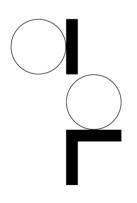
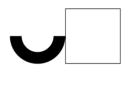
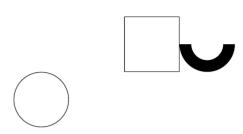


# G-NAF

# **Data Product Description**February 2023











#### Standard

This document is based on the AS/NZS ISO 19131:2008 Geographic information – Data product specifications standard.

#### Disclaimer

Geoscape Australia believes this publication to be correct at the time of printing and does not accept responsibility for any consequences arising from the use of the information herein. Readers should rely on their own skill and judgement to apply information to particular issues.

This work is copyright. Apart from any use as permitted under the Copyright Act 1968, no part may be reproduced by any process without prior written permission of Geoscape Australia Limited.





# **Contents**

1. Overview	5
1.1 Data product specification title	5
1.2 Reference date	5
1.3 Informal description of the data product	5
1.4 Responsible party	5
1.5 Language	5
1.6 Topic category	5
1.7 Distribution format	5
1.8 Glossary	
1.9 Copyright in G-NAF dataset	8
1.10 Privacy	
1.11 Addressing standards	8
1.12 About AS/NZ 4819:2011	
1.13 About AS4590:2006	
1.14 About the National Address Management Framework	9
2. Specification Scope	10
2.1 Scope identification	
3. Data Product Identification	
3.1 Title	
3.2 Alternate titles	
3.3 Abstract	
3.4 Purpose	
3.5 Topic category	
3.6 Geographic description	12
4. Data Content and Structure	14
4.1 Feature-based data	14
4.2 Feature-based application schema (data model)	14
4.3 Data dictionary	14
4.4 Feature-based content scope	14
5. Reference System	15
5.1 Spatial reference system	
5.2 Temporal reference system	
5.3 Reference system scope	
6. Data Quality	
6.1 Positional accuracy	
6.2 Coordinates Referencing the GDA 2020 Datum	
6.3 Attribute accuracy	
6.4 Logical consistency	

6.5 Completeness	17
7. Data Capture	18
7.1 Data capture scope	18
8. Data Maintenance	19
8.1 Pre-processing	20
8.2 G-NAF maintenance software	20
8.3 Maintenance scope	28
9. Data Product Delivery	29
9.1 Open Data – Delivery format information	29
9.2 Geoscape Partner Network – Delivery format information	
10. Geoscape Data	31
Appendix A – Addressing standards and NAMF relationship	32
Appendix B – G NAF Data Model	35
Appendix C – Data Dictionary	38



# 1.1 Data product specification title

G-NAF Product Description

#### 1.2 Reference date

February 2023

# 1.3 Informal description of the data product

G-NAF (Geocoded National Address File) is a trusted index of Australian address information. It contains the state, suburb, street, number and coordinate reference (or "geocode") for street addresses in Australia. G-NAF does not contain any personal information or details relating to an individual or business.

G-NAF uses existing and recognised address sources (referred to as contributors) from the state and territory government land records and Commonwealth government agencies. The Mesh Block data is sourced from the Australian Bureau of Statistics (ABS) and is part of their Australian Statistical Geography Standard (ASGS). A rigorous process is used that involves textual address comparison, matching and geospatial validation to provide both national consistency and national coverage.

# 1.4 Responsible party

Geoscape Australia Limited (Geoscape)

Unit 6, 113 Canberra Avenue, GRIFFITH ACT 2603 Australia

T: +61 2 6260 9000 | E: <a href="mailto:support@geoscape.com.au">support@geoscape.com.au</a>.

URL: \_http://www.geoscape.com.au\_ | ABN: 23 089 912 710

# 1.5 Language

English

# 1.6 Topic category

Address files for urban, rural and locality areas within Australia.

### 1.7 Distribution format

**PDF** 

# 1.8 Glossary

Geoscape maintains a glossary of common terms with their definitions and also includes acronyms and abbreviations that are commonly used in relation to Geoscape products and services. The glossary is available at the Geoscape website at https://geoscape.com.au/documentation/glossary-and-terms/

The following list defines some of the terms used by Geoscape for G-NAF but is not necessarily the same definition as used by others.

Term	Definition
Address	A structured label for any place that could deliver or receive a good or service.
Address Contributor	Supplier of address information to G-NAF.
Address Level Geocode	An address in G-NAF that has a parcel level geocode (i.e. a geocode reliability code of 2). Also referred to as a "parcel level" or "property level" address. The address will have one or more address site geocodes.
Alias Address (or Alternate Address)	Another label for a Principal Address which may differ because of a variation in some or all address components (i.e. numbers, levels, street name, locality name). An Alias Address will share the same location as the Principal Address. Association with Principal Address may be provided by an Address Contributor or determined programmatically.
Building Name	A building or property name that is associated with an address. The name is typically free text and is not unique to any address.
Class	Description of a set of objects that share the same attributes, operations, methods, relationships, and semantics [UML].
	Note: A class does not always have an associated geometry (e.g. the metadata class).
Confidence Level	G-NAF is currently built from three national address datasets. The confidence level of an address indicates the level of usage of each address by the contributor address datasets.
Contributor Data	Address datasets held and maintained by organisations external to Geoscape that is being made available for building and maintaining G-NAF.
Event	Characteristic of a feature measured within an object without modifying the associated geometry.
Feature	Abstraction of real-world phenomena.
Feature Attribute	Characteristic of a feature (e.g. name of an area).
Gap Geocode	A geocode created programmatically based on address ranging in the absence of a geocode being allocated to a specific property. This geocode may not necessarily lie within a property polygon.
Geocode	A point feature for an address spatially defined by a coordinate. In G-NAF, an address may have multiple geocodes representing various real-world features (e.g. parcel, property, building centroid, street centroid, locality centroid, etc.) associated with a physical address. The geographic coordinates are expresse as latitude/longitude in decimal degrees.
Geocode Level Type	The geocode level type indicates which geocodes have been assigned to an address. Every address within G-NAF must have a locality level geocode. Addresses may also have a street level geocode, and an address level geocode.
Geocode Type	The type of address level geocode for an address, e.g. BUILDING CENTROID. An address can have multiple types of address level geocodes.
Geocode Priority	G-NAF can assign multiple geocodes to an address. The geocode priority is a priority order established by Geoscape to enable a default geocode to be assigned to each address which represents the geocode of the highest precision currently assigned to an address.
Geocode Reliability	Refers to the geocode precision and is linked to how the geocode was generated.
G-NAF Merge Criteria	Those components of an address string used by the G-NAF process to uniquel identify an address.

Term	Definition			
Jurisdiction	Reference to a State or Territory Government.			
Locality	A named geographical area defining a community or area of interest, which may be rural or urban in character. Usually known as a Suburb in an urban area. The localities used in G-NAF are the gazetted localities as provided by the respective jurisdictions.			
Locality Alias	Another recognised name for a gazetted locality name. Could be misspellings, historic authoritative names or unauthoritative names.			
Other Territories	Refers to external Territories of Australia included within the Geoscape datasets: Christmas Island, Cocos (Keeling) Islands, Norfolk Island and Jervis Bay.			
Mesh Blocks	Mesh Blocks are the smallest geographic region in the Australian Statistical Geography Standard (ASGS), and the smallest geographical unit for which Census data is available.			
Object	An entity with a well-defined boundary and identity that encapsulates state and behaviour [UML Semantics]  Note: An object is an instance of a class.			
Package	Grouping of a set of classes, relationships, and even other packages to organise the model into more abstract structures.			
Postcodes	Postcodes are allocated to geographic areas to facilitate the efficient processing and delivery of mail.			
Primary Postcodes	Primary postcodes are unique integers based on the postcodes used to differentiate between gazetted localities within a jurisdiction that shares the same name. They may not necessarily be coincident with the postcode for any area.			
Primary Address	A Primary Address is a principal address that contains all the components of a address except flat number or level number information. Where flat number or level number information exists for an address, then this forms part of a Secondary Address and a linkage made to the Primary Address. Alternatively, a Primary Address can be linked to one or more Secondary Addresses by Geoscape where identified by an address contributor (e.g. involves private roa in complex development, public housing estates etc.)			
Principal Address	Accepted label for an Address which may have zero, one or more than one associated Alias Address.			
Geoscape Online Data Delivery System	A suite of applications to store, quality assure and distribute Geoscape's datasets.			
Reference Data	Each address entering G-NAF is tested to ensure it can be matched against th geospatial region to which it relates: state, locality and street. The datasets used for this geospatial verification are:			
	State and Territory Boundaries for Australia (State Boundaries)			
	Gazetted Locality Boundaries for Australia (Localities).  National Road Centreline Dataset (Roads)			
	These three datasets are commonly referred to as the Reference Data.			
Rules	Rules are at times applied to contributor addresses as part of the G-NAF processing where errors are identified in the addresses such as the incorrect spelling of street names, incorrect street types or incorrect localities. The application of these rules generates alias street localities or localities, depending on the rule applied.			
Secondary Address	A Secondary Address is any address where flat number or level number information is not null, i.e. includes prefix, number or suffix. Alternatively, a Secondary Address can be linked to a Primary Address by Geoscape where identified by an address contributor (e.g. involves private road in complex development, public housing estates etc.).			
Street (or Road)	An in-use name for a street name that exists within Geoscape's National Road Centreline Dataset (i.e. reference dataset) within Geoscape Roads.			
Street Locality	A Street or Road within a particular Locality, e.g. Smith St Melbourne VIC 3000. A street is unique to a locality. If it crosses a locality boundary, that segment receives a different street_locality_pid and is treated as another street.			

Term	Definition
Street Locality Alias	A Street or Road within a particular Locality that is an alternative name for a Street Locality Address.
Street Alias	In use name for a Street name not existing within Geoscape's Road centreline dataset (i.e. reference dataset).
Quality	Data is of the highest quality reflective at the time and fields provided. Key factors are timeliness, consistency and completeness.

# 1.9 Copyright in G-NAF dataset

Please see https://geoscape.com.au/legal/data-copyright-and-disclaimer/ for the Copyright and Disclaimer Notice for the G-NAF dataset.

# 1.10 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

# 1.11 Addressing standards

Australia has two national standards applicable to addressing:

- AS/NZS 4819:2011 Geographic information—Rural and urban addressing
- AS4590:2006 Interchange of Client Information.

#### 1.12 About AS/NZ 4819:2011

The standard AS/NZ 4819:2011 is intended for use by agencies that are responsible for addressing. The goal of AS/NZ 4819:2011 is to specify requirements for assigning addresses that can be readily and unambiguously identified and located.

To achieve this goal, the objectives of the standard are:

- Localities are to enable addresses to be uniquely and clearly identified
- Assigned names for roads or other primary means of access enable addresses to be readily and uniquely identified
- Assigned address numbering enables address sites to be readily located
- Signage enables assigned addresses to be readily identified and located
- · Address information enables sites to be readily located.

#### 1.13 About AS4590:2006

The standard AS4590:2006 sets out requirements of data elements for the interchange of client information. There are several elements specific to addressing.

As G-NAF contains both old and new addresses, it is more closely related to the structure in AS4590:2006.

# 1.14 About the National Address Management Framework

The National Address Management Framework (NAMF) has been developed as a national, coordinated approach to address management. It is a consistent, standards-based framework which will guide the process for verifying addresses and provide a standard for exchange of address data. Appendix A sets out the relationship between G-NAF, AS450:2006 and NAMF fields.

# 2. Specification Scope

There is a defined scope for Feature Based Content, Reference Systems, Data Quality, Data Capture and Data Maintenance regarding the data accuracy, geometry, metadata and temporal considerations of the data release cycle.

# 2.1 Scope identification

#### Level

Dataset

#### Level name

**G-NAF** 

#### **Extent**

Spatial coverage of Australia's land mass including External Territories.

# 3. Data Product Identification

#### 3.1 Title

G-NAF

#### 3.2 Alternate titles

G-NAF for Australia Geocoded National Address File Geographic National Address File Open G-NAF

#### 3.3 Abstract

The G-NAF Product Description (an ISO 19131 compliant description) provides an optimised quality geometric description and a set of basic attributes of the Address Index for Australia. G-NAF incorporates all addresses included in contributors' data that are regarded as complete addresses. G-NAF data is revised regularly.

# 3.4 Purpose

Addresses were once exclusively related to properties (e.g. where a bill should be sent for a utility service or rates notice). In a digital world, the use and purpose of addressing has changed. Addresses are now used to label land parcels and properties as well as for locating assets such as ATMs, tree plantations, reserves and substations.

Official addresses may be considered as those that are recognised and recorded by an authoritative body such as a land agency. In addition to official addresses, there are also "unofficial" or "in-use" addresses that may exist and be widely used and recognised by the community.

Addressing is not always simple and can be extremely challenging and complex.

# 3.5 Topic category

G-NAF: Addresses defined by coordinate spatial data (latitude and longitude) with associated textual metadata.

# 3.6 Geographic description

The G-NAF dataset covers the addresses within the complete national geography of Australia (AUS). 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°

This area covers the land masses of Australia, including External Territories and offshore islands (Christmas Island, Cocos (Keeling) Islands, and Norfolk Island).

The spatial domain is described by the polygon:



#### **Geographic extent name**

AUSTRALIA INCLUDING EXTERNAL TERRITORIES – AUS – Australia – Australia The States and Territories within Australia are represented by the following:

	•	<u> </u>
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)
Western 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	ОТ	9 (or 09)

Note: Geoscape has aligned Other Territories (OT) with the Australian Bureau of Statistics (ABS). It includes the Territory of Christmas Island, Territory of Cocos (Keeling) Islands, Jervis Bay Territory and more recently the inclusion of Norfolk Island. OT does not include any other external Territory.

