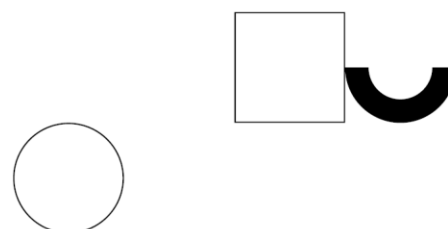
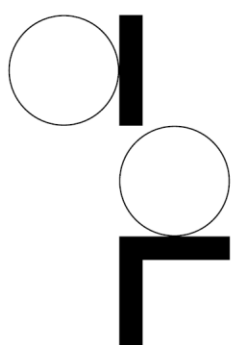
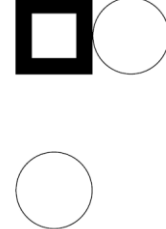
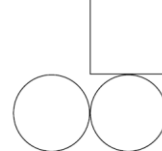


Cadastre

Product Guide
Version 1.0





Disclaimer

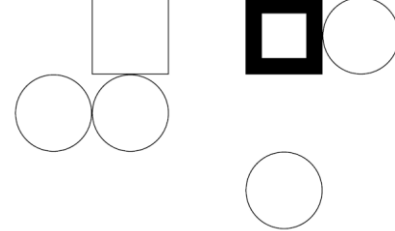
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Preface

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Copyright and disclaimer

Please see geoscape.com.au/legal/data-copyright-and-disclaimer/

Privacy

Geoscape products and services should not contain any personal names or other personal 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.

Product Version

1.0

Overview

Cadastral is a spatial representation of cadastral parcels defined by the State and Territory governments of Australia. Cadastral aggregates the complex representations unique to each jurisdiction into a consistent, seamless representation of the cadastral fabric of Australia. With the representation of Lot, Strata, Stratum, and Road plans Cadastral informs on the boundaries and associated attributes of these features in addition to providing linkages to jurisdiction Land Registries, and other products commonly used alongside Cadastral e.g. G-NAF.

Australian cadastral parcels represent the smallest legal area of land capable of sale without further approval to subdivide. These parcels can be referenced by a Land Title which offers the opportunity to link to jurisdictional information that can include: the certificate of title or crown lease, valuation information, land descriptions and more, through the State's or Territory's Land Registry.



Cadastral is designed to meet the needs of organisations that require a geospatial representation of land parcel boundaries at both a local and broad scale. The attribution of parcels provided within Cadastral allows for the application of the data across a wide range of commercial, government and research uses. Cadastral can also be used to identify changes in the urban landscape, such as subdivision of greenfield developments or blocks into multi building dwellings or the development of high-rise buildings.

Geoscape Australia welcomes your feedback on our Cadastral product. We also publish regular updates on the development of our products on the Geoscape website (www.geoscape.com.au).

Technical Description

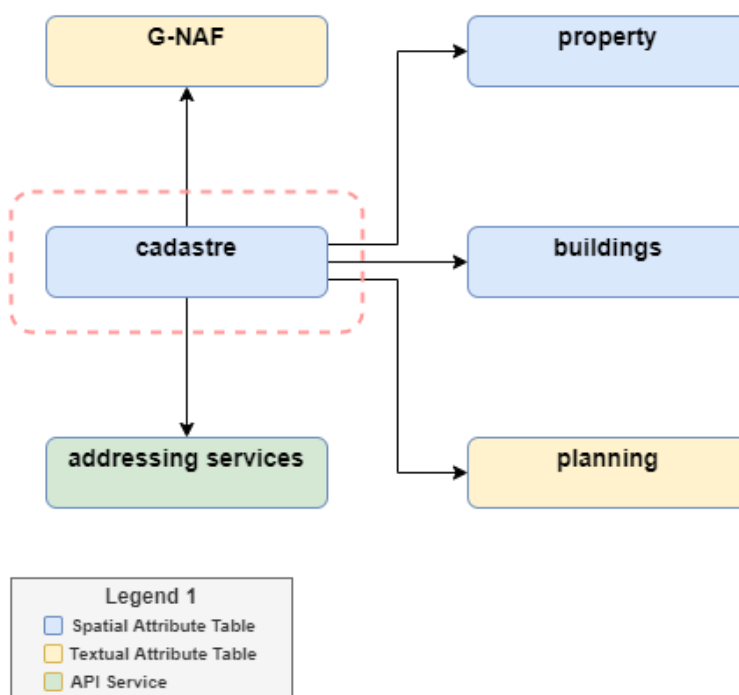
Cadastre is created through processing cadastral data sourced from Australia's States and Territories. Source attributes are mapped and standardised to provide a coherent definition across the jurisdiction supplies, with associated geometry being cleaned and processed to output a topologically consistent layer of Australia's cadastral boundaries at a national scale. Additional attributes and geometry have been generated and integrated by Geoscape to support the jurisdictional information as well as to provide convenience in the use and representation of the dataset.

Cadastre is updated and released regularly and has integrated relationships with other Geoscape Products. Further information regarding attributes, quality, coverage and product release details are outlined below.

Linkages

Cadastre is integrated with the following Geoscape products:

- G-NAF
- Buildings
- Planning
- Property
- Addressing Services



Please refer to the relevant product description or guide for detailed information on the link between Cadastre and the above listed products.

Attributes

Lot

The Lot attribute provides information that uniquely identifies the parcel within a plan.

Plan

The Plan attribute provides the legal plan information for a parcel as defined by the jurisdiction. Parcels can share a common plan number or alternatively not have one assigned. Where a plan value has not been assigned there may be source, feature or design reasons.

Parcel ID

The Parcel ID attribute provides a direct lookup for the parcel in the land registry of the associated State or Territory. The creation of Parcel IDs for each jurisdiction is described in the table below.

