth and State/Territory Governments collect data to delineate the areas covered by each tier of government within Australia.

Geoscape welcomes your feedback on the Electoral Boundaries Dataset. We also publish regular updates on the development of our products on the Geoscape website.

1.9 Distribution Format

This document is available in PDF format. For other formats and use of this document, contact Geoscape Support (support@geoscape.com.au).

1.10 Copyright and disclaimer

Please see <https://geoscape.com.au/legal/data-copyright-and-disclaimer/>

1.11 Privacy

Geoscape products and services should not contain any personal or business names or other sensitive information. Geoscape undertakes reasonable data cleansing steps as part of its production processes to ensure that is the case. If you think that personal information may have inadvertently been included in Geoscape products or services, please contact support@geoscape.com.au.

Specification Scope

2.1 Scope Identification

Electoral Boundaries is a standalone data theme containing two layers called Commonwealth Electoral Boundaries (CEB) and State Electoral Boundaries (SEB).

2.2 Extent

National spatial coverage of Australia's Commonwealth and State Electoral Boundaries.

Data Product Identification

3.1 Title

Electoral Boundaries

3.2 Alternate Titles

Geoscape Electoral Boundaries

3.3 Abstract

Electoral Boundaries is a digital representation of Australia's electoral divisions or electorates. This dataset provides an optimised aggregated national view of electoral boundary geometry and attribution. The dataset is created from multiple sources including jurisdictional data which is revised regularly and supplied in varying formats and at different levels of quality.

3.4 Description

The Electoral Boundaries theme consists of two layers; the Commonwealth Electoral Boundaries (CEB) and the State Electoral Boundaries (SEB).

Commonwealth Electoral Boundaries represent federal electoral divisions legally prescribed by the Australian Electoral Commission (AEC) for the purpose of electing members to the House of Representatives.

State Electoral Boundaries represent state electoral divisions legally prescribed by the various state and territory governments of Australia for the purpose of electing members to the state or territory lower and/or upper houses of parliament. These boundaries differ by state and territory in terms of state electoral class represented (e.g. Legislative Assembly, Legislative Council, House of Assembly). For example, the territories of ACT and NT, as well as the state of QLD only have Legislative Assembly (Lower House) boundaries associated. NSW, SA, VIC and WA all have both Legislative Assembly (Lower House) and Legislative Council (Upper House) boundaries associated. TAS has House of Assembly (Lower House) and Legislative Council (Upper House) boundaries associated.

3.5 Purpose

Electoral Boundaries is designed to meet the needs of organisations that require a graphical representation of locations of electoral divisions to integrate with other data in servicing their business needs.

3.6 Topic Category

Vector spatial data defined by coordinates (latitude and longitude) with associated textual (aspatial) metadata.

3.7 Geographic Description

The spatial coverage of Electoral Boundaries includes Australia's land mass. The Bounding Box for this data is as follows:

- North bounding latitude: -8°
- South bounding latitude: -45°
- East bounding longitude: 168°
- West bounding longitude: 96°

The area covers the land mass of Australia, including offshore islands (Christmas Island, Cocos (Keeling) Islands, and Norfolk Island). The spatial domain is described by the polygon:



3.8 Geographic Extent Name

The States and Territories within Australia are represented by the following:

State or Territory Name	Abbreviation	Character Code
New South Wales	NSW	1 (or 01)
Victoria	VIC	2 (or 02)
Queensland	QLD	3 (or 03)
South Australia	SA	4 (or 04)
West Australia	WA	5 (or 05)
Tasmania	TAS	6 (or 06)
Northern Territory	NT	7 (or 07)
Australian Capital Territory	ACT	8 (or 08)
Other Territories	OT	9 (or 09)

Note

Geoscape has adopted the Australian Bureau of Statistics (ABS) definition of 'Other Territories' (OT). It includes the Territory of Christmas Island, Territory of Cocos (Keeling) Islands, Jervis Bay Territory and Norfolk Island. OT does not include any other external Territory.