# 4. Data Content and Structure

G-NAF is a feature-based product. A data model is included (Appendix B) with an associated data dictionary (Appendix C).

#### 4.1 Feature-based data

Data types and codes are derived from the address standard where applicable. However, in some cases, the codes have been extended to handle exceptional cases.

The data model is hierarchical, storing information about streets and localities separate from address sites.

Alias addresses are stored in the same way as principal addresses. There is simply a 'mapping' table provided to determine which address is an alias of which principal address.

# 4.2 Feature-based application schema (data model)

The G-NAF data model is set out in Appendix B.

# 4.3 Data dictionary

The G-NAF feature catalogue in support of the application schema is provided in Appendix C. Spatial attributes are added to the feature catalogue in the same manner as other attributes for completeness and conformance to the application schema.

# 4.4 Feature-based content scope

All geometry and metadata for points within G-NAF.



# 5.1 Spatial reference system

GDA 94 or GDA 2020

# 5.2 Temporal reference system

Gregorian calendar

# 5.3 Reference system scope

The spatial objects and temporal collection periods for G-NAF.

# 6. Data Quality

### 6.1 Positional accuracy

G-NAF is a concerted effort to deliver the best possible geocoded national address dataset for Australia. The magnitude of this dataset, the complexity of its content, and the multiplicity of its sources, means that there is ongoing requirement to improve the content, quality and coverage of G-NAF.

All addresses in G-NAF contain a locality geocode. This geocode will generally be at the centre of the locality.

If the name of the street in the address can be matched to one in the locality, then another geocode is added at the centre of the street within that locality. This is generally referred to as the street locality geocode.

If the address is provided with coordinates or can be matched to one that already exists, then a third geocode will be added, placing the address inside the relevant property. This is generally referred to as the address site geocode.