State	Specific Area	Jurisdiction Value	Notes
ACT		DISTRICT_SHORT + "/" + DIVISION_SHORT + "/" + SECTION + "/" + BLOCK + "/" + UNIT	Derived from the following dataset: 'UNITS'
		DISTRICT_SHORT + "/" + DIVISION_SHORT + "/" + SECTION + "/" + BLOCK	Derived from the following datasets: 'BLOCKS' 'STRATUM_BLOCKS'
		DISTRICT_SHORT + "/" + DIVISION_SHORT + "/"	Derived from the following datasets: 'ROAD_POLYGON' 'PEDESTRIAN_AREA_POLYGON'
NSW		LOTNUMBER + "/" + SECTIONNUM + "/" + PLANNUMBER	Derived from the following dataset: 'LOT'
		LOTNUMBER + "/" + PLANNUMBER	Derived from the following dataset: 'LOT'
		PLAN_LABEL	Derived from the following datasets: 'ROAD' 'UNIDENTIFIED'
NT		PAR_LOC + "/" + PAR_LTO + "/" + PAR_PAR + "/" + UNIT_NUMBER	
OT	Christmas and Cocos Keeling Islands	PIPARCEL + "/" + LOT_NUMBER	A substring is used to select the plan element from the PIPARCEL where applicable.
	Jervis Bay	DISTRICT_SHORT + "/" + BLOCK	
	Norfolk Island	LOT + "/" + PORTION + "/" + SECTION	
QLD		LOT + "/" + PLAN	
SA		PLAN_T + "/" + PLAN + "/" + PARCEL_T + "/" + PARCEL	
TAS		PLAN + "/" + LOT	
VIC		SPI	
WA		PIPARCEL + "/" + LOT_NUMBER	A substring is used to select the plan element from the PIPARCEL where applicable.

Where a land registry requires the input of separate values a "/" has been used to delineate the fields.

Contributor ID

The Contributor ID is a jurisdiction provided identifier that can be used to link directly back to the source data. The associated attribute(s) in the jurisdiction source data for each State or Territory are found in the table below.

State	Specific Area	Jurisdiction Value	Notes
ACT		BLOCK_KEY	Links to the following datasets: 'BLOCKS' 'STRATUM_BLOCKS'
		ID	Links to the following datasets: 'ROAD_POLYGON' 'PEDESTRIAN_AREA_POLYGON'
		BLOCK_KEY/UNIT	Links to the following dataset: 'UNITS'
NSW		CADID	
NT		PFI	Links to the following datasets: 'NT_CADASTRE_POLYGONS' 'NT_CADASTRE_PROPOSED_POLYGONS'
		UFI	Links to the following dataset: NT_UNIT_ADDRESS_POINTS'
OT	Christmas and Cocos Keeling Islands	PIN	
	Jervis Bay	BLOCK_KEY	
TAS		CID	
VIC		PFI	
WA		PIN	

Source

The name of the State or Territory that the data was sourced from. If a supply did not provide a lot parcel representation associated with the parcels in a strata or stratum plan, then a parcel was generated by Geoscape Australia and assigned a Source value of 'Geoscape Australia'. These records are always assigned a Parcel Type value of 'Lot' and a Base Parcel value of 'Yes'. These parcels are generated by Geoscape Australia to achieve a complete national visualisation of cadastral coverage.

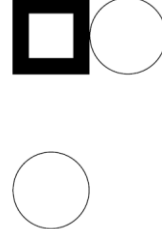
Contributor Status

This attribute describes the lifecycle stage of a parcel. The Contributor Status is populated with the value provided by the supplier of the parcel, where this information is provided.

Title Status

The Title Status attribute provides an indication whether the parcel has been 'Titled' or 'Not Titled' in the jurisdiction's Land Registry. This attribute is derived from either jurisdictional supplied Contributor Status values where provided, or from an assessment of the provided source tables for a jurisdiction.

OT (Norfolk Island, Cocos (Keeling) Islands and Christmas Island only), QLD, SA, TAS and WA can only have a Title Status of 'Titled'. Finally, any Geoscape Australia source records will not be assigned a value and will be <null>.



Parcel Type

The Parcel Type attribute can contain values of either 'Lot', 'Strata', 'Stratum' or 'Road'.

Parcels with a Parcel Type of 'Lot' are the most common form of parcels which are not specifically defined by any other Parcel Type.

The Parcel Type 'Strata' indicates a horizontal or vertical subdivision of the plan.

The Parcel Type 'Stratum' represents a volumetric or stratum plan, which indicates vertical restrictions relating to the parcel.

Road parcels are generally assigned as 'Road' which includes but is not limited to roads, road intersections, road pathways, road corridors and crossings. The Northern Territory data does not include Road Parcel Type features, while South Australia does include a small number of Road Parcel Type features but there is generally low coverage of these Road parcels across the state.

Base Parcel

The Base Parcel attribute allows for a simple visualisation of cadastre coverage across all States and Territories without overlapping parcels. Only parcels with a Parcel Type of 'Lot' that are not contained by another parcel can be part of the base representation.

Strata Type

A Strata parcel can have a Strata Type of 'Vertical' or 'Horizontal', or alternatively not have one assigned. Only Parcels with Parcel Type of 'Strata' can have a Strata Type value assigned.

A 'Horizontal' Strata Type indicates a horizontal configuration of the parcel within a plan, where different units do not sit on top of one another. Examples include dual occupancies (shared wall), separate dwellings on the same strata plan, and townhouses.

A 'Vertical' Strata Type indicates a vertical configuration, with units or apartments that are above/below one another. Examples include high-rise apartment building or a unit blocks where there are multiple levels with different units present.

Total Strata Count

The Total Strata Count provides the sum of all unique Strata parcels associated with a particular 'Lot' parcel. This attribute is only assigned to parcels with a Base Parcel value of 'Yes' and counts parcels with the same Parcel ID as a single Strata (e.g. a unit and disconnected carpark).

There are conditions where Strata parcels do not contribute to the count. These include:

- If a parcel is Common Property;
- In Victoria: if a parcel is an accessory lot, reserve, proposed parcel and/or a parcel containing a donut hole(s)
- In Western Australia, Cocos (Keeling) Islands and Christmas Island: Strata that does not have a unit entitlement; and
- In South Australia: parcels that are underground.