Data Content and Structure

The Electoral Boundaries dataset is a feature-based product. A data model is included (Appendix A - Data Model Diagram) with an associated data dictionary (Appendix B - Data Dictionary).

4.1 Feature-Based Data

The feature type is a spatial polygon. The table below outlines the features and their integration into related datasets.

Table 1: Feature descriptions and integration into related datasets table

Entity	Description	Integration
Commonwealth Electoral Boundaries	Commonwealth Electoral captures the boundaries for Commonwealth Electorates. It may have many polygons defining its boundary.	No integration to other datasets (except State).
State Electoral Boundaries	State Electoral captures the boundaries for State Electorates. It may have many polygons defining its boundary.	No integration to other datasets (except State).

4.2 Feature-Based Application Schema (Data Model)

The Electoral Boundaries dataset Data Model Diagram is set out in Appendix A - Data Model Diagram.

4.3 Data Dictionary

The feature catalogue in support of the application schema is provided in Appendix B - Data Dictionary. Spatial attributes are added to the feature catalogue in the same manner as other attributes for completeness and conformance to the application schema. The following table refers to all tables in the Feature Catalogue below.

Table 2: Feature Catalogue table

Column	Description
Name	The name of the column in the Integrated Database.
Data Type	The data type of the column based on the types defined in ISO 19103:2015. Parentheses capture Scale, Precision and Maximum Length, where applicable.
Description	A description of the column and what the expected contents are.
Primary Key	If 'Y' then this column must always have a unique value. (Has # entry in the data model tables).
Mandatory Field	Y = mandatory. If 'Y' (mandatory), this column is populated with data.
Foreign Key Table	Represents a table that this column is referred to.
Foreign Key Column	Represents a column in the 'Foreign Key Table' that this column is referred to by another table. (has * entry in the data model tables)
10 Character Alias	An alias for this column name - up to 10 characters maximum. Used to define the name of the column when in ESRI Shapefile format.

4.4 Feature-Based Content Scope

All geometry and metadata for polygons within the Electoral Boundaries dataset.

Reference System

5.1 Spatial Reference System

GDA94

Horizontal Datum: The Geocentric Datum of Australia 1994 (GDA94) is the target horizontal datum.
Coordinate System: Geographic Coordinate System Geocentric Datum of Australia 1994 (GDA94).

GDA2020

Horizontal Datum: The Geocentric Datum of Australia 2020 (GDA2020) is the target horizontal datum.
Coordinate System: Geographic Coordinate System Geocentric Datum of Australia 2020 (GDA2020).

5.2 Temporal Reference System

Gregorian calendar

5.3 Reference System Scope

The spatial objects and temporal collection periods for the Electoral Boundaries dataset.

Data Quality

6.1 Positional Accuracy

Positional accuracy is an assessment of the closeness of the location of the spatial objects in relation to their true positions on the earth's surface. Positional accuracy consists of 2 assessments:

- Horizontal accuracy assessment, and
- Vertical accuracy assessment.

The horizontal and vertical positional accuracy is the assessed accuracy after all transformations have been carried out.

6.2 Coordinates Referencing the GDA2020 Datum

Spatial features referencing the GDA2020 datum are produced using a coordinate transformation from the GDA94 datum using the following parameters.

- shift_x = 0.06155,
- shift_y = -0.01087,
- shift_z = -0.04019,
- rotate_x = -0.0394924,
- rotate_y = -0.0327221,
- rotate_z = -0.0328979,
- scale_adjust = -0.009994

6.3 Attribute accuracy

Attribute accuracy is an assessment of the reliability of values assigned to features in the dataset in relation to their true 'real world' values.

Key attributes (name and the unique identifier) have a high degree of accuracy in the order of 99.09%. Other attributes derived from the processing of supplied data may have a lower degree of accuracy but less than previously released data. All attribute accuracies are dependent on the data accuracy supplied to Geoscape Australia.