# 6.2 Coordinates Referencing the GDA 2020 Datum

From the November 2019 publication, coordinates in G-NAF are available referencing the GDA 2020 datum. These coordinates are produced using a coordinate transformation from GDA 94 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
```

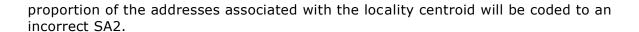
# 6.3 Attribute accuracy

Attribute accuracy is determined from rigorous standardisation processes and matching of the contributor datasets together with matching of addresses against the gazetted localities from Geoscape's Localities and Roads datasets.

#### Address Mesh Block integration

G-NAF has a Mesh Block ID allocated to every address, where available. This includes addresses that have a geocode allocated at a street-locality and locality level where a single Mesh Block cannot be identified. A coding table (MB MATCH CODE AUT) lists the codes describing the level of matching to Mesh Blocks.

The ABS recommends that G-NAF addresses associated with locality (and street) level geocode locations be associated with SA2 level units (ASGS units built up from SA2's). While there is a strong alignment between gazetted suburb and locality boundaries, there are situations where SA2 boundaries split localities. In these circumstances, an unknown



#### Allocation of postcodes

Postcodes are included in G-NAF at the address record level (i.e. postcode field in the respective ADDRESS\_DETAIL tables). Geoscape allocates a postcode to every address and is based on the gazetted suburb/locality. The inclusion of a postcode in G-NAF is primarily based on the most commonly used postcode for all the addresses within in each gazetted suburb/locality. One of the exceptions is the addresses located in the area allocated to postcode 3004 for St Kilda Road, where the majority of addresses would be in the suburb of MELBOURNE.

Postcodes are used by Australia Post to facilitate the efficient processing and delivery of mail. There is no mandatory requirement for inclusion of a postcode in an address (AS4590).

# 6.4 Logical consistency

The dataset data structure has been tested for conformance with the data model.

### 6.5 Completeness

Completeness is an assessment of the extent and range of the dataset with regard to the completeness of coverage, completeness of classification and completeness of verification. The Data Maintenance section provides more information about the completeness of the dataset based on the processing steps.

#### Dataset coverage

National

#### **Features**

#### Addresses included

G-NAF aims to include all physical addresses in circulation by using multiple sources. The physical addresses in G-NAF are used to label land parcels and properties as well as for locating assets such as ATMs, tree plantations, reserves and substations.

#### Attribute completeness

All mandatory attributes for each object are populated. Some attributes are not populated but have been included in the data model to assist with the alignment with relevant standards.

The process of collating addresses varies across the contributors supplying data to G-NAF. Therefore, the attributes supplied can vary, but Geoscape will attempt to populate attributes based on the available information from the contributors.

#### Quality scope

The attribute accuracy is in scope for all areas in G-NAF.



Data is contributed to G-NAF by organisations including the mapping agencies and land registries of each of the state and territory governments, and Commonwealth government agencies.

# 7.1 Data capture scope

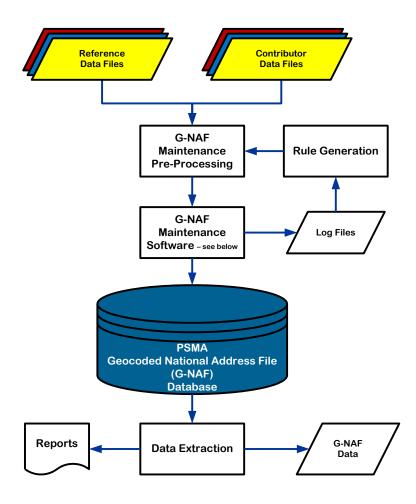
Data for changed objects within the current release period.

# 8. Data Maintenance

Maintenance activities are triggered by Geoscape receiving updated address data from data contributors according to an agreed delivery schedule. At present, this schedule defines a quarterly update process.

During the maintenance phase, contributed addresses are analysed and compared to existing records in G-NAF. This analysis and comparison give rise to new records being inserted and existing records being updated or retired.

The following diagram of the G-NAF Maintenance Process provides a high-level view of the G-NAF system including G-NAF maintenance pre-processing, the use of reference data files, G-NAF maintenance software and G-NAF outputs.



# 8.1 Pre-processing

The G-NAF maintenance pre-process takes the input files from the Geoscape reference datasets and contributor data and performs processing prior to data being processed by the G-NAF maintenance software.

Pre-processing is used to describe the following activities:

- Mapping from the contributor model to G-NAF model (with parsing as necessary)
- Application of rules that make corrections to misspellings, abbreviations and erroneous characters
- Application of updates to suburb data and road names propagating the changes through all affected parts of the data.

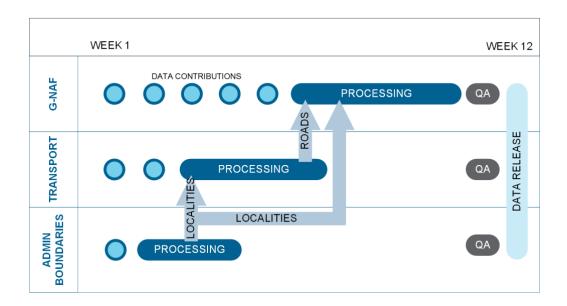
#### Data structure of an address

For an address to be included in G-NAF, it must be a "complete" entry. Complete equals:

- Must include a matched locality
- Must include a street name
- Must contain either a valid number\_first or a lot number.

#### Reference datasets

G-NAF is a dataset which is reliant on other Geoscape datasets. Below is a diagram which displays that relationship and order of production cycle for the release of Geoscape datasets. Geoscape's Localities and Roads datasets need to be completed before G-NAF production can commence.



#### 8.2 G-NAF maintenance software

The G-NAF maintenance software receives data from the pre-processing phase. All the contributed addresses from each jurisdiction are cleansed, compared and merged into the normalised G-NAF maintenance model.

#### **Processing**

The core maintenance processing consists of the following:

- Address scrubbing
- State-Locality validation and geocoding
- Street validation
- Street geocoding
- Address geocoding
- Merging (merge criteria and confidence levels)

A further series of processing occurs for the following steps:

- Post merge processing (including validation processes)
- Primary / Secondary maintenance
- Alias / Principal maintenance
- Geocode maintenance
- Update address attributes (update attributes not in core processing)
- Update address links (i.e. contributor mapping, Mesh Blocks, default geocode)
- Verify G-NAF data (i.e. conformance with a data model)
- Data export to integrated maintenance database.

#### Geocoding

Multiple geocodes and multiple types of geocodes can be stored for each address. While this capability exists in the G-NAF model, addresses with multiple geocodes only exist for some addresses at this stage.

#### Geocode level type

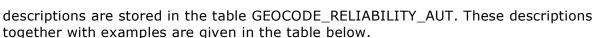
Every address within G-NAF must have a locality level geocode, it may also have a street level geocode and a parcel level geocode. The table GEOCODE\_LEVEL\_TYPE\_AUT indicates which of these geocode level types are associated with an address in accordance with the table below:

Geocode_Level_Type	Description
0	No Geocode
1	Parcel Level Geocode Only (No Locality or Street Level Geocode)
2	Street Level Geocode Only (No Locality or Parcel Level Geocode)
3	Street and Parcel Level Geocodes (No Locality Geocode)
4	Locality Level Geocode Only (No Street or Parcel Level Geocode)
5	Locality and Parcel level Geocodes (No Street Level Geocode)
6	Locality and Street Level Geocodes (No Parcel Level Geocodes)
7	Locality, Street and Parcel Level Geocodes

Note: LEVEL\_GEOCODED\_CODE field within the ADDRESS\_DETAIL table refers to the CODE field within the GEOCODE\_LEVEL\_TYPE\_AUT.

#### Geocode reliability

Reliability of a geocode refers to the geocode precision and is linked to how the geocode was generated. Every geocode in G-NAF has a reliability level. The levels and their



Reliability Level	Description	Example
1	Geocode resolution recorded to appropriate surveying standard	Address level geocode was manually geocoded with a GPS
2	Geocode resolution sufficient to place geocode within address site boundary or	Address level geocode was calculated as the geometric centre within the associated cadastral parcel
	access point close to address site boundary	Geocode for access point identified for a rural property
		Calculated geocode based on centre setback from road within cadastral parcel
		Geocode for approximate centre of building
3	Geocode resolution sufficient to place geocode near (or possibly within) address site boundary	Address level geocode was automatically calculated by determining where on the road the address was likely to appear, based on other bounding geocoded addresses
4	Geocode resolution sufficient to associate address site with a unique road feature	Street level geocode automatically calculated by using the road centreline reference data
5	Geocode resolution sufficient to associate address site with a unique locality or neighbourhood	Locality level geocode automatically calculated to the geometric centre within the gazetted locality for this address
6	Geocode resolution sufficient to associate address site with a unique region	Locality level geocode derived from topographic feature

Note: RELIABILITY\_CODE field within the ADDRESS\_SITE\_GEOCODE table refers to the CODE field within the GEOCODE\_TYPE\_AUT.

Every geocode has a reliability level. These levels are stored with the geocodes in the following tables:

- LOCALITY POINT
- STREET\_LOCALITY\_POINT
- ADDRESS SITE GEOCODE

#### Geocode type

Provision has also been made for G-NAF to cater for multiple types of geocodes for an address. Where geocode types are nominated by the jurisdiction, these are reflected in the geocode type field. Where a geocode type is not provided, a default value is used that reflects the majority of addresses. Nationally, the PROPERTY CENTROID (PC) geocode type is the most uniform. While the data model and respective geocode types have been listed, in the vast majority of cases, there are no current national data sources identified to populate the additional codes. The full list of allowed geocode types is included of the Data Dictionary in Appendix C (i.e. GEOCODE TYPE AUT table).

#### Geocode priority

A priority order has been developed and applied during G-NAF production to provide a single geocode for all G-NAF addresses. The priority order developed places emphasis on identifying locations associated with emergency management access, buildings on a site and other locations which are associated with the land management process. This order has been developed to assist users in general and will not be suitable for all user business needs. The priority order applied is included in the relevant table in Appendix C. The priority order has been applied in the <u>ADDRESS DEFAULT GEOCODE</u> table.