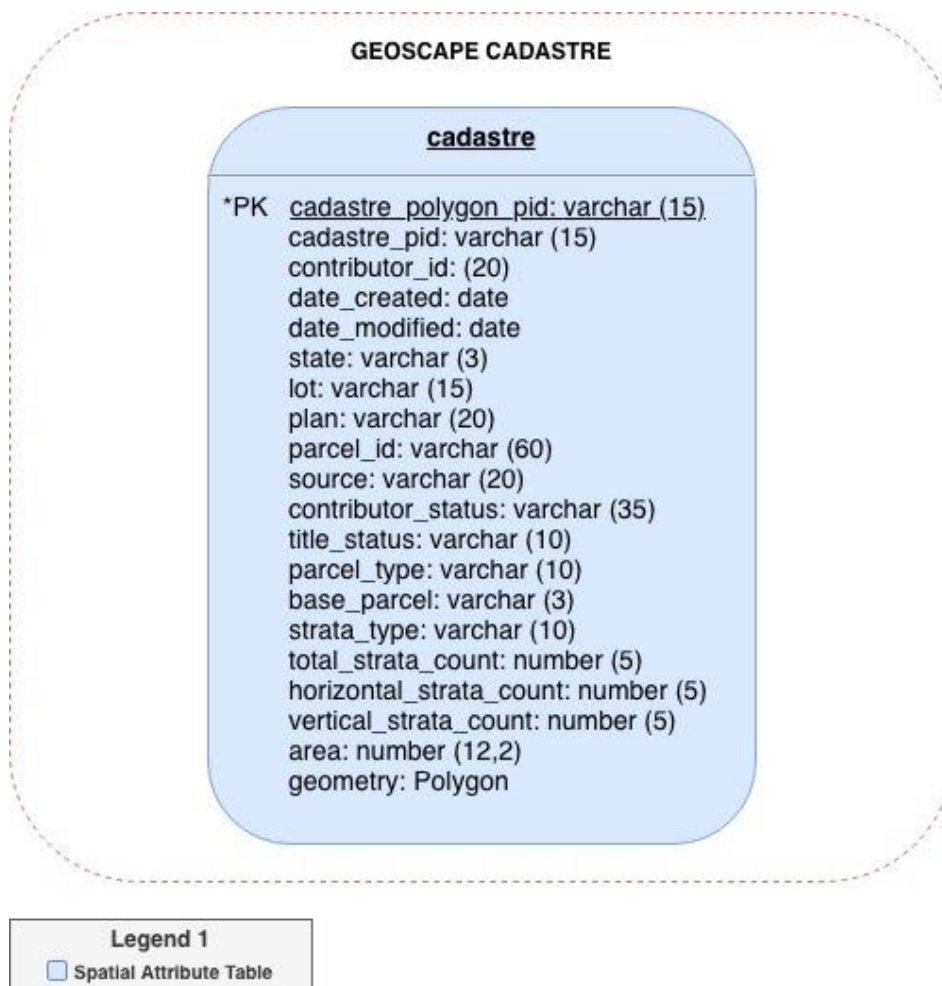
Horizontal and Vertical Strata Count

The Horizontal and Vertical Strata Count attributes are populated for parcels with a Base Parcel value of 'Yes' where horizontal and vertical Strata can be distinguished, following the same inclusion logic as described in Total Strata Count above.

Area

The area of each cadastre polygon in square meters, calculated from the feature geometry using an equal area projection. The total area in square meters can be calculated by summing parcels with a common Cadastre PID.

Data Model



Data Dictionary

Attribute	Data Type	Description	Primary Key	Mandatory
cadastre_polygon_pid	Character String (15)	Unique persistent identifier for the cadastre polygon.	Yes	Yes
cadastre_pid	Character String (15)	Persistent identifier for the cadastral feature for the life of the lot's title.	No	Yes
contributor_id	Character String (20)	An identifier used to link back to the contributor data where the contributor supplies a persistent identifier.	No	No
date_created	Date	The date the record is first introduced to the Geoscape product.	No	Yes
date_modified	Date	The latest date that this record has been modified.	No	No
state	Character String (3)	The abbreviated name of the State or Territory that the cadastre spatially resides within.	No	Yes
lot	Character String (15)	The lot or equivalent information that identifies the parcel within a plan.	No	No
plan	Character String (20)	The plan information for a parcel.	No	No
parcel_id	Character String (60)	A direct lookup for the parcel in the associated state or territory land registry. This field generally represents a combination of lot and plan style information.	No	No
source	Character String (20)	The State or Territory authority that has provided the source data for the parcel.	No	Yes
contributor_status	Character String (35)	The contributor attribute describing the lifecycle of the parcel where provided.	No	No
title_status	Character String (10)	An indicator of whether the parcel has been Titled or Not Titled.	No	No
parcel_type	Character String (10)	The type of parcel (e.g. Lot, Strata, Stratum, Road).	No	Yes
base_parcel	Character String (3)	A 'Yes' flag indicates that the parcel is part of the base representation.	No	No
strata_type	Character String (10)	The type of strata (Vertical or Horizontal) flagged for Strata parcel types. Where this information is not known for Strata parcels, the strata type is assigned as a null value.	No	No
total_strata_count	Number (5)	The total number of Strata relating to base_parcel = 'Yes' parcels only. Where horizontal and vertical strata cannot be differentiated the total_strata_count is populated but horizontal and vertical strata counts will be <null>.	No	No
horizontal_strata_count	Number (5)	The count of horizontal strata relating to the base parcel.	No	No
vertical_strata_count	Number (5)	The count of vertical strata relating to the base parcel.	No	No
area	Number (12,2)	The area in square metres of the polygon.	No	Yes
geometry	Polygon	The geometry of the polygon.	No	Yes

Domain Values

state

Domain Value	Description
ACT	The data is located within the Australian Capital Territory.
NSW	The data is located within the state of New South Wales.
NT	The data is located within the Northern Territory.
OT	The data is located within the Other Territories classification. Other Territories covers the external Australian territories of Cocos (Keeling) Islands, Christmas Island, Jervis Bay and Norfolk Island.
QLD	The data is located within the state of Queensland.
SA	The data is located within the state of South Australia.
TAS	The data is located within the state of Tasmania.
VIC	The data is located within the state of Victoria.
WA	The data is located within the state of Western Australia.

