# Geoscape Data Product Catalogue

Location Intelligence – Helping build a smarter, more productive Australia



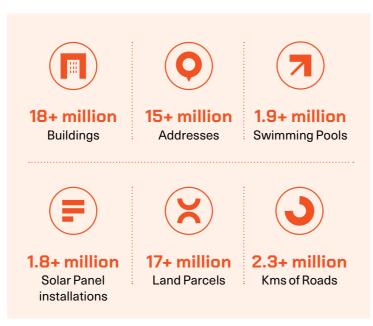
geoscape.com.au

# Geoscape Data Products

Geoscape Australia is a provider of national location data, backed by the governments of Australia.

Geoscape provides the big picture with every detail. We enable enterprises and government with the power of location data.

Geoscape's trusted location data delivers a clear picture of our complex cities, regional centres and rural communities as they change. We combine data derived from satellite and aerial imagery with data from private and public sources, including the governments of Australia. Our data is continually updated and available in a variety of formats for easy integration and flexibility of use. Our datasets can be consumed individually as it is or you can combine parts of data as customised solution.





### **Buildings**

Every building in Australia with a roof area greater than nine square metres – more than 16 million of them – are digitally represented in Geoscape Buildings.



### Solar

Get access to photovoltaic solar panels around Australia. Geoscape Solar dataset is captured via high resolution aerial images, using artificial intelligence (AI) technology. Our data provides an estimation of the power generation potential of buildings solar panels!



### Surface Features

Geoscape Surface Features describe what's on the surface of the earth at a location. It includes National Surface Cover, Urban Surface Cover, Urban Trees, Greenspace and Hydrology datasets. When used together, you can get a detailed spatial picture of Australia's surface features.



Transport

Geoscape Transport is made up of Road, Rail and Airport datasets. When used together, you get a detailed spatial picture of Australia's transport network.



# Land Parcels

Land Parcels includes Cadastre, Property, Planning and Planning Insights datasets for a complete picture of land information in Australia. Over 17 million land parcels are captured for comprehensive cover.



### Administrative Boundaries

Australia's most comprehensive national collection of boundaries, including government, statistical and electoral boundaries. Built and maintained by Geoscape Australia using authoritative government data, Administrative Boundaries comprises of 7 data products– Localities, LGAs, Wards, ABS Boundaries, Electoral Boundaries, State Boundaries and Townpoints.



### G-NAF (Geocoded National Address File)

The trusted source of geocoded address data for Australia. Some 50 million addresses contributed are distilled into more than 15.2 million G-NAF addresses. G-NAF is built from addresses supplied by 10 contributors, including the land agencies in each state and territory of Australia. The source data is independently examined and validated, matched textually and spatially, and assigned a geocode to place the address accurately on a map.



# Postcode Boundaries

This dataset provides a definitive set of Australian postcodes and their geographic boundaries. It has been developed jointly by Geoscape and Australia Post to support the spatial analysis and visualisation of postcode areas.



**G-NAF Core** 

G-NAF Core makes accessing geocoded addresses easier. It provides the core richness and power of G-NAF in a comprehensive, but easy-to-use format. G-NAF Core reduces the complexity of G-NAF by delivering the data in a simplified table model.

# Geoscape Data Product Matrix

All datasets are available in the following standard spatial reference systems: GDA94 or GDA2020. Other reference systems can be provided through a custom data sale.

Note that the below is not a comprehensive list Geoscape datasets. Please see our <u>website</u> for further details.