#### **Confidence levels**

Every address and geocode can be related to a supplied dataset, which in turn can be related to the contributor who provided it. This feature is essential to being able to supply the information back to the address contributors. However, the address custodian identifier is not available in G-NAF. Instead, address level metadata is available indicating how many source datasets provided each address.

Address Usage is reflected in the Confidence field included in the <u>ADDRESS\_DETAIL</u> table and is expressed as follows:

$$n-1=C$$

[n = number of datasets providing the address, C = confidence level]

Given G-NAF has been built with three contributor datasets, the Address Usage (Confidence Level) possibilities are as follows:

Confidence Level	Description			
Confidence level = 2	This reflects that all three contributors have supplied an identical address.			
Confidence level = 1	= 1 This reflects that a match has been achieved between only two contributors.			
Confidence level = 0	This reflects that a single contributor holds this address and no match has been achieved with either or the other two contributors.			
Confidence level = -1	This reflects that none of the contributors hold this address in their address dataset anymore.			

Where an address is no longer provided by any contributor, the address will be retired. The retirement will be reflected in its confidence level value of -1. Up until the August 2018 release of G-NAF all retired addresses were retained in G-NAF for four releases after which they were then archived and not retained in the product. The introduction of the ADDRESS\_FEATURE table in August 2018 with the tracking of change to addresses, requires the need to retain all retired addresses to show change over time.

#### Merge criteria

Addresses which share similar characteristics from the different contributors are merged into a single record. These shared characteristics are known as the merge criteria.

The fields comprising the G-NAF merge criteria are:

- STATE ABBREVIATION
- LOCALITY NAME
- PRIMARY POSTCODE
- STREET NAME
- STREET\_TYPE
- STREET\_SUFFIX
- NUMBER FIRST PREFIX
- NUMBER FIRST
- NUMBER FIRST SUFFIX
- NUMBER\_LAST\_PREFIX
- NUMBER\_LAST
- NUMBER LAST SUFFIX
- FLAT\_NUMBER\_PREFIX
- FLAT\_NUMBER
- FLAT\_NUMBER\_SUFFIX

- LEVEL NUMBER
- BUILDING\_NAME (see note below)

#### Note: Exception for Addresses without a number\_first

When a contributed address is supplied without a number\_first, consideration is given as to whether the address contains a lot\_number. An address without a number\_first but with a lot\_number will be added to G NAF.

A G-NAF ID or address\_detail\_pid relates to a unique combination of these merge criteria fields. This address\_detail\_pid will persist with the address while it remains in the dataset. Where values in fields which are not included in the merge criteria (from the ADDRESS\_DETAIL table) change in consecutive product releases, the address\_detail\_pid will not change. However, the associated date\_last\_modified field will.

#### Merge criteria - Building Name

There is a growing trend for addresses on complex sites, typically sites with multiple buildings present, to rely on BUILDING NAME data to distinguish one address from another within the site, for example:

Building A, Flat 10, 50 Smith Street, Goodtown Building B, Flat 10, 50 Smith Street, Goodtown

It is reasonable to assume that these are discrete addresses, however the G-NAF merge criteria evaluates them as the same address. Addresses of this nature have led to a situation where there may be an incomplete representation of the addressing within G-NAF at certain sites.

Geoscape aims to ameliorate this by adding the building\_name to the merge criteria at identified sites facilitating the complete coverage of G-NAF addresses on the site. Implementation of this process has commenced and will be extended progressively as sites are identified across Australia.

Additionally, the use of building\_name as a merge criteria also has some benefit for non standard addesses that have neither a lot number nor street number. While fewer in number than the complex address sites, these addresses often represent smaller isolated communities and Geoscape will progressively create G-NAF addresses at these sites as they are identified.

#### Merge criteria changes

When any element of the merge criteria changes, the new record is treated as a new address and inserted into G-NAF as such.

#### **Example**

This example shows Unit 3 21 Smith Street Burwood (address\_detail\_pid = GAVIC411711441) being changed to Unit 3 21 Brown Street Burwood by a contributor. The street name change will mean it is no longer possible to match the new incoming record to an existing G-NAF record, so a new G-NAF record (address\_detail\_pid = GAVIC998999843) is created.

As the existing address (i.e. GAVIC411711441) is now only supported by two contributors, its confidence level is reduced to 1. The new incoming address, only supported by one contributor, will get a confidence of 0.

Existing G	Existing G-NAF Record										
GNAF_ PID	FLAT _TYP E	FLAT _ NUM BER	BUILDING _NAME	NUMB ER _FIRS T	STREET _NAME	STREET _TYPE	LOCALITY _NAME	C O N F I D E N C E	DATE CREA TED	DATE RETIR ED	DATE _LAST _ MODI FIED
GAVIC41 1711441	UNIT	3	PONDEROSA	21	SMITH	STREET	BURWOOD	2	29/04/ 2014		
									2014		
Updated G	-NAF Rec	ords									
GNAF_ PID	FLAT _TYP E	FLAT NUM BER	BUILDING _NAME	NUMB ER _FIRS T	STREET _NAME	STREET _TYPE	LOCALITY _NAME	C O N F I D E N C E	DATE CREA TED	DATE RETIR ED	DATE _LAST _ MODI FIED
GAVIC41 1711441	UNIT	3	PONDEROSA	21	SMITH	STREET	BURWOOD	1	29/04/ 2014		14/06/ 2014
GAVIC99 8999843	UNIT	3	PONDEROSA	21	BROWN	STREET	BURWOOD	0	14/06/ 2014		

#### **Address duplication**

As multiple contributors supply data nominally covering the same area, there is a possibility that there are duplicate addresses which represent the same addressable location. The above example simplistically demonstrates how this could occur. Geoscape has developed a sophisticated series of production processes in an effort to counter these issues. The majority of this duplication has occurred as a result of the following:

The use of both ranged and non-ranged addresses for the same site (e.g. 22-28 Sydney Street vs 22 Sydney Street).

The use of a flat number as opposed to a number\_first suffix for the same site (e.g. 2/27 Melbourne Street vs 27B Melbourne Street).

Where one contributor supplies a level number as part of an address string and another contributor does not supply the level number for the same site. This tends to occur on properties where "hotel style addressing" is used (e.g. Level 3, 302/50 Adelaide Street vs 302/50 Adelaide Street).

Where circumstances of this nature have been identified during processing, alias principal relationships have been established to prevent the duplication of addresses.

#### Alias Management

The usability of G-NAF is greatly enhanced by the inclusion of alias information that captures addresses in popular use irrespective of official status. Geoscape recognises that G-NAF has a role to play in progressing usage of official gazetted addresses. However, it is

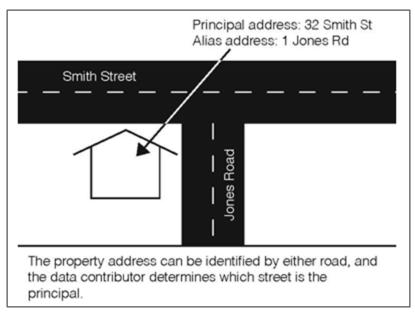
also acknowledged that the issue cannot be forced and in some cases, it will take generational change to see alias or incorrect addresses taken out of everyday usage.

It is also considered that the benefits of the inclusion of aliases outweigh the costs; particularly in the application of G-NAF by emergency services. There are three levels of aliases in the G-NAF schema:

- · Alias Address where an individual address is also known by another name
- Alias Street/Locality Address where a street/locality pair does not exist in the reference data and is the synonym or incorrect spelling of a street/locality pair that does exist.
- Alias Locality Address where a locality does not exist in the reference data and is the synonym or incorrect spelling of a locality that does exist

#### Alias address

Alias addresses (ADDRESS\_ALIAS) are addresses, other than the principal address, that refer to the same physical location as another address record.



An address level alias refers to the same address site which is identified by different address elements.

The relationship between addresses at a specific site is modelled through a principal and alias attribute and join table.

#### Alias street/locality

Alias street/locality (STREET\_LOCALITY\_ALIAS) is used to determine addresses that refer to the same physical location as another address record, where the street/locality is different. Where it is identified that the street/locality in an address from a contributor was incorrect (e.g. spelling error), a rule (see below) is created to manipulate the data during the scrubbing process.

#### Alias locality

Alias localities (LOCALITY\_ALIAS) are used to determine those addresses that refer to the same physical location as another address record, but where the locality is different. The example locality "CITY" will exist in the LOCALITY table and an entry for "CANBERRA CITY" will exist in the LOCALITY\_ALIAS table.

#### Using alias datasets

When using G-NAF to validate an address, the steps are:

- 1. Is there a principal address for this address?
- 2. Is there an alias address for this address?
- 3. Is there an alias locality for the locality of the address?
  - 4. This can be determined by checking the locality name of the address against the LOCALITY\_NAME field in the LOCALITY\_ALIAS table; the locality\_pid is then used to determine the correct locality\_name from the LOCALITY table. The next step would be to retry steps 1 & 2 with the new locality\_name.
- 5. Is there an alias street/locality for the address?
  - 6. This can be determined by checking the street name of the address against the street\_name, street\_type, street\_suffix fields in the STREET\_LOCALITY\_ALIAS table; the street\_pid is then used to determine the correct street\_name from the STREET table. The next step would be to retry steps 1, 2 & 3 with the new street name.

#### **Processing links to other Geoscape Data**

#### Localities

Localities is a reference dataset for G-NAF and is the source for identifying the official locality name for an address, where available. The suburbs/localities geometry is also an important part in the allocation of geocodes for locality and street-locality geocodes generated for G-NAF.

#### ABS Boundaries

- · Mesh Blocks 2016 (ABS Boundaries).
- Mesh Blocks 2021 (ABS Boundaries).