source

Domain Value	Description
ACT	The source data for the record was provided by the Australian Capital Territory Government. Jervis Bay data is sourced from the Australian Capital Territory Government.
NSW	The source data for the record was provided by the New South Wales Government.
NT	The source data for the record was provided by the Northern Territory Government.
OT	The data is located within the Other Territories classification. Other Territories covers the external Australian territories of Cocos (Keeling) Islands, Christmas Island, Jervis Bay and Norfolk Island.
QLD	The source data for the record was provided by the Queensland Government.
SA	The source data for the record was provided by the South Australian Government.
TAS	The source data for the record was provided by the Tasmanian Government.
VIC	The source data for the record was provided by the Victorian Government.
WA	The source data for the record was provided by the Western Australian Government. Cocos (Keeling) Islands and Christmas Island data is sourced from the Western Australian Government.
Geoscape Australia	The data has been created by Geoscape for the purposes of base parcel coverage.

contributor_status

Domain Value	State	Description
Registered	ACT /OT (Jervis Bay)	The block appears on a Deposited Plan that has been registered with the Land Titles Office but is not retired or deleted.
Approved	ACT	For non-Road parcels, the block appears on an Approved Plan that has been signed by the Territory Planning Section and the Project Officer for the development, but the block is not Registered, retired or deleted. For parcels with parcel_type of 'Road', the road reserve segment defines a current geometry of part of the road to which it is assigned, but the road reserve segment has not been gazetted or notified and therefore does not yet form part of the legal boundary of the road.
Proposed	ACT/OT (Jervis Bay)	For non-Road parcels the block is proposed but has not reached any other stage. For parcels with parcel_type of 'Road', the road reserve segment defines a possible future geometry of part of the road to which it is assigned, but the road reserve segment has not been gazetted or notified and therefore does not yet form part of the legal boundary of the road.
Gazetted	ACT	The road reserve segment defines part of the legal geometry of the road to which it is assigned. Prior to 13 September 2001, road openings were made legal by their appearance in the ACT Government Gazette, so the Gazetted stage was used. On and after 13 September 2001, road openings were made legal by their publication as a notifiable instrument in the ACT Legislation Register so the Opening Notified stage was used.
Opening Notified	ACT	The road reserve segment defines part of the legal geometry of the road to which it is assigned. Prior to 13 September 2001, road openings were made legal by their appearance in the ACT Government Gazette, so the Gazetted stage was used. On and after 13 September 2001, road openings were made legal by their publication as a notifiable instrument in the ACT Legislation Register so the Opening Notified stage was used.
Created	ACT	The Road parcel has a status of Created.
Undefined	NSW	The title status is undefined.
ITS Title	NSW	A land title exists in the Integrated Titling System.
Manual Volume/Folia	NSW	The title for the Torrens land still has a parchment as the Deed.
Old System	NSW	The title is still in the Book/Conveyance.
Untitled	NSW	No title was ever issued even though the survey is current.
Acquired Land	NSW	Land acquired by gazettal, but no title has been issued.
ITS Title Pending	NSW	Land has been acquired by Government Department, but new title not issued.
Cancelled	NSW	Cancelled.
Cancelled Residue Remains	NSW	Cancelled residue remains.
Dummy	NSW	A temporary boundary that suggests resurveying of the dummy parcel area.
Consolidated Title of Multiple Lots	NSW	These are known as auto consol titles in the ITS System.
Approved	VIC	Parcel is registered in the Victorian On-line Titles System (VOTS) (Freehold and Crown).
Proposed	VIC	Indicates that the parcel is associated with a plan of subdivision application that has not been registered in the Victorian On-line Titles System (VOTS).
<NULL>	All remaining jurisdictions	There is no contributor-provided status field for the record.

title_status

Domain Value	Description
Titled	A parcel which has a title issued. This is the default value.
Not Titled	A parcel whose boundaries have been sourced from a plan of subdivision (proposed or authorised) prior to the issue of a title.
<NULL>	The parcel has been created by Geoscape Australia for base Lot parcel coverage and has no reference to a title.

parcel_type

Domain Value	Description
Lot	A spatial representation of surveyed land referred to in a land title. This is the most common form of parcel and not specifically defined by any other parcel type.
Strata	Parcel identified in a plan representing a strata subdivision.
Stratum	Parcel identified in a plan representing land as being volumetric or stratum.
Road	Parcel identified in a plan representing land typically set aside for road infrastructure such as roads, intersections between roads, closed roads, road pathways, road corridors and crossings.

base_parcel

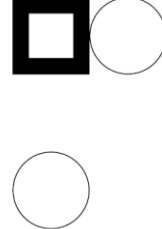
Domain Value	Description
Yes	The parcel has been identified as a base parcel. Only parcels with a parcel_type of Lot can be flagged as base parcels. A base parcel is not contained by any other Lot parcel and provides base coverage across each state and territory.
<NULL>	The parcel has been identified as not being a base parcel. Lot parcels contained by other Lot parcels and Strata, Stratum and Road parcel types will have <NULL> values for this field.

strata_type

Domain Value	Description
Horizontal	Parcel in a plan representing a strata subdivision (parcel_type = 'Strata') identified to contain a horizontal configuration in general terms.
Vertical	Parcel in a plan representing a strata subdivision (parcel_type = 'Strata') identified to contain a vertical configuration in general terms.
<NULL>	Parcel in a plan representing a strata subdivision where the configuration (Vertical or Horizontal) is unknown, or a non-Strata parcel_type (Lot, Stratum, Road) and therefore cannot have a strata type.

Update Frequency

Cadastre is continuously updated and released with the most up to date data available on a quarterly schedule in the months of February, May, August and November.



Data Quality

Positional Accuracy

Cadastre has been created by combining land boundary information from multiple jurisdictional sources. Each jurisdiction has a range of collection methodologies to capture the digital representation of the land parcel boundary. The varying approaches to maintaining the boundaries will contribute to the overall accuracy of Cadastre. As the jurisdiction capture programs improve land boundary accuracy, we incorporate these changes as an update into the product and the positional accuracy is maintained. Geoscape makes minor changes only where they are required to create valid features described in Cadastre Geometry Validity.