For this product, feature and attribute accuracy is a measure of the degree to which the features and attribute values of spatial objects agree with the information on the source material. The allowable error in attribute accuracy was previously up to 5%.

A precise attribute accuracy assessment may not always be possible. In these cases an intuitive estimate of the expected attribute accuracy or the likely maximum error based on previous experience is acceptable.

6.4 Logical Consistency

Logical consistency is a measure of the degree to which data complies with the technical specification. The allowable error in logical consistency previously ranged from 3% to 5%. The test procedures are a mixture of software scripts and onscreen, visual checks. The data structure has been tested for conformance with the data model. The following have been tested and confirmed to conform:

- File names
- Attribute names
- Attribute lengths
- Attribute types
- Attribute domains
- Attribute order in file
- Object type
- Compulsory attributes populated

6.5 Topological Consistency

Topological consistency is the measure of how features spatially relate to other features within and across themes. Topological inconsistencies are identified using a combination of automated rules and visual analysis. Where topological inconsistencies are identified they are notified back to the supplier organisation for remediation at the source. Some minor topological inconsistencies are corrected during product processing using automated rules. The level of topological consistency is dependent on the data supplied to Geoscape.

Electoral Boundaries has been processed to assure all polygons are stored as single part features to improve compatibility with a range of software applications. Due to this there can be a duplication of PIDs (e.g. STATE_ELECTORAL_PID) within a layer (e.g. State Electoral Boundaries) where there are multiple polygons represented by a single PID.

6.6 Completeness

Completeness is an assessment of the extent and range of the dataset in regard to completeness of coverage, completeness of classification and completeness of verification.

Attribute completeness

All attributes for each object are populated according to the data model, noting that some attributes are not mandatory.

Temporal accuracy for each layer is applicable to its most current release.

Quality scope

Polygon geometry accuracy and attribute accuracy for all included areas.

Data Capture

The digital Electoral Boundaries and their legal identifiers have been supplied by the Electoral Commission from each State and Territory as well as the Australian Electoral Commission. These boundaries undergo re-distribution depending on population of the electorate before each election.

Data Updates and Maintenance

8.1 Update Frequency

Geoscape Australia releases updates to datasets on either a monthly, quarterly, or as required frequency. Electoral Boundaries is updated as required with any updates delivered in the months of February, May, August and November when applied. As required means datasets are updated when significant change is provided by the jurisdictions for inclusion into the product.

8.2 Maintenance scope

Geoscape Australia's data maintenance occurs for existing objects with changed geometry and/or attributes, as well as data for new objects within the release period.

Delivery Format

9.1 Components

Electoral Boundaries is a vector data product and is made available for each state or territory in the formats listed below. The Australian Government releases Electoral Boundaries on data.gov.au in ESRI Shape and MapInfo TAB formats.

9.2 Supplied Formats

9.2.1 MapInfo TAB

Format name

TAB – MapInfo Professional

Specification

The MapInfo TAB format is a popular geospatial vector data format for geographic information systems software. It is developed and regulated by MapInfo as a proprietary format. This format includes files with the following extensions: *.tab, *.dat, *.id, *.map

TAB files support geospatial standards such as Open GIS, the OGC, ISO, W3C and others.