#### Roads

Roads is a reference dataset that is used for the processing of G-NAF. The roads data is a fundamental part of an address and is used as the source for the allocation of road names in the STREET\_LOCALITY table. The roads geometry is also used in the allocation of the street-locality level geocodes.

#### Legal Parcel Identifier

The ADDRESS\_DETAIL table contains a field called LEGAL\_PARCEL\_ID, the process involves incorporating the cadastral information captured from the address supplied by the jurisdiction, where possible. This process is done at the time that the address data is supplied by the jurisdiction and more accurately represents the cadastral information used for an address by the jurisdiction. Addresses from other contributors will also be allocated the same cadastral information where the geocode is at the same location. The LEGAL\_PARCEL\_ID field is populated with the cadastral information using the same concatenations (where applicable) as adopted for the PARCEL\_ID used in the Cadastre product as shown in the table below.

State	Concatenation	Examples

Norfolk (OT)	LOT/PORTION/SECTION	66/41a27/16
Cocos (OT)	same as WA	
Jervis (OT)	DISTRICT_SHORT/BLOCK	JERV/927
WA	PI_PARCEL/LOT_NUMBER	S030337/1 P003008/74
VIC***	PARCEL.SPI	1\TP201500 CM\PS405814 PC370718
TAS	PLAN/LOT	158882/1
SA	PLAN_T/PLAN/PARCEL_T/PARCEL	D/10001/A/14
QLD	LOT/PLAN	66/RP139841
NT**	PAR_LOC/PAR_PAR/PAR_LTO	550/3252/ 055/C/60001
	PLAN_LABEL	4994-1497
	If SECTIONNUM has a value then LOT_NUMBER/SECTIONNUM/PLANNUMBER	
	LOTNUMBER/PLANNUMBER else	3/23/2163
NSW	If SECTIONNUM is <null> then</null>	13/31993 11/C/3625
	DISTRICT_SHORT/DIVISION_SHORT//	CANB/CITY//
	DISTRICT_SHORT/DIVISION_SHORT/SECTION/BLOCK/UNIT	BELC/BRUC/78/17/2
ACT	DISTRICT_SHORT/DIVISION_SHORT/SECTION/BLOCK	CANB/BRAD/18/41

<sup>\*\*</sup> Leading 0 will be trimmed from PAR\_PAR

#### Jurisdiction Property Identifier

The ADDRESS\_DETAIL table includes a field called GNAF\_PROPERTY\_PID that includes the property identifier provided by the jurisdiction for the property associated with the address. This identifier is the same as the CONTRIBUTOR\_ID in the Property product as shown in the table below.

State	Field	Concatenation
ACT	CONTRIBUTOR_ID	TITLE + "/" + UNIT
NSW	CONTRIBUTOR_ID	PROPID
NT	CONTRIBUTOR_ID	VOLUME_TYP + "/" + VOLUME_NO + "/" + FOLIO_NO
QLD	CONTRIBUTOR_ID	PROPERTY_ID
SA	CONTRIBUTOR_ID	ASSNO_TENSEQNO
TAS	CONTRIBUTOR_ID	PID
VIC	CONTRIBUTOR_ID	PFI
WA	CONTRIBUTOR_ID	VPU_VE_NUMBER

# 8.3 Maintenance scope

Data for existing objects with changed geometry and attributes as well as data for new objects within the release period are included in the release.

<sup>\*\*\*</sup> The VIC SPI uses a \ concatenator (opposite to other jurisdictions)

# 9. Data Product Delivery

Geoscape Australia is the crucial link between the supply and demand sides of the market for the fundamental national spatial datasets that it offers under the banner of Geoscape Data. The organisation eliminates the difficulties of negotiating multiple license agreements with Australian governments and the problems of integrating the data into a seamless consistent national dataset. Furthermore, the existence of Geoscape Australia minimises the duplication of effort within the market for organisations wishing to access national data.

Geoscape Australia's website (<u>www.geoscape.com.au</u>) provides information to assist those interested in accessing Geoscape Data..

For further information on accessing Geoscape Data, or becoming a Product Partner contact:

#### **Geoscape Sales**

Unit 6, 113 Canberra Avenue, Griffith ACT 2603

T: 02 6260 9000

E: sales@geoscape.com.au W: www.geoscape.com.au

# 9.1 Open Data - Delivery format information

The Australian Government releases G-NAF on data.gov.au in PSV format.

#### **PSV** files

Format Name:

Pipe Separated Value files

#### Specification:

PSV files may be used in relational data base applications and may be viewed in spreadsheets. This format provides files with the following extension \*.psv

#### Language:

English

# 9.2 Geoscape Partner Network – Delivery format information

G-NAF is delivered to Geoscape's Partner Network in the following formats:

Pipe Separated Value (PSV) files



...Format Name:

Pipe Separated Value files

#### Specification:

PSV files may be used in relational database applications and may be viewed in spreadsheets. This format provides files with the following extension \*.psv

Language:

English



More information on Geoscape's full data catalogue can be obtained here: <a href="https://geoscape.com.au/data/">https://geoscape.com.au/data/</a>

# Appendix A – Addressing standards and NAMF relationship

The field names used for G-NAF differ from those used by the address standard AS4590:2006 and the National Address Management Framework (NAMF). Geoscape recommends applying the following G-NAF fields to provide the relationship to AS4590 and NAMF fields.

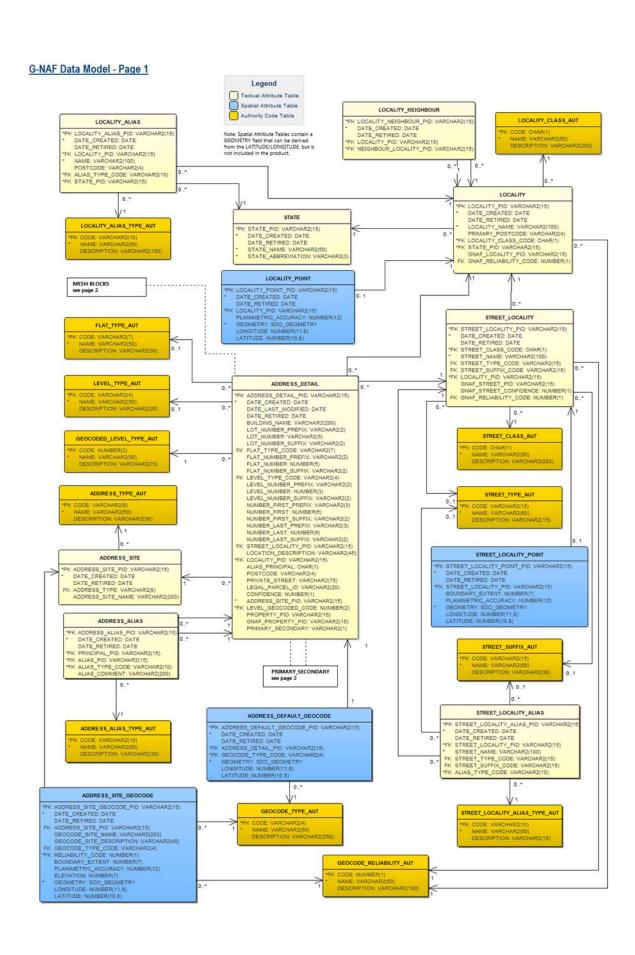
Table 1: Relationship between G NAF, AS4590 and NAMF fields

NAMF Field	AS4590 Field	G-NAF Field(s)	Description
complexLevelType	COMPLEX.LEVEL TYPE CODE	LEVEL_TYPE_AUT.DESCRIPTION	Full name of level type
complexLevelNumber	COMPLEX.LEVEL NUMBER	ADDRESS_DETAIL.LEVEL_NUMBER _PREFIX, ADDRESS_DETAIL.LEVEL_NUMBER	Level number is a concatenation of the three fields
		, ADDRESS_DETAIL.LEVEL_NUMBER _SUFFIX	
complexUnitType	COMPLEX.SUB DWELLING UNIT TYPE CODE	FLAT_TYPE_AUT.DESCRIPTION	Full name of flat type
complexUnitIdentifier	COMPLEX.SUB DWELLING UNIT NUMBER	ADDRESS_DETAIL.FLAT_NUMBER_ PREFIX, ADDRESS_DETAIL.FLAT_NUMBER, ADDRESS_DETAIL.FLAT_NUMBER_ SUFFIX	Flat number is a concatenation of the three fields
complexStreetNumber1	COMPLEX.COMPL EX ROAD NUMBER 1	ADDRESS_DETAIL.NUMBER_FIRST _PREFIX, ADDRESS_DETAIL.NUMBER_FIRST, ADDRESS_DETAIL.NUMBER_FIRST _SUFFIX	Applicable if, and only if, a primary secondary relationship is identified in G-NAF. The first street number of the secondary address is a concatenation of the three fields
complexStreetNumber2	COMPLEX.COMPL EX ROAD NUMBER 2	ADDRESS_DETAIL.NUMBER_LAST_ PREFIX, ADDRESS_DETAIL.NUMBER_LAST, ADDRESS_DETAIL.NUMBER_LAST_ SUFFIX	Applicable if, and only if, a primary secondary relationship is identified in G-NAF. The last street number of the secondary address is a concatenation of the three fields
complexStreetName	COMPLEX.COMPL EX ROAD NAME	STREET_LOCALITY.STREET_NAME	Applicable if, and only if, a primary secondary relationship is identified in G-NAF. Street name of the secondary address
complexStreetType	COMPLEX.COMPL EX ROAD TYPE CODE	STREET_TYPE_AUT.DESCRIPTION	Applicable if, and only if, a primary secondary relationship is identified in G-NAF. Abbreviation of street type of the secondary address
complexStreetSuffix	COMPLEX.COMPL EX ROAD SUFFIX CODE	STREET_SUFFIX_AUT.DESCRIPTIO N	Applicable if, and only if, a primary secondary relationship is identified in G-NAF. Full name of street suffix of the secondary address

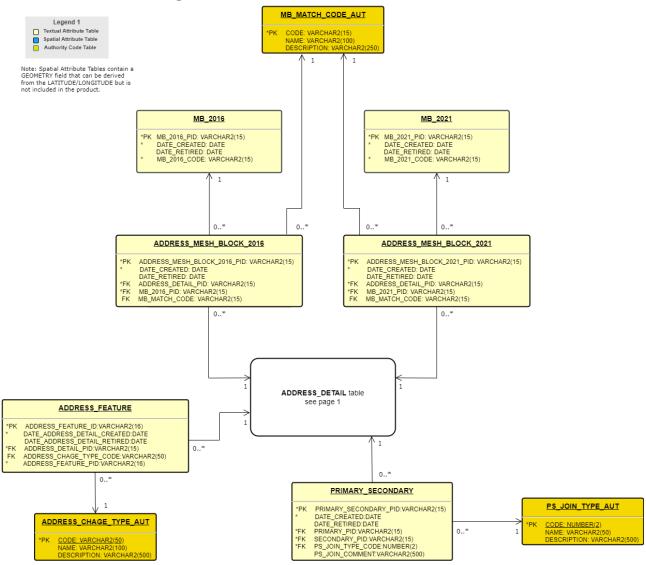
NAMF Field	AS4590 Field	G-NAF Field(s)	Description
siteName	ADDRESS SITE NAME	ADDRESS_DETAIL.BUILDING_NAME	Building name. This may require review, as there is also a name in the ADDRESS_SITE table. Perhaps a business rule similar to:  1 CASE 2 WHEN ADDRESS_DETAIL.BUILDI NG_NAME IS NOT NULL THEN ADDRESS_DETAIL.BUILDI NG_NAME 3 ELSE ADDRESS_SITE.ADDRESS_SITE_NAME 4 END
lotIdentifier	ROAD NUMBER.LOT NUMBER	ADDRESS_DETAIL.LOT_NUMBER_P REFIX, ADDRESS_DETAIL.LOT_NUMBER, ADDRESS_DETAIL.LOT_NUMBER_S UFFIX	Lot number is a concatenation of the three fields
streetNumber1	ROAD NUMBER.ROAD NUMBER 1	ADDRESS_DETAIL:NUMBER_FIRST _PREFIX, ADDRESS_DETAIL:NUMBER_FIRST, ADDRESS_DETAIL:NUMBER_FIRST _SUFFIX	The first street number is a concatenation of the three fields
streetNumber2	ROAD NUMBER.ROAD NUMBER 2	ADDRESS_DETAIL.NUMBER_LAST_ PREFIX, ADDRESS_DETAIL.NUMBER_LAST, ADDRESS_DETAIL.NUMBER_LAST_ SUFFIX	The last street number is a concatenation of the three fields
streetName	ROAD.ROAD NAME	STREET_LOCALITY.STREET_NAME	Street name
streetType	ROAD.ROAD TYPE CODE	STREET_TYPE_AUT.DESCRIPTION	Abbreviation of street type
streetSuffix	ROAD.ROAD SUFFIX CODE	STREET_SUFFIX_AUT.DESCRIPTION	Full name of street suffix
localityName	LOCALITY NAME	LOCALITY.LOCALITY_NAME	Locality name
stateTerritory	STATE OR TERRITORY CODE	STATE.STATE_ABBREVIATION	State or territory abbreviation
geoNorthSouthCoordinate	GEOCODE.GEOC ODE LATITUDE	ADDRESS_SITE_GEOCODE.LATITU DE OR STREET_LOCALITY_POINT.LATITU DE OR LOCALITY_POINT.LATITUDE	Business rule:  1 CASE  2 WHEN  ADDRESS_SITE_GEOCOD  E.LATITUDE IS NOT NULL  THEN  ADDRESS_SITE_GEOCOD  E.LATITUDE  3 WHEN  STREET_LOCALITY_POINT .LATITUDE IS NOT NULL  THEN  STREET_LOCALITY_POINT .LATITUDE  4 ELSE  LOCALITY_POINT.LATITUD  E  5 END

NAMF Field	AS4590 Field	G-NAF Field(s)	Description
geoEastWestCoordinate	GEOCODE.GEOC ODE LONGITUDE	ADDRESS_SITE_GEOCODE.LONGIT UDE OR STREET_LOCALITY_POINT.LONGIT UDE OR LOCALITY_POINT.LONGITUDE	Business rule:  1 CASE  2 WHEN ADDRESS_SITE_GEOCOD E.LONGITUDE IS NOT NULL THEN ADDRESS_SITE_GEOCOD E.LONGITUDE  3 WHEN STREET_LOCALITY_POINT .LONGITUDE IS NOT NULL THEN STREET_LOCALITY_POINT .LONGITUDE  4 ELSE LOCALITY_POINT.LONGIT UDE  5 END
geoFeature	GEOCODE.GEOC ODE FEATURE	GEOCODE_TYPE_AUT.NAME OR "STREET LOCALITY CENTROID" OR "LOCALITY CENTROID"	Business rule:  1 CASE  2 WHEN ADDRESS_SITE_GEOCOD E.GEOCODE_TYPE_CODE IS NOT NULL THEN GEOCODE_TYPE_AUT.NA ME  3 WHEN ADDRESS_SITE_GEOCOD E.LONGITUDE IS NOT NULL THEN 'PROPERTY/PARCEL GEOCODE'  4 WHEN STREET_LOCALITY_POINT .LONGITUDE IS NOT NULL THEN 'STREET LOCALITY CENTROID'  5 ELSE 'LOCALITY CENTROID'  6 END
geoDatumCode	GEOCODE.GEOC ODE GEOGRAPHIC DATUM	"GDA94" or "GDA2020"	

# Appendix B – G NAF Data Model



#### **G-NAF Data Model - Page 2**



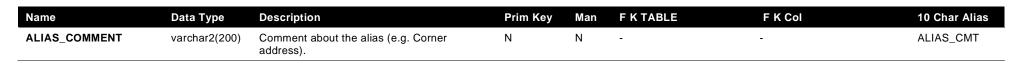
# Appendix C - Data Dictionary

The following describes how the various fields should be interpreted in the respective metadata tables in the Feature Catalogue below.

Column	Abbreviation	Description
Name	Name	The name of the column in the Integrated Database
Data Type	Data type	The Oracle data type of the column. Mapinfo TAB files have similar data types.
Description	Description	A description of the column and what the expected contents are
Primary Key	Prim Key	If 'Y' then this column must always have a unique value. (has # entry in the data model tables)
Obligation	Man	Y = mandatory. If 'Y' (mandatory), this column must be populated with data.  That is, all ACTIVE records must have values in this column.
Foreign Key Table	F K TABLE	Represents a column in the 'Foreign Key Table' that this column is referred to by another table. (has * entry in the data model tables)
Foreign Key Column	F K Col	Represents a table in the Integrated Database that this column is referred to.