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
```

Cadastre Geometry Validity

Cadastre geometry is validated to ensure polygons are a valid representation and free of self-intersection. Issues being detected and resolved include spikes, bow ties, duplicate vertices, null geometries, multipart geometries, and self-contacts. Minor overlaps are also resolved where a cadastre has a base_parcel of 'Yes'. Overlapping polygons will persist in the product as they can be valid geometries representing the jurisdictions intent.

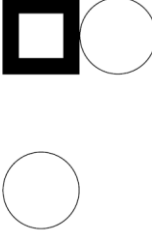
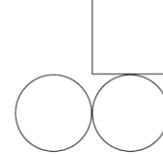
Polygon orientation conforms to the following specifications:

- OGC Simple Feature Access Specification v1.2.1 [Section - 6.1.11.1]
- The GeoJSON Specification RFC7946 [Section 3.1.6 dot point 4]

This means the polygon outer boundary will be counter clockwise and the inner boundary will be clockwise for file formats that support the above standards.

Further Comments

Cadastre has been processed to assure all polygons are stored as single part features to improve capability with a range of software applications. Due to this there can be a duplication of the cadastre_pid, lot, plan and parcel_id information between separate Cadastre records where they are multiple polygons represented by a single parcel_id.



Extent/Geographic Description

The spatial coverage of Cadastre includes Australia's land mass and surrounding offshore islands.

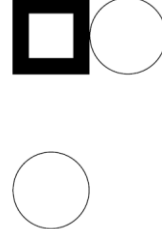
The Bounding Box for this data is as follows:

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



A detailed description of the coverage for each State and Territory is provided in the table below.

State	Specific Area	Coverage
ACT		Complete coverage
NSW		Complete coverage
NT		Complete coverage
OT	Christmas and Cocos (Keeling) Islands	Complete coverage
	Jervis Bay	Complete coverage
	Norfolk Island	Complete coverage
QLD		Complete coverage Additional coverage of coastal sea areas
SA		Complete coverage
TAS		Complete coverage
VIC		Complete coverage.
WA		Complete coverage.



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).

Delivery Format

Cadastre is provided at a National and State/Territory level, depending on the file format selected. The data is made available in the File Geodatabase, GeoJSON, ESRI Shapefile and MapInfo TAB formats described below.

Format	National	State/Territory
File Geodatabase	Yes	Yes
GeoJSON	Yes	Yes
ESRI Shapefile	-	Yes
MapInfo TAB	-	Yes

File Geodatabase

Format name

File Geodatabase – ESRI™

Specification

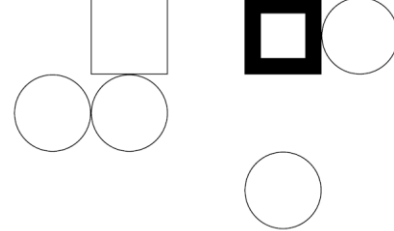
This format includes files with the following extensions: *.gdb

ESRI File Geodatabase Technical Description. Follow this link:

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

Language

English



GeoJSON

Format name

GeoJSON

Specification

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

GeoJSON specification: <https://tools.ietf.org/html/rfc7946>

NOTE: The GeoJSON specification states that the coordinate reference system for all GeoJSON coordinates is:

“a geographic coordinate reference system, using the World Geodetic System 1984 (WGS 84) datum, with longitude and latitude units of decimal degrees”

Cadastre will be provided with coordinates using the datum selected for download (GDA94/GDA2020) with longitude and latitude units of decimal degrees.

Language

English

JSON

Format name

JSON

Specification

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

JSON specification: <https://www.json.org/json-en.html>

Language

English

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



MapInfo TAB

Format name

TAB – MapInfo Professional™

Specification

This format includes files with the following extensions: *.tab, *.dat, *.id, *.map

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

Language

English

Product Versioning

Cadastre versioning is managed through incrementing when there is a change to the product schema or a significant change in data population, these are described further below:

- A schema change can affect a major or minor increment to the versioning. Additive changes (changes that won't break customers' ability to work with the data) will be incremented with a minor version increment, an example is the addition of a new attribute. Removal of attributes or changing the structure of the Cadastre schema will enact a major change to identify that this requires the attention of all customers and partners.