Language

English

9.2.2 ESRI Shapefile

Format name

Shape – ESRI™

Specification

This format includes files with the following extensions: *.shp, *.shx, *.dbf

ESRI Shapefile Technical Description, an ESRI White Paper, July 1998. Follow this link: www.esri.com/library/whitepapers/pdfs/shapefile.pdf

Language

English

9.2.3 File Geodatabase

Format name

File Geodatabase – ESRI™

Specification

This format includes files with the following extensions: *.gdb

ESRI File Geodatabase Technical Description. Follow this link: <http://desktop.arcgis.com/en/desktop/latest/manage-data/administer-file-gdbs/file-geodatabases.htm>

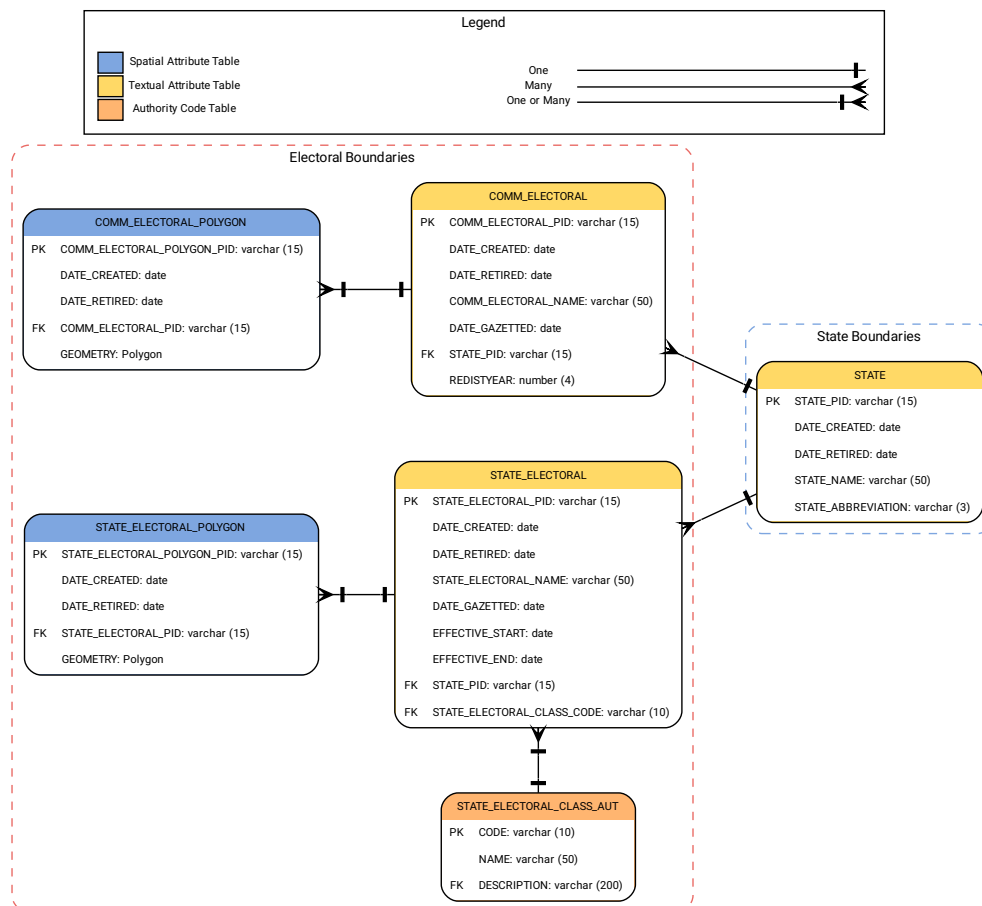
<http://desktop.arcgis.com/en/desktop/latest/manage-data/administer-file-gdbs/file-geodatabases.htm>

Language

English

Appendices

10.1 Appendix A – Data Model Diagram



10.2 Appendix B – Data Dictionary

10.2.1 Commonwealth Electoral Boundaries

Table 1: COMM_ELECTORAL table

Name	Data Type	Description	Prim Key	Man	F K TABLE	F K Col	10 Char Alias
COMM_ELECTORAL	var-char2(15)	The Persistent Identifier is unique to the real world feature this record represents.	Y	Y			CE_PID
DATE_CREATED	date	Date this record was created.	N	Y			DT_CREATE
DATE_RETIRED	date	Date this record was retired.	N	N			DT_RETIRE
COMM_ELECTORAL	var-char2(50)	Name of the Commonwealth electorate.	N	Y			NAME
DATE_GAZETTED	date	Gazetted date.	N	N			DT_GAZETD
STATE_PID	var-char2(15)	State Persistent Identifier.	N	Y	STATE	STATE_ID	STATE_PID
REDISTYEAR	number(4)	The field is the year of the boundary redistribution for each electorate.	N	N			REDISTYEAR