10 Character Alias	10 Char 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.

#### Table 1: ADDRESS\_ALIAS

Name	Data Type	Description	Prim Key	Man	F K TABLE	F K Col	10 Char Alias
ADDRESS_ALIAS_PID	varchar2(15)	The Persistent Identifier is unique to the real world feature this record represents.	Υ	Y	-	-	ADD_AL_PID
DATE_CREATED	Date	Date this record was created.	N	Υ	-	-	DT_CREATE
DATE_RETIRED	Date	Date this record was retired.	N	N	-	-	DT_RETIRE
PRINCIPAL_PID	varchar2(15)	Persistent identifier (i.e. ADDRESS_DETAIL_PID) of the principal address.	N	Y	ADDRESS_DETAIL	ADDRESS_DETAIL_PID	PRINC_PID
ALIAS_PID	varchar2(15)	Persistent identifier (i.e. ADDRESS_DETAIL_PID) of the alias address.	N	Y	ADDRESS_DETAIL	ADDRESS_DETAIL_PID	ALIAS_PID
ALIAS_TYPE_CODE	varchar2(10)	Alias type (e.g. "Synonym").	N	Y	ADDRESS_ALIAS_TYP E_AUT	CODE	ALTYP_CODE



# Table 2: ADDRESS\_ALIAS\_TYPE\_AUT

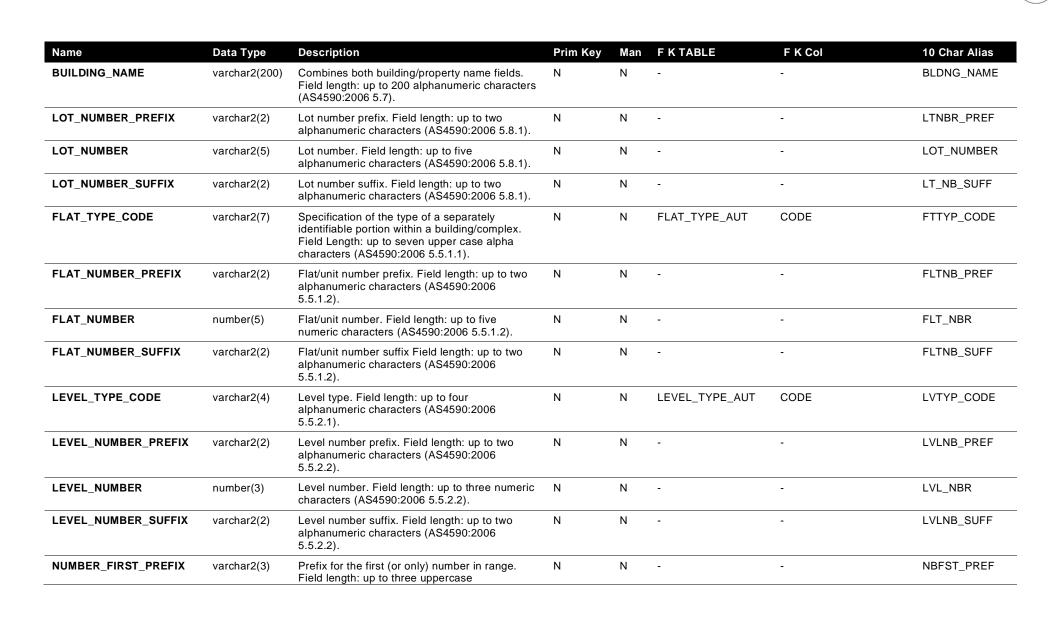
Name	Data Type	Description	Prim Key	Man	F K TABLE	F K Col	10 Char Alias
CODE	varchar2(10)	Unique abbreviation of address alias type. This is the persistent identifier.	Υ	Υ	-	-	CODE_AUT
NAME	varchar2(50)	Name of the address alias type code.	N	Υ	-	-	NAME_AUT
DESCRIPTION	varchar2(30)	Description of the address alias type code.	N	N	-	-	DSCPN_AUT

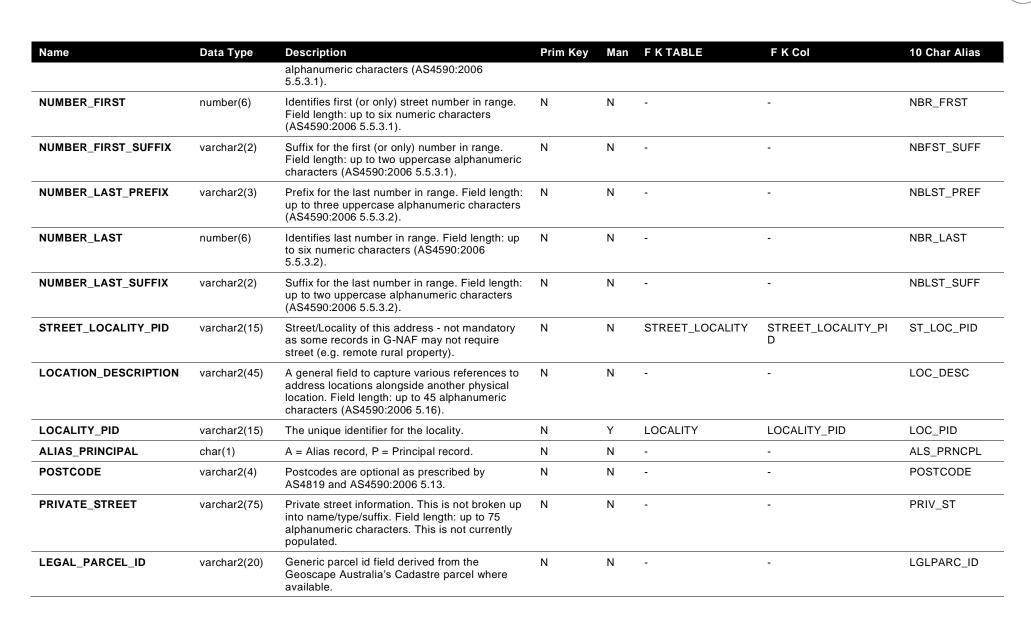
#### Table 3: ADDRESS\_ALIAS\_TYPE\_AUT

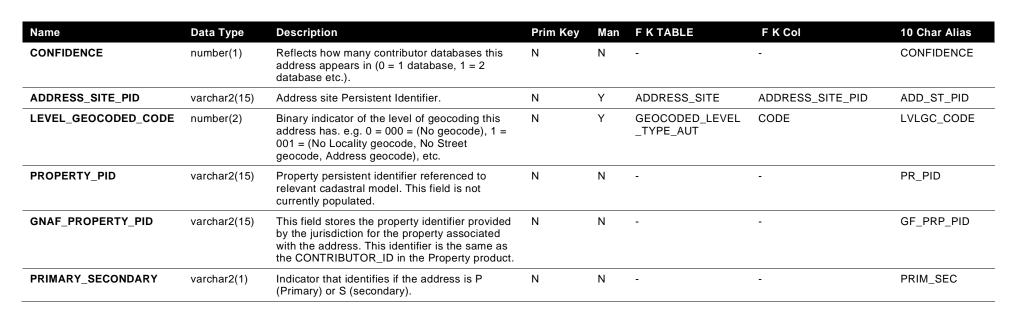
CODE	NAME
SYN	Synonym
CD	Contributor Defined
AL	Alternative Locality
RA	Ranged Address
LD	Level Duplication
FNNFS	Flat Number – No First Suffix Correlation
MR	Maintenance Reference

# Table 4: ADDRESS\_DETAIL

Name	Data Type	Description	Prim Key	Man	F K TABLE	F K Col	10 Char Alias
ADDRESS_DETAIL_PID	varchar2(15)	The Persistent Identifier is unique to the real world feature this record represents.	Υ	Y	-	-	ADD_DT_PID
DATE_CREATED	Date	Date this record was created.	N	Υ	-	-	DT_CREATE
DATE_LAST_MODIFIED	Date	Date this record was last modified (not retired/recreated in line with ICSM standard).	N	N	-	-	DT_LST_MOD
DATE_RETIRED	Date	Date this record was retired.	N	N	-	-	DT_RETIRE

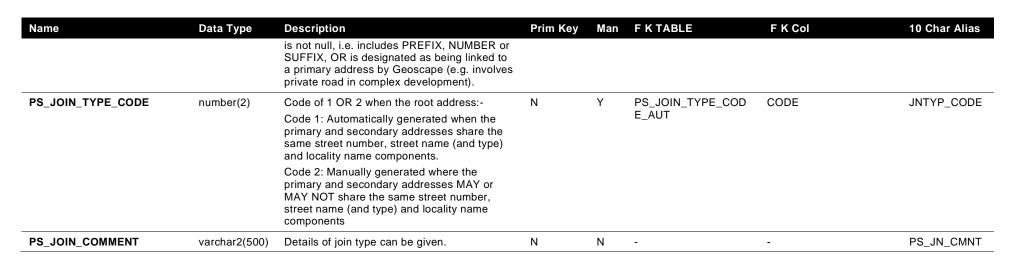






#### Table 5: PRIMARY\_SECONDARY

Name	Data Type	Description	Prim Key	Man	F K TABLE	F K Col	10 Char Alias
PRIMARY_SECONDARY_PID	varchar2(15)	The Persistent Identifier is unique to the real world feature this record represents.	Y	Y	-	<del>-</del>	PRIM_S_PID
DATE_CREATED	date	Date this record was created.	N	Υ	-	-	DT_CREATE
DATE_RETIRED	date	Date this record was retired.	N	N	-	-	DT_RETIRE
PRIMARY_PID	varchar2(15)	Persistent identifier for the primary address Defined as a principal address which does not have a flat number or level number but which matches the secondary address in all other respects OR is designated as owning secondary addresses by Geoscape (e.g. involves private road in complex development).	N	Y	ADDRESS_DETAIL	ADDRESS_DETAIL_PID	PRIM_PID
SECONDARY_PID	varchar2(15)	Secondary persistent identifier for the Secondary address - defined as any address where flat number or level number information	N	Y	ADDRESS_DETAIL	ADDRESS_DETAIL_PID	SEC_PID



#### Table 6: PS\_JOIN\_TYPE\_AUT

Name	Data Type	Description	Prim Key	Man	F K TABLE	F K Col	10 Char Alias
CODE	varchar2(2)	Defines the type of join (e.g. "1","2").	Υ	Υ	-	-	CODE_AUT
NAME	varchar2(50)	Name of the join type code.	N	Υ	-	-	NAME_AUT
DESCRIPTION	varchar2(500)	Description of the join type code.	N	N	-	-	DSCPN_AUT

#### Table 7: PS\_JOIN\_TYPE\_AUT Codes

CODE	DESCRIPTION	Name
1	AUTOMATICALLY MATCHED PRIMARY AND SECONDARY WHEN THE PRIMARY AND SECONDARY ADDRESSES SHARE THE SAME STREET NUMBER, STREET NAME (AND TYPE) AND LOCALITY NAME COMPONENTS	AUTO
2	MANUALLY GENERATED LINK, PRIMARY AND SECONDARY ADDRESSES MAY OR MAY NOT SHARE THE SAME STREET NUMBER, STREET NAME (AND TYPE) AND LOCALITY NAME COMPONENTS	MANUAL



Name	Data Type	Description	Prim Key	Man	F K TABLE	F K Col	10 Char Alias
ADDRESS_FEATURE_ID	varchar2(16)	The Identifier is unique to the record within the table. The ID is prefixed with the state or territory abbreviation, e.g. NSW123456	Υ	Y	-	-	ADD_FT_ID
ADDRESS_FEATURE_PID	varchar2(16)	The Persistent Identifier is the unique identifier for the addressable object this record represents. The PID allows for tracking change to the ADDRESS_DETAIL_PID associated with an addressable object over time. The PID is prefixed with AF and the state or territory abbreviation, e.g. AFNSW123456	N	Y	-	-	ADD_FT_PID
ADDRESS_DETAIL_PID	varchar2(15)	The Persistent Identifier that is unique to the real world feature this record represents.	Υ	Υ	ADDRESS_DETAIL	ADDRESS_DETAIL_PI D	ADD_DT_PID
DATE_ADDRESS_DETAIL_C REATED	Date	Date the address (ADDRESS_DETAIL) record was created.	N	Y	-	-	DT_AD_CR
DATE_ADDRESS_DETAIL_RE TIRED	Date	Date the address (ADDRESS_DETAIL) record was retired.	N	N	-	-	DT_AD_RT
ADDRESS_CHANGE_TYPE_C Ode	varchar(50)	The code indicating the type of change, for example, LOC-STN for locality name and street name change.	N	N	ADDRESS_CHANGE _TYPE_AUT	CODE	CODE

Table 9: ADDRESS\_CHANGE\_TYPE\_AUT

Name	Data Type	Description	Prim Key	Man	F K TABLE	F K Col	10 Char Alias
CODE	varchar(50)	An abbreviated name of the type of change. Field length: up to fifty characters. This is the persistent identifier.	Υ	Υ	-	-	CODE_AUT
NAME	varchar2(100)	Name of the address change type code.	N	Υ	-	=	NAME_AUT
DESCRIPTION	varchar2(500)	Description of address change type code.	N	N	-	-	DSCPN_AUT

Note: The codes are not listed due to the large number of change types. Please look at the tables within the data.





# Table 10: ADDRESS\_MESH\_BLOCK\_2016

Name	Data Type	Description	Prim Key	Man	F K TABLE	F K Col	10 Char Alias
ADDRESS_MESH_BLOCK_2016_PID	varchar2(15)	The Persistent Identifier is unique to the real world feature this record represents.	Y	Υ	-	-	A_MB_16PID
DATE_CREATED	date	Date this record was created.	N	Υ	-	-	DT_CREATE
DATE_RETIRED	date	Date this record was retired.	N	N	-	-	DT_RETIRE
ADDRESS_DETAIL_PID	varchar2(15)	Persistent identifier (i.e. ADDRESS_DETAIL_PID) of the principal address.	N	Y	ADDRESS_DETAIL	ADDRESS_DETAIL_PID	ADD_DT_PID
MB_MATCH_CODE	Varchar2(15)	Code for mesh block match e.g. 1.	N	Υ	MB_MATCH_COD E	CODE	MB_MATCHED
MB_2016_PID	varchar2(15)	Mesh block 2016 Persistent Identifier.	N	Y	MB_2016	MB_2016_PID	MB_16PID

# Table 11: ADDRESS\_MESH\_BLOCK\_2021

Name	Data Type	Description	Prim Key	Man	F K TABLE	F K Col	10 Char Alias
ADDRESS_MESH_BLOCK_2021_PID	varchar2(15)	The Persistent Identifier is unique to the real world feature this record represents.	Υ	Y	-	-	A_MB_21PID
DATE_CREATED	date	Date this record was created.	N	Υ	-	-	DT_CREATE
DATE_RETIRED	date	Date this record was retired.	N	N	-	-	DT_RETIRE
ADDRESS_DETAIL_PID	varchar2(15)	Persistent identifier (i.e. ADDRESS_DETAIL_PID) of the principal address.	N	Y	ADDRESS_DETAIL	ADDRESS_DETAIL_PID	ADD_DT_PID
MB_MATCH_CODE	Varchar2(15)	Code for mesh block match e.g. 1.	N	Υ	MB_MATCH_COD E	CODE	MB_MATCHED
MB_2021_PID	varchar2(15)	Mesh block 2021 Persistent Identifier.	N	Υ	MB_2021	MB_2021_PID	MB_21PID



Name	Data Type	Description	Prim Key	Man	F K TABLE	F K Col	10 Char Alias
CODE	varchar2(15)	Code e.g. 1. This is the persistent identifier.	Υ	Υ	-	-	CODE_AUT
NAME	varchar2(100)	Name of the match code. e.g. PARCEL LEVEL MATCH.	N	Y	-	-	NAME_AUT
DESCRIPTION	varchar2(250)	Description of what the match code means.	N	N	-	=	DESC_AUT

# Table 13: MB\_MATCH\_CODE\_AUT Codes

NAME	DESCRIPTION
PARCEL LEVEL MATCH	A parcel level geocode for the address has been applied and clearly within the boundaries of a single mesh block. The mesh block ID allocated to the address in most cases is at a very high level of confidence.
GAP GEOCODED ADDRESS LEVEL MATCH	A gap geocoded match for the address has been applied and clearly within the boundaries of a single mesh block. The mesh block ID allocated to the address in most cases is at a high level of confidence.
STREET LOCALITY LEVEL SINGLE MATCH	A street-locality level geocode for the address has been applied and clearly within the boundaries of a single mesh block. The mesh block ID allocated to the address in most cases is at a high level of confidence.
STREET LOCALITY LEVEL MULTIPLE MATCH	A street-locality level geocode for the address has been applied and is within the boundaries of a multiple mesh blocks. The mesh block ID allocated to the address is at a low level of confidence.
LOCALITY LEVEL MULTIPLE MATCH	A locality level geocode for the address has been applied and is within the boundaries of a multiple mesh blocks. The mesh block ID allocated to the address is at a very low level of confidence.
	PARCEL LEVEL MATCH  GAP GEOCODED ADDRESS LEVEL MATCH  STREET LOCALITY LEVEL SINGLE MATCH  STREET LOCALITY LEVEL MULTIPLE  MATCH

# Table 14: ADDRESS\_SITE

Name	Data Type	Description	Prim Key	Man	F K TABLE	F K Col	10 Char Alias
ADDRESS_SITE_PID	varchar2(15)	The Persistent Identifier is unique to the real world feature this record represents.	Υ	Υ	-	-	ADD_ST_PID
DATE_CREATED	date	Date this record was created.	N	Υ	-	-	DT_CREATE
DATE_RETIRED	date	Date this record was retired.	N	N	-	-	DT_RETIRE
ADDRESS_TYPE	varchar2(8)	Address type (e.g. "Postal", Physical").	N	N	ADDRESS_TYPE_AUT	CODE	ADDR_TYPE
ADDRESS_SITE_NAME	varchar2(200)	Address site name. Field length: 200 alphanumeric characters.	N	N	-	-	NAME





Table 15: ADDRESS\_SITE\_GEOCODE

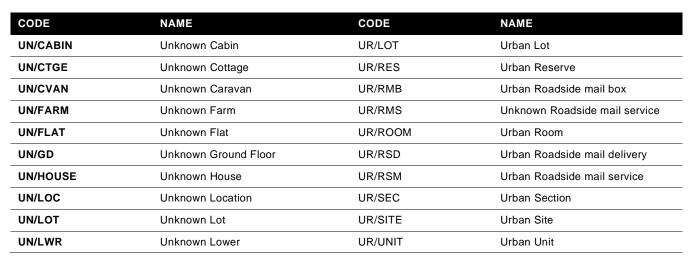
Name	Data Type	Description	Prim Key	Man	F K TABLE	F K Col	10 Char Alias
ADDRESS_SITE_GEOCODE_PID	varchar2(15)	The Persistent Identifier is unique to the real world feature this record represents.	Υ	Y	-	-	AS_GCD_PID
DATE_CREATED	date	Date this record was created.	N	Υ	-	-	DT_CREATE
DATE_RETIRED	date	Date this record was retired.	N	N	-	-	DT_RETIRE
ADDRESS_SITE_PID	varchar2(15)	Address site Persistent Identifier.	N	N	ADDRESS_SITE	ADDRESS_SITE_PI D	ADD_ST_PID
GEOCODE_SITE_NAME	varchar2(200)	An identifier that relates to this specific geocoded site (e.g. "Transformer 75658").	N	N	-	-	GC_ST_NAME
GEOCODE_SITE_DESCRIPTION	varchar2(45)	Additional textual data e.g. "Warning: Access to water riser is located at rear of building via SMITH LANE".	N	N	-	-	GCD_ST_DES
GEOCODE_TYPE_CODE	varchar2(4)	Unique abbreviation for geocode feature. (e.g. "PRCL") (SAWG 7.4.1).	N	N	GEOCODE_TYPE_AUT	CODE	GCTYP_CODE
RELIABILITY_CODE	number(1)	Spatial precision of the geocode expressed as number in the range, 1 (unique identification of feature) to 6 (feature associated to region i.e. postcode).	N	Y	GEOCODE_RELIABILIT Y_AUT	CODE	RLBTY_CODE
BOUNDARY_EXTENT	number(7)	Measurement (metres) of a geocode from other geocodes associated with the same address persistent identifier.	N	N	-	-	BNDRY_EXT
PLANIMETRIC_ACCURACY	number(12)	Planimetric accuracy.	N	N	-	-	PLANIM_ACC