- Where a significant geography of Australia either has a new population of data for an attribute or is populated from a much higher quality source a minor increment will be applied to the product version.

Therefore, Cadastre versioning will not increment with every data update. Published releases will have a name e.g. 'May 2021' and will reference a version of the Cadastre product e.g. '1.0'.

Annex A - User Guide

Strata counts and what they represent

The `total_strata_count`, `vertical_strata_count` and `horizontal_strata_count` attributes populated for base Lot parcels (`base_parcel = 'Yes'`) can be used to easily access the count of strata parcels at a site and can give insight into the vertical or horizontal distribution of strata at the site.

Where Geoscape Australia is able to classify Strata parcels as vertical or horizontal, this information will be available as a vertical or horizontal strata count on the base Lot parcel.

Examples of strata count representations are shown below.

Example 1

Victoria: 145.0362041845, -37.7688367440.

In the below image on the left, the `parcel_ids` (white text) show that the strata parcels represent different lots on the same plan (PS608146), but no Lot parcel has been provided by the jurisdiction.

A Geoscape Australia source parcel has been created to represent the Lot parcel at this site (the image on the right) as a dissolved polygon created from the 4 strata parcels, with the `total_strata_count` value of '3' shown in white text. The common property strata parcel (lot = 'CM1') has not been counted.

At this site the four strata parcels have a `strata_type` value of 'Horizontal'. This means that the Lot parcel related to them will have a `horizontal_strata_count` of '3'. The `vertical_strata_count` will be null here as there are no vertical strata parcels present on the plan.



Example 2

The below image shows only the base layer with the total strata counts labelled in white text.



Example 3

Western Australia: 115.878985815, -31.987057060

The jurisdiction can provide Lot parcels at locations where Strata parcels exist with a different plan. This can be seen here where there are two Strata parcels with plan of 'S009789' present that overlap a Lot parcel with plan of 'D042602'. At sites such as these, the strata counts have been assigned to the base Lot parcel that already exists at the site.

Here the total_strata_count and horizontal_strata_count will be '2' for the base Lot parcel as the Strata parcels have a strata_type of 'Horizontal'.

cadastre_polygon_pid	cp186db7b8321f5
cadastre_pid	cadd38c2a4ba1de
total_strata_count	2
horizontal_strata_count	2
vertical_strata_count	NULL
base_parcel	Yes
date_created	2021-05-18
date_modified	NULL
state	WA
source	WA
lot	160
plan	D042602
parcel_id	D042602/160
contributor_status	NULL
title_status	Titled
parcel_type	Lot
strata_type	NULL
area	1108.89
contributor_id	148109

Strata parcels do not always accurately describe the area or boundary of the title related to the Strata. Below is an image of the WA site described above. It is visible that all the horizontal Strata parcels have the same geometry at the site, and the individual dwellings are not defined by the two strata boundaries below (green polygons), which have the same geometry. This will occur in cadastre where the jurisdictional data does not provide information that allows distinct polygon representation for Strata parcels and can also occur for vertical strata.



Example 4

Australian Capital Territory: 149.1070277, -35.3135129

Vertical strata polygons do not exist in the ACT's jurisdictional data. However, we are able to describe the vertical_strata_count for base Lot parcels that relate to vertical strata due to aspatial data provided by the jurisdiction. In the ACT, we are unable to create vertical Strata parcels as the aspatial data does not provide unit numbers that we could use to differentiate the vertical strata parcels.

This can be seen here where there is a Lot parcel that relates to vertical strata (i.e. the units at the site are arranged in a vertical structure). No vertical Strata parcels exist in the jurisdictional data, but the base Lot parcel with parcel_id = 'CANB/DEAK/12/20' will be assigned a vertical_strata_count of '114' through aspatial information provided by the jurisdiction.



cadastre_polygon_pid	cp26d8534049ac5
cadastre_pid	cad40b14e729571
total_strata_count	114
horizontal_strata_count	NULL
vertical_strata_count	114
base_parcel	Yes
date_created	2021-05-18
date_modified	NULL
state	ACT
source	ACT
lot	20
plan	NULL
parcel_id	CANB/DEAK/12/20
contributor_status	Registered
title_status	Titled
parcel_type	Lot