Table 2: COMM_ELECTORAL_POLYGON table

Name	Data Type	Description	Prim Key	Man	F K TABLE	F K Col	10 Char Alias
COMM_ELECTORAL	var-char2(15)	The Persistent Identifier is unique to the real world feature this record represents.	Y	Y			CE_PLY_PID
DATE_CREATED	date	Date this record was created.	N	Y			DT_CREATE
DATE_RETIRED	date	Date this record was retired.	N	N			DT_RETIRE
COMM_ELECTORAL	var-char2(15)	Commonwealth electoral persistent identifier.	N	Y	COMM_ELE	COMM_ELECTORAL	CE_PID
GEOMETRY	polygon	Polygon geometry.	N	Y			GEOMETRY

10.2.2 State Electoral Boundaries

Table 3: STATE_ELECTORAL table

Name	Data Type	Description	Prim Key	Man	F K TABLE	F K Col	10 Char Alias
STATE_ELECTORAL	var-char2	The Persistent Identifier is unique to the real world feature this record represents.	Y	Y			SE_PID
DATE_CREATED	date	Date this record was created.	N	Y			DT_CREATE
DATE_RETIRED	date	Date this record was retired.	N	N			DT_RETIRE
STATE_ELECTORAL	var-char2	Name.	N	Y			NAME
DATE_GAZETTED	date	Gazetted date.	N	N			DT_GAZETD
EFFECTIVE_START	date	Where available, the date the electorate becomes effective, often this is the first election date after redistribution. In some states the effective date and gazetted date are the same	N	N			EFF_START
EFFECTIVE_END	date	Where available, the date the electorate is no longer in effect, often this is the due to a redistribution.	N	N			EFF_END
STATE_PID	var-char2	State Persistent Identifier.	N	Y	STATE	STATE_ID	STATE_PID
STATE_ELECTORAL	var-char2	State Electoral class code	N	N	STATE_ELEC	CODE	SECL_CODE

Table 4: STATE_ELECTORAL_POLYGON table

Name	Data Type	Description	Prim Key	Man	F K TA-BLE	F K Col	10 Char Alias
STATE_ELECTORAL	var-char2(1)	The Persistent Identifier is unique to the real world feature this record represents.	Y	Y			SE_PLY_PID
DATE_CREATED	date	Date this record was created.	N	Y			DT_CREATE
DATE_RETIRED	date	Date this record was retired.	N	N			DT_RETIRE
STATE_ELECTORAL	var-char2(1)	State electoral Persistent Identifier.	N	N	STATE_ELE	STATE_ELECT	SE_PID)
GEOMETRY	poly-gon	Polygon geometry.	N	Y			GE-OME-TRY

Table 5: STATE_ELECTORAL_CLASS_AUT table

Name	Data Type	Description	Prim Key	Man	F K TA-BLE	F K Col	10 Char Alias
CODE	var-char2(10)	This is the persistent Identifier of the record.	Y	Y			CODE
NAME	var-char2(50)	Name.	N	Y			NAME
DESCRIPTION	var-char2(200)	Description of the State Electoral classes.	N	N			DESCRIPTION

Table 6: Codes for STATE_ELECTORAL_CLASS_AUT table

Code	DESCRIPTION	NAME
1	Jurisdiction Electoral Boundaries for the House of Assembly	House of Assembly
2	Jurisdiction Electoral Boundaries for the Legislative Assembly	Legislative Assembly
3	Jurisdiction Electoral Boundaries for the Legislative Council	Legislative Council
4	Jurisdiction Electoral Boundaries for the Legislative Assembly and Legislative Council	Legislative Assembly and Legislative Council
5	Jurisdiction Electoral Boundaries for the House of Assembly and Legislative Council	House of Assembly and Legislative Council

10.3 Appendix C - Metadata

Direct Download [electoral_boundaries.xml](#).