ELEVATION	number(7)	Elevation. This field is not currently populated.	N	N	-	-	ELEVATION
GEOMETRY	point	Point geometry – calculated by the longitude/latitude of record (not part of the product).	N	Y	-	-	GEOMETRY
LONGITUDE	number(11,8)	Longitude.	N	N	-	-	LONGITUDE
LATITUDE	number(10,8)	Latitude.	N	N	-	-	LATITUDE

# Table 16: ADDRESS\_TYPE\_AUT

Name	Data Type	Description	Prim Key	Man	F K TABLE	F K Col	10 Char Alias
CODE	varchar2(8)	Defines the type of address (e.g. "Rural", "Urban").	Υ	Υ	-	=	CODE_AUT
NAME	varchar2(50)	Name of the address type code.	N	Υ	-	=	NAME_AUT
DESCRIPTION	varchar2(30)	Description of address type code.	N	N	-	=	DSCPN_AUT

# Table 17: ADDRESS\_TYPE\_AUT Codes

CODE	NAME	CODE	NAME
R	Rural	UN/POR	Unknown Portion
UN	Unknown	UN/PTHS	Unknown Penthouse
UR	Urban	UN/REAR	Unknown Rear
R/BLOCK	Rural Block	UN/RES	Unknown Reserve
R/CABIN	Rural Cabin	UN/RMB	Unknown Roadside mail box
R/FLAT	Rural Flat	UN/RMS	Unknown Roadside mail service
R/HOUSE	Rural House	UN/ROOM	Unknown Room
R/LOT	Rural Lot	UN/RSD	Unknown Roadside mail delivery
R/RES	Rural Reserve	UN/RSM	Unknown Roadside mail service
R/RMB	Rural Roadside mail box	UN/SEC	Unknown Section
R/ROOM	Rural Room	UN/SITE	Unknown Site
R/RSD	Rural Roadside mail delivery	UN/TNHS	Unknown Townhouse
R/RSM	Rural Roadside mail service	UN/UNIT	Unknown Unit
R/SEC	Rural Section	UN//VLLA	Unknown Villa
R/SITE	Rural Site	UR/BLOCK	Urban Block
R/UNIT	Rural Unit	UR/CABIN	Urban Cabin
UN/APT	Unknown Apartment	UR/FLAT	Urban Flat
UN/BLOCK	Unknown Block	UR/HOUSE	Urban House
	22.0	3.4002	2.36



# Table 18: FLAT\_TYPE\_AUT

Name	Data Type	Description	Prim Key	Man	F K TABLE	F K Col	10 Char Alias
CODE	varchar2(7)	Specification of the type of a separately identifiable portion of a building complex. Field length: one to seven uppercase alpha characters (AS4590:2006 5.5.1.1). This is the persistent identifier.	Υ	Y	-	-	CODE_AUT
NAME	varchar2(50)	Name for the of the flat type code.	N	Υ	-	-	NAME_AUT
DESCRIPTION	varchar2(30)	Description of flat type code.	N	N	-	-	DSCPN_AUT

# Table 19: FLAT\_TYPE\_AUT Codes

CODE	NAME
ANT	ANTENNA
APT	APARTMENT
ATM	AUTOMATED TELLER MACHINE
BBQ	BARBECUE
BLCK	BLOCK

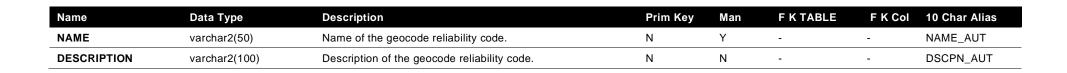
CODE	NAME
OFFC	OFFICE
PTHS	PENTHOUSE
REAR	REAR
ROOM	ROOM
RESV	RESERVE

CODE	NAME
BTSD	BOATSHED
BLDG	BUILDING
BNGW	BUNGALOW
CAGE	CAGE
CARP	CARPARK
CARS	CARSPACE
CLUB	CLUB
COOL	COOLROOM
CTGE	COTTAGE
DUPL	DUPLEX
FLAT	FLAT
FCTY	FACTORY
GRGE	GARAGE
HALL	HALL
HSE	HOUSE
KSK	KIOSK
LBBY	LOBBY
LOFT	LOFT
LOT	LOT
LSE	LEASE
MBTH	MARINE BERTH
MSNT	MAISONETTE

CODE	NAME
SE	SUITE
SEC	SECTION
SHED	SHED
SHOP	SHOP
SHRM	SHOWROOM
SIGN	SIGN
SITE	SITE
STLL	STALL
STOR	STORE
STU	STUDIO
STR	STRATA UNIT
SUBS	SUBSTATION
TNCY	TENANCY
TNHS	TOWNHOUSE
TWR	TOWER
UNIT	UNIT
VLLA	VILLA
VLT	VAULT
WARD	WARD
WHSE	WAREHOUSE
WKSH	WORKSHOP

# Table 20: GEOCODE\_RELIABILITY\_AUT

Name	Data Type	Description	Prim Key	Man	F K TABLE	F K Col	10 Char Alias
CODE	varchar2(1)	Geocode reliability code. This is the persistent identifier.	Υ	Υ	-	-	CODE_AUT



#### Table 21: GEOCODE\_RELIABILITY\_AUT codes

CODE	DESCRIPTION	NAME
1	Geocode accuracy recorded to appropriate surveying standard	Surveying Standard
2	Geocode accuracy sufficient to place geocode within address site boundary or access point	Within Address Site Boundary or Access Point
3	Geocode accuracy sufficient to place geocode near (or possibly within) address site boundary	Near (Or Possibly Within) Address Site Boundary
4	Geocode accuracy sufficient to associate address site with a unique road feature	Unique Road Feature
5	Geocode accuracy sufficient to associate address site with a unique locality or neighbourhood	Unique Locality Or Neighbourhood
6	Geocode accuracy sufficient to associate address site with a unique region	Unique Region

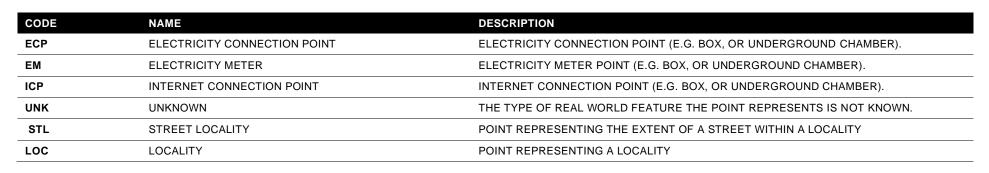
#### Table 22: GEOCODE\_TYPE\_AUT

Name	Data Type	Description	Prim Key	Man	F K TABLE	F K Col	10 Char Alias
CODE	varchar2(4)	Stores unique abbreviations for geocode features. (e.g. "BC"; Building Centroid). This is the persistent identifier.	Υ	Υ	-	-	CODE_AUT
NAME	varchar2(50)	Name of the geocode type code.	N	Υ	-	-	NAME_AUT
DESCRIPTION	varchar2(250)	Description of geocode type code.	N	N	-	-	DSCPN_AUT

#### Table 23: GEOCODE\_TYPE\_AUT Codes

CODE	NAME	DESCRIPTION
BAP	BUILDING ACCESS POINT	POINT OF ACCESS TO THE BUILDING.
ВС	BUILDING CENTROID	POINT AS CENTRE OF BUILDING AND LYING WITHIN ITS BOUNDS (E.G. FOR U-SHAPED BUILDING).
CDF	CENTRE-LINE DROPPED FRONTAGE	A POINT ON THE ROAD CENTRE-LINE OPPOSITE THE CENTRE OF THE ROAD FRONTAGE OF AN ADDRESS SITE.

CODE	NAME	DESCRIPTION
DF	DRIVEWAY FRONTAGE	CENTRE OF DRIVEWAY ON ADDRESS SITE FRONTAGE.
EA	EMERGENCY ACCESS	SPECIFIC BUILDING OR PROPERTY ACCESS POINT FOR EMERGENCY SERVICES.
EAS	EMERGENCY ACCESS SECONDARY	SPECIFIC BUILDING OR PROPERTY SECONDARY ACCESS POINT FOR EMERGENCY SERVICES.
FDA	FRONT DOOR ACCESS	FRONT DOOR OF BUILDING.
FC	FRONTAGE CENTRE	POINT ON THE CENTRE OF THE ADDRESS SITE FRONTAGE.
FCS	FRONTAGE CENTRE SETBACK	A POINT SET BACK FROM THE CENTRE OF THE ROAD FRONTAGE WITHIN AN ADDRESS SITE.
LB	LETTERBOX	PLACE WHERE MAIL IS DEPOSITED.
PAP	PROPERTY ACCESS POINT	ACCESS POINT (CENTRE OF) AT THE ROAD FRONTAGE OF THE PROPERTY.
PAPS	PROPERTY ACCESS POINT SETBACK	A POINT SET BACK FROM THE (CENTRE OF THE) ACCESS POINT AT THE ROAD FRONTAGE OF THE PROPERTY.
PC	PROPERTY CENTROID	POINT OF CENTRE OF PARCELS MAKING UP A PROPERTY AND LYING WITHIN ITS BOUNDARIES (E.G. FOR L-SHAPED PROPERTY).
PCM	PROPERTY CENTROID MANUAL	POINT MANUALLY PLACED APPROXIMATELY AT CENTRE OF PARCELS MAKING UP A PROPERTY AND LYING WITHIN ITS BOUNDARIES (E.G. FOR L-SHAPED PROPERTY).
UC	UNIT CENTROID	POINT AT CENTRE OF UNIT AND LYING WITHIN ITS BOUNDS (E.G. FOR U-SHAPED UNIT).
UCM	UNIT CENTROID MANUAL	POINT MANUALLY PLACED APPROXIMATELY AT CENTRE OF UNIT AND LYING WITHIN ITS BOUNDS (E.G. FOR U-SHAPED UNIT).
GG	GAP GEOCODE	POINT PROGRAMMATICALLY ALLOCATED DURING THE G-NAF PRODUCTION PROCESS PROPORTIONALLY BETWEEN ADJACENT ADDRESS LOCATIONS (BASED ON NUMBER_FIRST).
WCP	WATER CONNECTION POINT	WATER CONNECTION POINT (E.G. BOX, OR UNDERGROUND CHAMBER).
WM	WATER METER	WATER METER POINT (E.G. BOX, OR UNDERGROUND CHAMBER).
SCP	SEWERAGE CONNECTION POINT	SEWERAGE CONNECTION POINT (E.G. BOX, OR UNDERGROUND CHAMBER).
GCP	GAS CONNECTION POINT	GAS CONNECTION POINT (E.G. BOX, OR UNDERGROUND CHAMBER).
GM	GAS METER	GAS METER POINT (E.G. BOX, OR UNDERGROUND CHAMBER).
ТСР	TELEPHONE CONNECTION POINT	TELEPHONE CONNECTION POINT (E.G. BOX, OR UNDERGROUND CHAMBER).

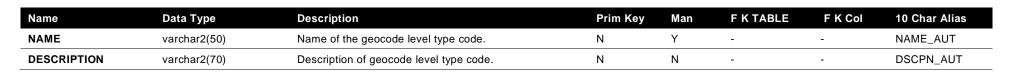


#### Table 24: ADDRESS\_DEFAULT\_GEOCODE

Name	Data Type	Description	Prim Key	Man	F K TABLE	F K Col	10 Char Alias
ADDRESS_DEFAULT_GEOCODE_PID	varchar2(15)	The Persistent Identifier is unique to the real world feature this record represents.	Υ	Y	-	-	A_D_G_PID
DATE_CREATED	date	Date this record was created.	N	Υ	-	-	DT_CREATE
DATE_RETIRED	date	Date this record was retired.	N	N	-	-	DT_RETIRE
ADDRESS_DETAIL_PID	varchar2(15)	Persistent identifier from the ADDRESS_DETAIL table.	N	Υ	ADDRESS_DETAI L	ADDRESS_DETAIL_PID	ADD_DT_PID
GEOCODE_TYPE_CODE	varchar2(4)	Unique abbreviation for the geocode type.	N	Y	GEOCODE_TYPE_ AUT	CODE	GCTYP_CODE
GEOMETRY	point	Point geometry – calculated by the longitude/ latitude of record (not part of the product).	N	Y	-	-	GEOMETRY
LONGITUDE	number(11,8)	Longitude.	N	N	-	-	LONGITUDE
LATITUDE	number(10,8)	Latitude.	N	N	-	-	LATITUDE

# Table 25: GEOCODED\_LEVEL\_TYPE\_AUT

Name	Data Type	Description	Prim Key	Man	F K TABLE	F K Col	10 Char Alias
CODE	varchar2(2)	Stores the level geocoded code for each address (e.g. 1).	Υ	Υ	-	-	CODE_AUT



# Table 26: GEOCODED\_LEVEL\_TYPE\_AUT Codes

CODE	Description
0	000 = (No geocode)
1	001 = (No Locality geocode, No Street geocode, Address geocode)
2	010 = (No Locality geocode, Street geocode, No Address geocode)
3	011 = (No Locality geocode, Street geocode, Address geocode)
4	100 = (Locality geocode, No Street geocode, No Address geocode)
5	101 = (Locality geocode, No Street geocode, Address geocode)
6	110 = (Locality geocode, Street geocode, No Address geocode)
7	111 = (Locality geocode, Street geocode, Address geocode)

# Table 27: LEVEL\_TYPE\_AUT

Name	Data Type	Description	Prim Key	Man	F K TABLE	F K Col	10 Char Alias
CODE	varchar2(4)	Level type. Field length: up to four alphanumeric characters (AS4590:2006 5.5.2.1). This is the persistent identifier.	Υ	Y	-	-	CODE_AUT
NAME	varchar2(50)	Name of the level type code.	N	Υ	-	-	NAME_AUT
DESCRIPTION	varchar2(30)	Description of level type code.	N	N	-	-	DSCPN_AUT

# Table 28: LEVEL\_TYPE\_AUT Codes

CODE	NAME
В	BASEMENT
FL	FLOOR
G	GROUND

CODE	NAME
Р	PARKING
PTHS	PENTHOUSE
PDM	PODIUM

CODE	NAME
L	LEVEL
LB	LOBBY
LG	LOWER GROUND FLOOR
М	MEZZANINE
OD	OBSERVATION DECK

CODE	NAME
PLF	PLATFORM
RT	ROOFTOP
SB	SUB-BASEMENT
UG	UPPER GROUND FLOOR

# Table 29: LOCALITY\_CLASS\_AUT

Name	Data Type	Description	Prim Key	Man	FKT	F K Col	10 Char Alias
CODE	char(1)	Locality class code. This is the persistent Identifier of the record.	Υ	Υ	=	-	CODE_AUT
NAME	varchar2(50)	Name of the locality class code.	N	Υ	=	-	NAME_AUT
DESCRIPTION	varchar2(200)	Description of what this locality type code represents (e.g. Gazetted Locality).	N	N	-	-	DSCPN_AUT

# Table 30: LOCALITY\_CLASS\_AUT Codes

CODE	NAME	DESCRIPTION
Α	ALIAS ONLY LOCALITY	ALIAS ONLY LOCALITY
D	DISTRICT	DISTRICT
G	GAZETTED LOCALITY	GAZETTED LOCALITY
Н	HUNDRED	HUNDRED
1	INDIGENOUS LOCATION	Location identified in the Australian government indigenous programs and policy locations (AGIL) dataset available at <a href="https://data.gov.au">https://data.gov.au</a>
M	MANUALLY VALIDATED	MANUALLY VALIDATED
T	TOPOGRAPHIC LOCALITY	TOPOGRAPHIC LOCALITY
U	UNOFFICIAL SUBURB	UNOFFICIAL SUBURB
V	UNOFFICIAL TOPOGRAPHIC FEATURE	UNOFFICIAL TOPOGRAPHIC FEATURE





#### Table 31: LOCALITY

Name	Data Type	Description	Prim Key	Man	F K TABLE	F K Col	10 Char Alias
LOCALITY_PID	varchar2(15)	The Persistent Identifier is unique to the real world feature this record represents.	Υ	Υ	-	-	LOC_PID
DATE_CREATED	date	Date this record was created.	N	Υ	-	-	DT_CREATE
DATE_RETIRED	date	Date this record was retired.	N	N	-	-	DT_RETIRE
LOCALITY_NAME	varchar2(100)	The name of the locality or suburb.	N	Υ	-	-	NAME
PRIMARY_POSTCODE	varchar2(4)	Required to differentiate localities of the same name within a state.	N	N	-	-	PRIM_PCODE
LOCALITY_CLASS_CODE	char(1)	Describes the class of locality (e.g. Gazetted, topographic feature etc.). Lookup to locality class.	N	Υ	LOCALITY_CLASS_AUT	CODE	LOCCL_CODE
STATE_PID	varchar2(15)	State persistent identifier.	N	Υ	STATE	STATE_PID	STATE_PID
GNAF_LOCALITY_PID	varchar2(15)	Internal identifier used in the management of G-NAF.	N	N	-	-	GF_LOC_PID