Geoscape Product	Geoscape Dataset	Update frequency	Key Attributes included		Coverage	Mode of availability	Linkages
Buildings	Buildings	Quarterly – March, June, September, December	<ul> <li>Building outline (polygon)</li> <li>Building area and volume</li> <li>Eave and roof height</li> <li>Ground elevation</li> <li>Estimated levels</li> <li>Number of vertices</li> </ul>	Building area and volumeRoof colour, material and typeNATportalEave and roof heightSolar panel and swimming pool indicatorsRUR• Custom data sale • Buildings API (developer portal)Estimated levels• Planning zoneURB• Datasets API (developer portal)		Linkage tables are provided for buildings to: • Property • Cadastre • Address • Meshblocks and localities	
Solar	Solar	Quarterly – March, June, September, December	<ul> <li>Solar panel outline (polygon)</li> <li>Solar panel type (monocrystalline, poly</li> <li>Solar panel area</li> <li>Daily estimated power</li> <li>Roof shape, slope and material</li> </ul>	rcrystalline, thin film)	NAT RUR URB	<ul> <li>Data on Demand self-serve portal</li> <li>Custom data sale</li> <li>Datasets API (developer portal)</li> <li>Geoscape Partners</li> </ul>	Linkage tables are provided for solar to: • Address • Buildings
Land Parcels	Cadastre	Monthly	<ul> <li>Cadastre parcel outline (polygon)</li> <li>Lot</li> <li>Plan</li> <li>Parcel id</li> <li>Source</li> </ul>	<ul> <li>Title status</li> <li>Contributor status</li> <li>Parcel type</li> <li>Strata types and counts</li> <li>Parcel area</li> </ul>	NAT	<ul> <li>Data on Demand self-serve portal</li> <li>Custom data sale</li> <li>Land Parcels API (developer portal)</li> <li>Datasets API (developer portal)</li> <li>Geoscape Partners</li> </ul>	Attributes within cadastre can be used to join to: G-NAF G-NAF Core Property Buildings Planning
Land Parcels	Property	Monthly	<ul> <li>Property parcel outline (polygon)</li> <li>Source</li> <li>Contributor id</li> <li>Area</li> </ul>		NAT	<ul> <li>Data on Demand self-serve portal</li> <li>Custom data sale</li> <li>Land Parcels API (developer portal)</li> </ul>	Linkage tables are provided for property to: • Cadastre
Land Parcels	Planning	Quarterly – March, June, September, December	<ul> <li>Zone code</li> <li>Primary zone description</li> <li>Secondary zone description</li> <li>PSMA description</li> <li>Source and URL</li> </ul>		NAT	<ul> <li>Data on Demand self-serve portal</li> <li>Custom data sale</li> <li>Land Parcels API (developer portal)</li> <li>Datasets API (developer portal)</li> <li>Geoscape Partners</li> </ul>	<ul><li>Planning requires Cadastre.</li><li>Attributes within planning can be used to join to:</li><li>Cadastre</li></ul>
Land Parcels	Planning Insights	<b>Quarterly</b> – March, June, September, December	<ul> <li>Base Product:</li> <li>Planning zone code</li> <li>Flood, bushfire, infrastructure, environment, heritage and industry overlays</li> </ul>	<ul> <li>Permitted, permitted with controls and prohibited uses</li> <li>Add Ons:</li> <li>Building height limits</li> <li>Floor space ratios</li> </ul>	NAT	<ul> <li>Data on Demand self-serve portal</li> <li>Custom data sale</li> </ul>	Linkage table provided for joining to • Address Planning Insights contains attribute that allow linkage to Cadastre
Transport	Roads	Monthly	<ul> <li>Road centreline (line)</li> <li>Road name</li> <li>Road name alias</li> <li>State or national route</li> <li>Road hierarchy (highway, local)</li> <li>Road subcategory (roundabout, tunnel, bridge)</li> </ul>	<ul> <li>Lane count, one way and travel direction</li> <li>Road surface type</li> <li>Speed limit</li> <li>Road trafficability</li> <li>Road access type and status</li> <li>State</li> </ul>	NAT	<ul> <li>Data on Demand self-serve portal</li> <li>Custom data sale</li> <li>Datasets API (developer portal)</li> <li>Geoscape Partners</li> </ul>	Linkage to G-NAF
Surface Features	Surface Cover	Quarterly for urban surface cover – March, June, September, December	Surface cover categories including: • Bare earth • Road and path • Grass • Trees • Unspecified vegetation • Built-up areas	<ul> <li>Water</li> <li>Buildings</li> <li>Cloud</li> <li>Shadow</li> <li>Swimming pool</li> <li>Car park</li> </ul>	NAT RUR URB	<ul> <li>Data on Demand self-serve portal</li> <li>Custom data sale</li> <li>Datasets API (developer portal)</li> <li>Geoscape Partners</li> </ul>	No linkage tables
Surface Features	Trees	<b>Quarterly</b> – March, June, September, December	<ul><li>Tree position (raster)</li><li>Tree height</li></ul>		URB	<ul> <li>Data on Demand self-serve portal</li> <li>Custom data sale</li> <li>Datasets API (developer portal)</li> <li>Geoscape Partners</li> </ul>	No linkage tables