strata_type	NULL
area	8789.35
contributor_id	12150120020

Parcel IDs and how to search Land Registries

The parcel_id can be used to directly look up a cadastre record in the State or Territory land registry.

Some jurisdictions allow you to search the parcel_id as it exists in the product, while for some states, parcel_ids cannot be directly input into a land registry and must be split apart into its lot and plan components. Where the latter is the case, the parcel_id will have forward slashes present to split the values and make it easier to search for the parcel.

Example 1

An example for NSW can be seen at 151.21655356, -33.90774711 in NSW, where a Lot parcel has a parcel_id of '20/5081' (see selected polygon below with attribution).



cadastre_polygon_pid	cp6eb39142a218f
cadastre_pid	cadfa0c8ece92d2
total_strata_count	NULL
horizontal_strata_count	NULL
vertical_strata_count	NULL
base_parcel	Yes
date_created	2021-05-18
date_modified	NULL
state	NSW
source	NSW
lot	20
plan	DP5081
parcel_id	20/5081
contributor_status	ITS Title
title_status	Titled
parcel_type	Lot
strata_type	NULL
area	691.54
contributor_id	102773388

The current land registry for NSW can be located at:
<https://online.nswlrs.com.au/wps/portal/six/find-records/>.

The parcel_id of '20/5081' can be directly input into the 'Search location records' dialogue box in the land registry to search for the cadastral parcel. Doing this will return a result in the form of imagery, showing the location of the cadastre, as well as 'Prior title search' and 'Land value search' options to the left of the screen.

The 'View' button next to the 'Prior title search' result can be used to access the prior title reference of '13158-127'. This title reference can be used to access more information about the parcel.

Example 2

In Victoria, the parcel_id can also be directly input into the land registry.

An example of this can be seen at 144.81306361, -37.79130841 where there are seven Strata parcels present. They have parcel_ids of 'CM\RP3294', '1\RP3294', '2\RP3294', ... and '6\RP3294'.

These parcel_ids can be searched in the Victorian land registry at: <https://www.land.vic.gov.au/property-and-parcel-search>. For example, when the parcel_id of '1\RP3294' is input into the search field and searched, additional information about the parcel is provided.

Property and parcel search results

1\RP3294

[Property PDF](#) [Planning PDF](#) [Launch MapshareVic](#) [Launch VicPlan](#)

PARCEL DETAILS		ZONES AND OVERLAYS	
Local Government Area (Council):	BRIMBANK	Zone:	GENERAL RESIDENTIAL ZONE (GRZ) GENERAL RESIDENTIAL ZONE - SCHEDULE 1 (GRZ1)
Lot / Plan:	Lot 1 RP3294	Overlays:	DEVELOPMENT CONTRIBUTIONS PLAN OVERLAY (DCPO) DEVELOPMENT CONTRIBUTIONS PLAN OVERLAY - SCHEDULE 2 (DCPO2)
Standard Parcel Identifier (SPI):	1\RP3294		
Property Address:	MAILEY STREET SUNSHINE WEST 3020		
STATE ELECTORATES		UTILITIES	
Legislative Council:	WESTERN METROPOLITAN	Rural Water Corporation:	Southern Rural Water
Legislative Assembly:	FOOTSCRAY	Melbourne Water Retailer:	City West Water
		Melbourne Water:	inside drainage boundary
		Power Distributor:	POWERCOR

Screenshot taken from [Victorian land registry website](https://www.land.vic.gov.au/property-and-parcel-search) © State of Victoria (Department of Environment, Land, Water and Planning). Available under [CC BY 4.0](https://creativecommons.org/licenses/by/4.0/) licence.

Example 3

In South Australia at 138.5747180, -33.7118605 the parcel has a parcel_id of 'D/90199/A/450'. Here, the forward slashes separate 'Plan Type', 'Plan Number', 'Parcel Type' and 'Parcel Number' information that must be individually input into the land registry to search for the parcel.

The land registry for SA can be found at: <https://sailis.lssa.com.au/products/titleSearch/registerSearchPlus?form.>

To search, click the 'Plan/Parcel' tab to the left of the screen. This will prompt you with four search boxes relating to the parts of the parcel_id. The search for the parcel_id of 'D/90199/A/450' would be done as shown below.

Search field	Input value
Plan Type	Deposited Plan
Plan Number	90199
Parcel Type	Allotment
Parcel Number	450

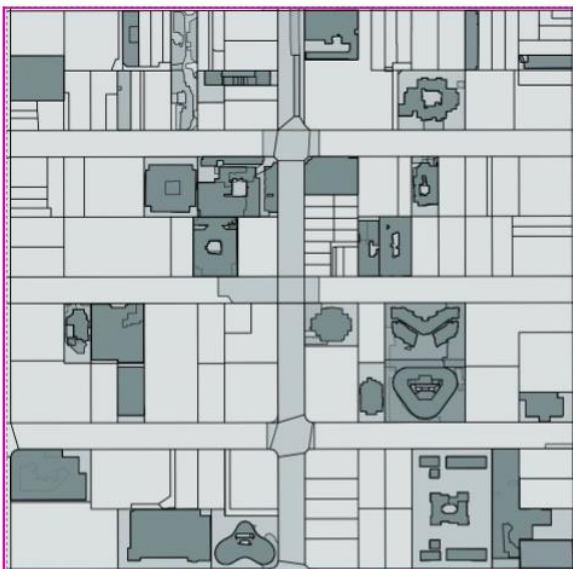
This will return information about the parcel, as well as the ability to order a copy of the certificate of title.

Note: Road parcels are generally not searchable in the land registries. Parcels with source = 'Geoscape Australia' will also not be searchable.

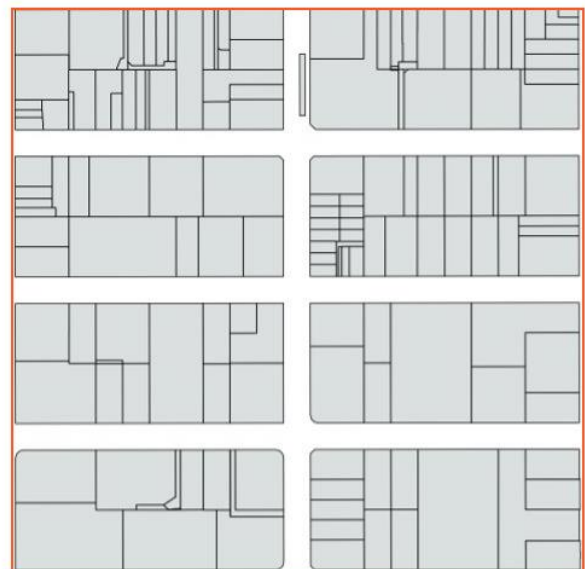
Base Parcels and how they represent a non-overlapping cadastre