10.3.1 Electoral Boundaries Metadata Statement

Metadata for the Metadata

Metadata Identifier: a9e3f7c2-4d8b-4f6a-9c2e-7b1d3a8f5e64

Time:

- Create Date: 2022-02-02T01:56:57.785613Z
- Revision Date: 2025-06-18T06:30:35.152518Z

Responsible Party:

- Individual: Michael Dixon
- Organisation: Geoscape Australia
- Position: Chief Data Officer
- Telephone: +61 2 6260 9000
- Delivery point: Unit 6, 113 Canberra Ave Griffith ACT 2603 Australia

Access, Use, Security:

Standard: ISO 19115-3

Language: English

Resource Metadata

Title: Electoral Boundaries

Abstract: Electoral Boundaries is a digital representation of Australia's electoral divisions/electorates, providing an optimised aggregated national view of electoral boundary geometry and attribution, created from multiple (regularly revised) jurisdictional sources supplied in varying formats and quality.

Purpose: To provide organisations with a graphical representation of electoral division locations that can be integrated with other data to support business needs.

Responsible Party:

- Organisation: Geoscape
- Telephone: +61 2 6260 9000
- Delivery point: Unit 6, 113 Canberra Ave Griffith ACT 2603 Australia

Access, Use, Security:

- Legal Constraints: Geoscape Australia and its authorised partners license this dataset. Users must comply with the applicable licence terms and the Geoscape Copyright Notice and Disclaimer, available at geoscape.com.au/data-copyright-disclaimer/.
- Security Constraints: None. This dataset is not subject to any security classification.
- Use Limitations: Refer to the product guide available via docs.geoscape.com.au for data quality and related information.
- Releasability: This dataset must not be distributed except in accordance with the terms of the licence under which it was accessed.

Extents



- West/Min X: 96.00
- East/Max X: 168.00
- South/Min Y: -45.00
- North/Max Y: -8.00

Reference System:

- GDA2020 (EPSG:7844)
- GDA94 (EPSG:4283)
- Australian Height Datum (EPSG:5111)

Keywords:

- Electoral Boundaries
- Electoral Boundaries datasets
- Electoral Boundaries file
- Geoscape Electoral Boundaries

Distribution:

This dataset is available from Geoscape Australia.

Format/s:

- ESRI Shapefile
- Mapinfo TAB
- GeoJSON
- ESRI File Geodatabase
- OGC GeoPackage

Status: completed

Lineage:

Statement:

Electoral Boundaries is compiled as a feature-based polygon dataset consisting of two layers, Commonwealth Electoral Boundaries (federal divisions prescribed by the AEC) and State Electoral Boundaries (state/territory divisions prescribed by jurisdictions). It is produced by aggregating boundary geometry and attribution from multiple jurisdictional sources that are revised regularly, then structured into a standardised national dataset (with an accompanying data model and data dictionary) to provide a consistent national view.

Additional Documentation

- Title: Electoral Boundaries Product Description
- Alternate Title: Electoral Boundaries Product Guide
- Edition: 3.3
- Presentation Format: documentDigital
- Linkage: https://docs.geoscape.com.au/projects/docs_electoral_boundaries_desc/en/stable/index.html
- Name: Electoral Boundaries Product Description
- Description: Product Description of the current version of the Geoscape Electoral Boundaries Product.
- Function: information

Maintenance and Update Frequency: quarterly

Bibliography

[Aerometrex, 2023] Aerometrex. Aerial imagery. Raster Dataset, 2023. URL: <https://aerometrex.com.au/>.