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	Standard formats	Geometry description	
	<ul> <li>ESRI Shapefile</li> <li>MapInfo TAB</li> <li>ESRI Geodatabase</li> <li>GeoJSON</li> <li>JSON</li> </ul>	✓	
	<ul> <li>ESRI Shapefile</li> <li>MapInfo TAB</li> <li>ESRI Geodatabase</li> <li>GeoJSON</li> <li>JSON</li> </ul>	<ul> <li>✓</li> <li>✓</li> </ul>	
	<ul> <li>ESRI Shapefile</li> <li>MapInfo TAB</li> <li>ESRI Geodatabase</li> <li>GeoJSON</li> <li>JSON</li> </ul>	•	
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	<ul> <li>ESRI Shapefile</li> <li>MapInfo TAB</li> <li>ESRI Geodatabase</li> <li>GeoJSON</li> <li>JSON</li> </ul>	===	
o: es	<ul> <li>Pipe separated values (PSV)</li> <li>ESRI Geodatabase</li> <li>JSON</li> </ul>	===	
	<ul> <li>ESRI Shapefile</li> <li>MapInfo TAB</li> <li>ESRI Geodatabase</li> <li>GeoJSON</li> </ul>	~	
	<ul> <li>GeoTiff</li> <li>ESRI Shapefile (only for the index file)</li> </ul>	8	
	<ul><li>GeoTiff</li><li>ESRI Shapefile</li></ul>	8	

Product Matrix Continue –

# Product Matrix Continue $\longrightarrow$

NAT = National coverage

Geoscape Product	Geoscape Dataset	Update frequency	Key Attributes included	Coverage	Mode of availability	Linkages	Standard formats	Geometry description
Administrative Boundaries	ABS Boundaries	Updated as required with any updates delivered in February, May, August and November when applied.	<ul> <li>Boundary outline (polygon)</li> <li>Boundary code and name</li> <li>Change flag and label</li> <li>Area</li> <li>Dwelling count</li> <li>Population count</li> </ul>	NAT	<ul> <li>Data on Demand self-serve portal</li> <li>Custom data sale</li> <li>Datasets API (developer portal)</li> <li>Geoscape Partners</li> <li>Open data locations (e.g. data.gov.au)</li> </ul>	Attributes within ABS Boundaries can be used to join to: • State boundaries	<ul><li>ESRI Shapefile</li><li>MapInfo TAB</li></ul>	*
Administrative Boundaries	Electoral Boundaries	Updated as required with any updates delivered in February, May, August and November when applied.	<ul> <li>Boundary outline (polygon)</li> <li>Electoral name</li> <li>Date created, gazetted and retired</li> <li>Effective start and end dates</li> <li>Redistribution year</li> </ul>	NAT	<ul> <li>Data on Demand self-serve portal</li> <li>Custom data sale</li> <li>Administrative Boundaries API (developer portal)</li> <li>Datasets API (developer portal)</li> <li>Geoscape Partners</li> <li>Open data locations (e.g. data.gov.au)</li> </ul>	Attributes within Electoral Boundaries can be used to join to: • State boundaries	<ul> <li>ESRI Shapefile</li> <li>MapInfo TAB</li> </ul>	✓
Administrative Boundaries	Local Govern- ment Areas (LGAs)	Quarterly - February, May, August, November	<ul> <li>LGA boundary outline (polygon)</li> <li>LGA name</li> </ul>	NAT	<ul> <li>Data on Demand self-serve portal</li> <li>Custom data sale</li> <li>Administrative Boundaries API (developer portal)</li> <li>Datasets API (developer portal)</li> <li>Geoscape Partners</li> <li>Open data locations (e.g. data.gov.au)</li> </ul>	Linkage tables are provided for LGA to: • Locality Attributes within LGA can be used to join to: • Wards	<ul> <li>ESRI Shapefile</li> <li>MapInfo TAB</li> <li>ESRI Geodatabase</li> <li>GeoJSON</li> <li>JSON</li> </ul>	•
Administrative Boundaries	Suburbs / Localities	Quarterly - February, May, August, November	<ul> <li>Locality boundary outline (polygon)</li> <li>Locality name</li> <li>Locality class</li> </ul>	NAT	<ul> <li>Data on Demand self-serve portal</li> <li>Custom data sale</li> <li>Administrative Boundaries API (developer portal)</li> <li>Datasets API (developer portal)</li> <li>Geoscape Partners</li> <li>Open data locations (e.g. data.gov.au)</li> </ul>	Attributes within localities can be used to join to: • G-NAF • Buildings • LGA • Postcode	<ul> <li>ESRI Shapefile</li> <li>MapInfo TAB</li> <li>ESRI Geodatabase</li> <li>GeoJSON</li> </ul>	•
Postcode Boundaries	Postcode Boundaries	Quarterly	<ul> <li>Postcode boundary outline (polygon)</li> <li>Postcode centroid (point)</li> <li>Postcode</li> <li>Postcode class code</li> <li>Date created and retired</li> </ul>	NAT	<ul> <li>Data on Demand self-serve portal</li> <li>Custom data sale</li> <li>Datasets API (developer portal)</li> <li>Geoscape Partners</li> </ul>	Linkage tables are provided for postcode to: • Locality Attributes within localities can be used to join to: • State	<ul><li>ESRI Shapefile</li><li>MapInfo TAB</li></ul>	<ul><li>✓</li><li></li><li></li></ul>
G-NAF	G-NAF	Quarterly	<ul> <li>Address location (point)</li> <li>Address label</li> <li>G-NAF ID</li> <li>Street, flat, unit number</li> <li>Street name and type</li> <li>Locality</li> <li>State</li> <li>Postcode</li> <li>Alias type and comment</li> <li>Lot</li> <li>Legal parcel ID</li> <li>Building name</li> <li>Primary / secondary</li> <li>ABS linkages</li> </ul>	NAT	<ul> <li>Data on Demand self-serve portal</li> <li>Custom data sale</li> <li>Datasets API (developer portal)</li> <li>Geoscape Partners</li> <li>Open data locations (e.g. data.gov.au)</li> </ul>	Attributes within G-NAF can be used to join to: • Buildings • Solar	Pipe separated values (PSV)	<b>()</b>
G-NAF Core	G-NAF Core	Quarterly	<ul> <li>Address location (point)</li> <li>Address label</li> <li>G-NAF ID</li> <li>Street, flat, unit number</li> <li>Locality</li> <li>State</li> <li>Postcode</li> <li>Alias type and comment</li> <li>Lot</li> <li>Legal parcel ID</li> <li>Building name</li> <li>Primary / secondary</li> <li>ABS boundary linkages</li> </ul>	NAT	<ul> <li>Data on Demand self-serve portal</li> <li>Custom data sale</li> <li>Datasets API (developer portal)</li> <li>Geoscape Partners</li> <li>Open data locations (e.g. AWS Marketplace)</li> </ul>	Attributes within G-NAF can be used to join to: • Buildings • Solar	Pipe separated values (PSV)	۲