Base parcels features are parcels with parcel_type of 'Lot' that have been flagged with the intention of providing a non-overlapping layer representation of cadastre parcels. A user can simply identify these records by selecting where base_parcel = 'Yes'.

Below, the two images show the cadastre layer with no filter applied (left), as well as only where base_parcel equals 'Yes' (right).



No filter applied



Filtered on base_parcel = 'Yes'

The designation of a base parcel, and the creation of “Geoscape Australia” source base parcels, was important so that a simple and complete coverage polygon layer could be provided for visualization and analytics, as well as allowing strata counts to be assigned consistently to Lot parcels across each State and Territory. To the right, the base parcels are shown (orange polygons) with total_strata_count labels (white text).



Using ‘Geoscape Australia’ source parcels

Parcels with a Source value of ‘Geoscape Australia’ have been created to add a Lot parcel representation for sites where one is not provided by the jurisdiction. This was done so that a Lot parcel representation could be added, contributing to the continuous, non-overlapping representation of cadastre lots.

They are generated using related Strata or Stratum parcels that are supplied by the jurisdiction to create the best representation of a Lot parcel for the site.

Example

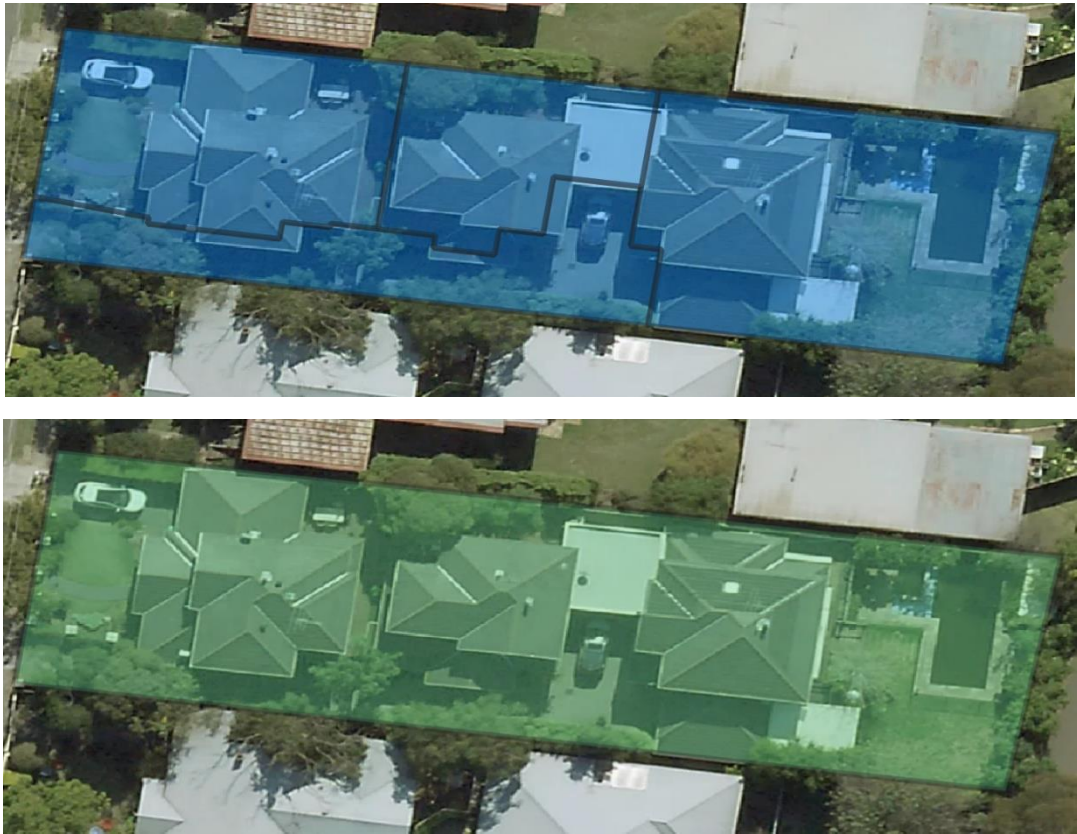
Victoria: 145.0390311, -37.7665132

Below images show the Lot parcels provided by the jurisdiction in Victoria as orange polygons. These will have a Source attribute value of ‘VIC’.

On the left you can see that when only Lot parcels are visible there are “gaps” or “missing” polygons over some parcels of land. In Victoria, these gaps are covered by Strata parcels, shown in blue on the right.



A 'Geoscape Australia' source parcel (green polygon below, bottom) was created here based on a dissolve of these strata parcels (blue polygons below, top). Example located at 145.0385614, -37.7665431.



This created Geoscape Australia parcel is a 'Lot' parcel_type parcel that will have a base_parcel value of 'Yes'.

This parcel will also have strata counts assigned, as it has strata parcels relating to it. At this site, three non-common property strata parcels are related to the Geoscape Australia parcel so the horizontal_strata_count and total_strata_count will be '3'.

The parcel_id for Geoscape Australia records will not be searchable in the State or Territory land registry as the parcel has not been provided by the jurisdiction.

cadastre_polygon_pid	cp45336b43592fd
cadastre_pid	cad2b867e8ca120
total_strata_count	3
horizontal_strata_count	3
vertical_strata_count	NULL
base_parcel	Yes
date_created	2021-05-18
date_modified	NULL
state	VIC
source	Geoscape Australia
lot	NULL
plan	PS604601
parcel_id	\PS604601
contributor_status	NULL
title_status	NULL
parcel_type	Lot
strata_type	NULL
area	1149.56
contributor_id	NULL

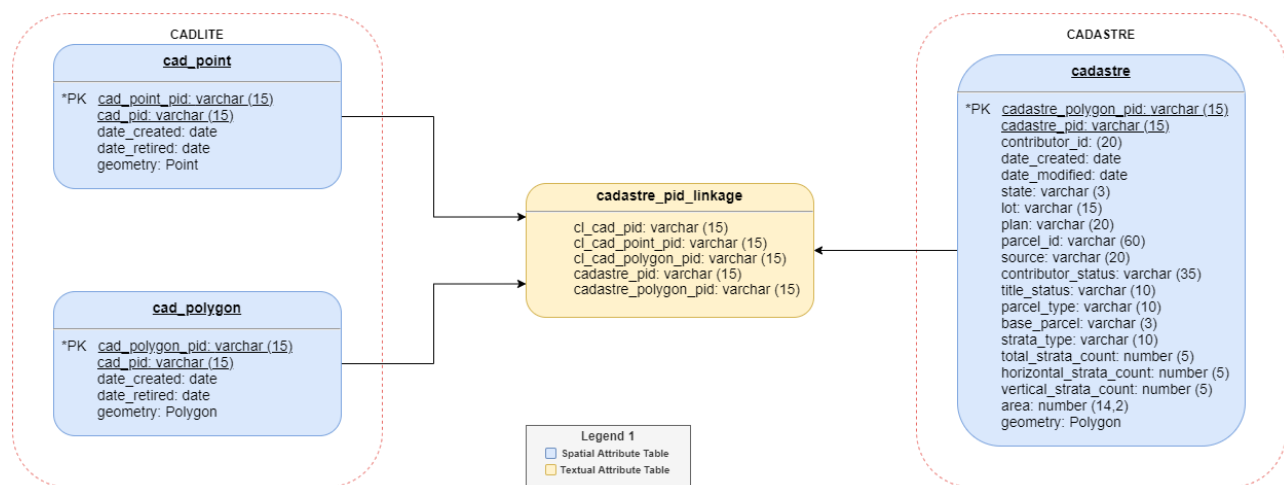
In the below image, base_parcel = 'Yes' parcels are turned on (pink polygons). The image shows that there is base Lot coverage across both sites where the jurisdiction provides Lot parcels (source = 'VIC') and where Lot parcels have been created (source = 'Geoscape Australia'). This provides a consistent base layer and allows strata counts to be applied to the base layer.



Linking CadLite to Cadastre

A linkage table has been included to facilitate the transition between the CadLite Cadastre theme and the new Cadastre product. This table enables the link between the Cad_Point and Cad_Polygon features in CadLite to their corresponding Cadastre feature where possible.

The link was created by matching the CadLite jurisdiction_id with the Cadastre parcel_id, supported by a spatial comparison where there was more than one match resulting from the join.



If a parcel does not have a record in the linkage table, a link between CadLite and Cadastre could not be created. This occurred where:

- There was no match between the CadLite jurisdiction_id and a Cadastre parcel_id. This may happen if:
 - the feature is no longer represented in Cadastre (e.g. easements),
 - the CadLite jurisdiction_id no longer exists,
 - the Cadastre parcel_id is new, or
 - the values could not confidently be joined during the linking process
- There were multiple matches between a CadLite jurisdiction_id and a Cadastre parcel_id and:
 - the spatial check did not support the join, or
 - the spatial check could not identify a one-to-one link
- The source attribute has a value of 'Geoscape Australia' in Cadastre