**URB** = Urban regions

RUR = Rural regions

Raster (Spatial) Spreadsheets (Aspatial)

# Access the data in a way that suits you best

You can access our data via multiple channels, depending on how much data you want and how you intend to use it.

### **Custom Data Solution**

If you have a custom area of interest or need our datasets tweaked to be perfect for your business needs, <u>get in touch</u> with our team and we can sort you out with a custom data solution.

## Geoscape Hub

Geoscape Hub provides a self-serve portal empowering data exploration and API management. Key features include -

Self-Serve: Manage API keys and download the latest licensed dataset. A centralised space connecting all Geoscape location intelligence services. Data on Demand: With Clip, easily download Geoscape datasets including G-NAF Core, Geoscape Buildings, and Geoscape Cadastre on demand, tailored to your customised areas.

**Prototypes:** Early access to proof of concepts and sample prototypes that Geoscape Australia are exploring.

**Data Visualisation:** View the entire Geoscape product catalogue in a fast and responsive map interface.

### Become a Geoscape Partner

As a Geoscape Partner, you gain access to Australia's leading location data, allowing you to focus on delivering and improving your core offerings for your customers.

Focus your data resources on building value, and not on sourcing data.

# **Need more information**

For more detailed technical information on our data products, see the relevant product guides on our website.

#### Want to explore and try out our data?

Sign up for free at **https://hub.geoscape.com.au** to visualise and explore Geoscape datasets in a fast, responsive map interface. Hub accounts also allow you to clip and download data or use our APIs to programmatically access our data.

Get in touch with our team at info@geoscape.com.au

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