GNAF_RELIABILITY_CODE	number(1)	= 5 if suburb locality, else = 6. Spatial precision of the geocode expressed as number in the range, 1 (unique identification of feature) to 6 (feature associated to region i.e. postcode).	N	N	GEOCODE_RELIABILIT Y_AUT	CODE	GF_RL_CODE

# Table 32: LOCALITY\_ALIAS

Name	Data Type	Description	Prim Key	Man	F K TABLE	F K Col	10 Char Alias
LOCALITY_ALIAS_PI D	varchar2(15)	The Persistent Identifier is unique to the real world feature this record represents.	Υ	Υ	-	-	LOC_AL_PID
DATE_CREATED	date	Date this record was created.	N	Υ	-	-	DT_CREATE
DATE_RETIRED	date	Date this record was retired.	N	N	-	-	DT_RETIRE
LOCALITY_PID	varchar2(15)	Locality persistent identifier.	N	Υ	LOCALITY	LOCALITY_PID	LOC_PID
NAME	varchar2(100)	The alias name for the locality or suburb.	N	Υ	-	-	NAME
POSTCODE	varchar2(4)	Postcode.	N	N	-	-	POSTCODE
ALIAS_TYPE_CODE	varchar2(10)	Alias type code for the locality.	N	Υ	LOCALITY_ALIAS_TYPE _AUT	CODE	ALTYP_CODE
STATE_PID	varchar2(15)	State persistent identifier.	N	Υ	STATE	STATE_PID	STATE_PID



Name	Data Type	Description	Prim Key	Man	F K TABLE	F K Col	10 Char Alias
CODE	varchar2(10)	Code (e.g. SR). This is the persistent identifier for the record.	Υ	Y	-	-	CODE_AUT
NAME	varchar2(50)	Name	N	Υ	-	-	NAME_AUT
DESCRIPTION	varchar2(100)	Description of what the code means (e.g. Spatially Related).	N	N	-	-	DSCPN_AUT

# Table 34: LOCALITY\_ALIAS\_TYPE\_AUT Codes

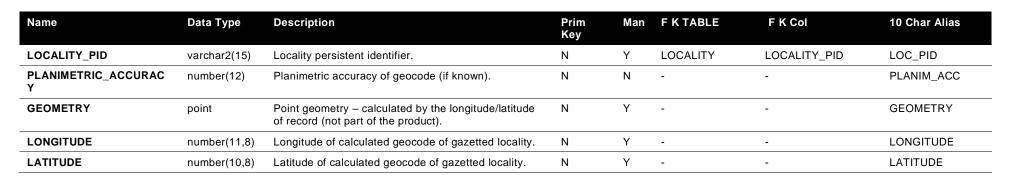
CODE	NAME
SR	SPATIALLY RELATED
SYN	SYNONYM

#### Table 35: LOCALITY\_NEIGHBOUR

Name	Data Type	Description	Prim Key	Man	F K TABLE	F K Col	10 Char Alias
LOCALITY_NEIGHBOUR_PID	varchar2(15 )	The Persistent Identifier is unique to the real world feature this record represents.	Υ	Y	-	-	LOC_NB_PID
DATE_CREATED	date	Date this record was created.	N	Υ	-	-	DT_CREATE
DATE_RETIRED	date	Date this record was retired.	N	Ν	-	-	DT_RETIRE
LOCALITY_PID	varchar2(15 )	Locality persistent identifier.	N	Y	LOCALITY	LOCALITY_PID	LOC_PID
NEIGHBOUR_LOCALITY_PID	varchar2(15 )	The neighbour locality persistent identifier.	N	Y	LOCALITY	LOCALITY_PID	NB_LOC_PID

# Table 36: LOCALITY\_POINT

Name	Data Type	Description	Prim Key	Man	F K TABLE	F K Col	10 Char Alias
LOCALITY_POINT_PID	varchar2(15)	The Persistent Identifier is unique to the real world feature this record represents.	Υ	Υ	-	-	LC_PNT_PID
DATE_CREATED	date	Date this record was created.	N	Υ	-	-	DT_CREATE
DATE_RETIRED	date	Date this record was retired.	N	N	-	-	DT_RETIRE



#### Table 37: MB\_2016

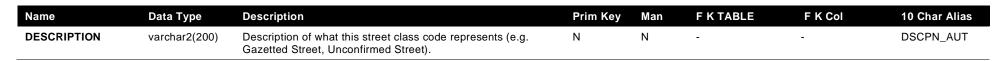
Name	Data Type	Description	Prim Key	Man	F K TABLE	F K Col	10 Char Alias
MB_2016_PID	varchar2(15)	The Persistent Identifier is unique to the real world feature this record represents.	Υ	Υ	-	-	MB_PID
DATE_CREATED	date	Date this record was created.	N	Υ	-	-	DT_CREATE
DATE_RETIRED	date	Date this record was retired.	N	N	-	-	DT_RETIRE
MB_2016_CODE	varchar2(15)	The 2016 mesh block code.	N	Υ	-	-	MB_CODE

#### Table 38: MB\_2021

Name	Data Type	Description	Prim Key	Man	F K TABLE	F K Col	10 Char Alias
MB_2021_PID	varchar2(15)	The Persistent Identifier is unique to the real world feature this record represents.	Υ	Y	-	-	MB_PID
DATE_CREATED	date	Date this record was created.	N	Υ	-	-	DT_CREATE
DATE_RETIRED	date	Date this record was retired.	N	N	-	-	DT_RETIRE
MB_2021_CODE	varchar2(15)	The 2021 mesh block code.	N	Υ	-	-	MB_CODE

# Table 39: STREET\_CLASS\_AUT

Name	Data Type	Description	Prim Key	Man	F K TABLE	F K Col	10 Char Alias
CODE	char(1)	Street class code. This is the persistent Identifier of the record.	Υ	Υ	-	-	CODE_AUT
NAME	varchar2(50)	Name of the street class code.	N	Υ	-	-	NAME_AUT



#### Table 40: STREET\_CLASS\_AUT Codes

CODE	NAME	DESCRIPTION
С	CONFIRMED	A confirmed street is present in the roads data of the Geoscape Roads product for the same release.
U	UNCONFIRMED	An unconfirmed street is NOT present in the roads data of the Geoscape Roads product for the same release and will not have a street locality geocode.

#### Table 41: STREET\_TYPE\_AUT

Name	Data Type	Description	Prim Key	Man	F K TABLE	F K Col	10 Char Alias
CODE	varchar2(15)	Street type in full text (e.g. AVENUE, PARADE, STREET) This is the persistent identifier (AS4590:2006 5.9.2).	Υ	Υ	-	-	CODE_AUT
NAME	varchar2(50)	Street type as an abbreviation (e.g. AV, PDE, ST), based on AS4590 road types, where applicable.	N	Y	-	-	NAME_AUT
DESCRIPTION	varchar2(15)	Street type as an abbreviation (e.g. AV, PDE, ST), based on AS4590 road types, where applicable.	N	N	-	-	DSCPN_AUT

Note: the usage of the code, name and description is intentional (i.e. full text street type is used for the code) due to the initial development of the model and the dependencies at the time of developing the integrated data model. Ideally this table should be changed, but there are no current plans to change due to the impact for users on changing the model.

#### Table 42: STREET\_TYPE\_AUT Codes

Note: the list of street types may not necessarily have G-NAF addresses, the list of codes are mainly derived from the roads data (Geoscape's Roads product) and in some cases there are roads with no addresses. There are some additional street types not listed in the AS4590 (road abbreviations) that are due to the reasons explained, but also due to the street types provided by the contributors.

CODE	NAME
ACCESS	ACCS
ACRE	ACRE
AIRWALK	AWLK
ALLEY	ALLY
ALLEYWAY	ALWY
AMBLE	AMBL
APPROACH	APP
ARCADE	ARC
ARTERIAL	ARTL
ARTERY	ARTY
AVENUE	AV
BANAN	ВА
BANK	BANK
BAY	BAY
BEACH	всн
BEND	BEND
BOARDWALK	BWLK
BOULEVARD	BVD
BOULEVARDE	BVDE
BOUNDARY	BDY
BOWL	BOWL
BRACE	BR
BRAE	BRAE
BRANCH	BRAN
BREAK	BRK

BRET

**BRETT** 

CODE	NAME
ESTATE	EST
EXPRESSWAY	EXP
EXTENSION	EXTN
FAIRWAY	FAWY
FIREBREAK	FBRK
FIRELINE	FLNE
FIRETRACK	FTRK
FIRETRAIL	FITR
FLAT	FLAT
FLATS	FLTS
FOLLOW	FOLW
FOOTWAY	FTWY
FORD	FORD
FORESHORE	FSHR
FORK	FORK
FORMATION	FORM
FREEWAY	FWY
FRONT	FRNT
FRONTAGE	FRTG
GAP	GAP
GARDEN	GDN
GARDENS	GDNS
GATE	GTE
GATEWAY	GWY
GLADE	GLDE
GLEN	GLEN

CODE	NAME	
POINT	PNT	
PORT	PORT	
PRECINCT	PREC	
PROMENADE	PROM	
PURSUIT	PRST	
QUAD	QUAD	
QUADRANT	QDRT	
QUAY	QY	
QUAYS	QYS	
RAMBLE	RMBL	
RAMP	RAMP	
RANGE	RNGE	
REACH	RCH	
REEF	REEF	
RESERVE	RES	
REST	REST	
RETREAT	RTT	
RETURN	RTN	
RIDE	RIDE	
RIDGE	RDGE	
RIGHT OF WAY	ROFW	
RING	RING	
RISE	RISE	
RISING	RSNG	
RIVER	RVR	
ROAD	RD	

CODE	NAME
BRIDGE	BDGE
BROADWALK	BRDWLK
BROADWAY	BDWY
BROW	BROW
BULL	BULL
BUSWAY	BSWY
BYPASS	BYPA
BYWAY	BYWY
CAUSEWAY	CSWY
CENTRE	CTR
CENTREWAY	CNWY
CHASE	СН
CIRCLE	CIR
CIRCLET	CLT
CIRCUIT	ССТ
CIRCUS	CRCS
CLOSE	CL
CLUSTER	CLR
COLONNADE	CLDE
COMMON	CMMN
COMMONS	CMMNS
CONCORD	CNCD
CONCOURSE	CON
CONNECTION	CNTN
CONNECTOR	CONR
COPSE	CPS

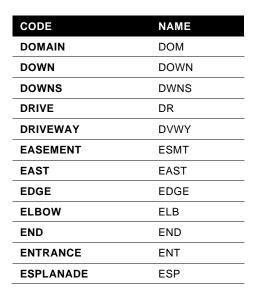
CODE	NAME
GRANGE	GRA
GREEN	GRN
GROVE	GR
GULLY	GLY
HARBOUR	HRBR
HAVEN	HVN
HEATH	HTH
HEIGHTS	HTS
HIGHROAD	HIRD
HIGHWAY	HWY
HIKE	HIKE
HILL	HILL
HILLS	HILLS
HOLLOW	HLLW
HUB	HUB
INLET	INLT
INTERCHANGE	INTG
ISLAND	ID
JUNCTION	JNC
KEY	KEY
KEYS	KEYS
KNOLL	KNOL
LADDER	LADR
LANDING	LDG
LANE	LANE
LANEWAY	LNWY

CODE	NAME
ROADS	RDS
ROADWAY	RDWY
ROTARY	RTY
ROUND	RND
ROUTE	RTE
ROW	ROW
ROWE	ROWE
RUE	RUE
RUN	RUN
SERVICEWAY	SVWY
SHUNT	SHUN
SKYLINE	SKLN
SLOPE	SLPE
SOUTH	STH
SPUR	SPUR
SQUARE	SQ
STEPS	STPS
STRAIGHT	STRT
STRAIT	STAI
STRAND	STRA
STREET	ST
STRIP	STRP
SUBWAY	SBWY
TARN	TARN
TERRACE	TCE
THOROUGHFARE	THFR

CODE	NAME
CORNER	CNR
CORSO	CSO
COURSE	CRSE
COURT	CT
COURTYARD	CTYD
COVE	COVE
CRESCENT	CR
CREST	CRST
CRIEF	CRF
CROOK	CRK
CROSS	CRSS
CROSSING	CRSG
CROSSOVER	CRVR
CRUISEWAY	CUWY
CUL-DE-SAC	CSAC
CUT	CUT
CUTTING	CUTT
DALE	DALE
DASH	DASH
DELL	DELL
DENE	DENE
DEVIATION	DE
DIP	DIP
DISTRIBUTOR	DSTR
DIVIDE	DIV
DOCK	DOCK

CODE	NAME
LEAD	LEAD
LEADER	LEDR
LINE	LINE
LINK	LINK
LOOKOUT	LKT
LOOP	LOOP
LYNNE	LYNN
MALL	MALL
MANOR	MANR
MART	MART
MAZE	MAZE
MEAD	MEAD
MEANDER	MNDR
MEW	MEW
MEWS	MEWS
MILE	MILE
MOTORWAY	MTWY
NOOK	NOOK
NORTH	NTH
NULL	NULL
OUTLET	OTLT
OUTLOOK	OTLK
OVAL	OVAL
PALMS	PLMS
PARADE	PDE
PARADISE	PRDS

CODE	NAME
THROUGHWAY	THRU
TOLLWAY	TLWY
ТОР	TOP
TOR	TOR
TRACK	TRK
TRAIL	TRL
TRAMWAY	TMWY
TRAVERSE	TVSE
TRUNKWAY	TKWY
TUNNEL	TUNL
TURN	TURN
TWIST	TWIST
UNDERPASS	UPAS
VALE	VALE
VALLEY	VLLY
VERGE	VERGE
VIADUCT	VIAD
VIEW	VIEW
VIEWS	VWS
VILLA	VLLA
VILLAGE	VLGE
VILLAS	VLLS
VISTA	VSTA
VUE	VUE
WADE	WADE
WALK	WALK

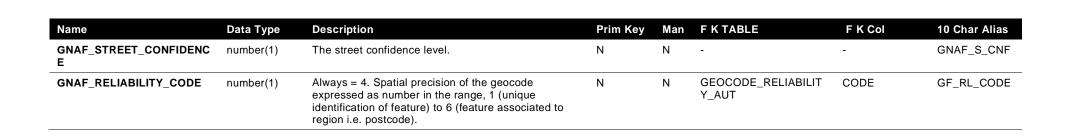


CODE	NAME
PARK	PARK
PARKWAY	PWY
PART	PART
PASS	PASS
PASSAGE	PSGE
PATH	PATH
PATHWAY	PWAY
PENINSULA	PSLA
PIAZZA	PIAZ
PLACE	PL
PLAZA	PLZA
POCKET	PKT

CODE	NAME
WALKWAY	WKWY
WATERS	WTRS
WATERWAY	WTWY
WAY	WAY
WEST	WEST
WHARF	WHRF
WOOD	WD
WOODS	WDS
WYND	WYND
YARD	YARD

# Table 43: STREET\_LOCALITY

Name	Data Type	Description	Prim Key	Man	F K TABLE	F K Col	10 Char Alias
STREET_LOCALITY_PID	varchar2(15)	The Persistent Identifier is unique to the real world feature this record represents.	Υ	Y	-	-	ST_LOC_PID
DATE_CREATED	date	Date this record was created.	N	Υ	-	-	DT_CREATE
DATE_RETIRED	date	Date this record was retired.	N	N	-	-	DT_RETIRE
STREET_CLASS_CODE	char(1)	Defines whether this street represents a confirmed or unconfirmed street.	N	Y	STREET_CLASS_AUT	CODE	STCLS_CODE
STREET_NAME	varchar2(100)	Street name. e.g. "POPLAR".	N	Υ	-	-	NAME
STREET_TYPE_CODE	varchar2(15)	The street type code. e.g. "PLACE".	N	N	STREET_TYPE_AUT	CODE	STTYP_CODE
STREET_SUFFIX_CODE	varchar2(15)	The street suffix code. e.g. "WEST".	N	N	STREET_SUFFIX_AUT	CODE	STSFX_CODE
LOCALITY_PID	varchar2(15)	The locality persistent identifier.	N	Υ	LOCALITY	LOCALITY_PID	LOC_PID
GNAF_STREET_PID	varchar2(15)	Internal identifier used in the management of G-NAF.	N	N	-	-	GF_ST_PID









# Table 44: STREET\_LOCALITY\_POINT

Name	Data Type	Description	Prim Key	Man	F K TABLE	F K Col	10 Char Alias
STREET_LOCALITY_POINT_PID	varchar2(15)	The Persistent Identifier is unique to the real world feature this record represents.	Υ	Υ	-	-	SL_PNT_PID
DATE_CREATED	date	Date this record was created.	N	Υ	-	-	DT_CREATE
DATE_RETIRED	date	Date this record was retired.	N	N	-	-	DT_RETIRE
STREET_LOCALITY_PID	varchar2(15)	Street locality persistent identifier.	N	Υ	STREET_LOCALITY	STREET_LO CALITY_PID	ST_LOC_PID
BOUNDARY_EXTENT	number(7)	Boundary extent is defined as the straight-line distance from the street centroid to the furthest centreline point on the street segment. The value of the street boundary extent will be expressed in km.	N	N	-	-	BNDRY_EXT
PLANIMETRIC_ACCURACY	number(12)	Planimetric accuracy of geocode (if known).	N	N	-	-	PLANIM_ACC
GEOMETRY	point	Point geometry – calculated by the longitude/latitude of record (not part of the product).	N	Υ	-	-	GEOMETRY
LONGITUDE	number(11,8)	Longitude of programmatically calculated centroid of street centreline within the gazetted locality.	N	Υ	-	-	LONGITUDE
LATITUDE	number(10.8)	Latitude of programmatically calculated centroid of street centreline within the gazetted locality.	N	Υ	-	-	LATITUDE

# Table 45: STREET\_LOCALITY\_ALIAS

Name	Data Type	Description	Prim Key	Man	F K TABLE	F K Col	10 Char Alias
STREET_LOCALITY_ALIAS_PID	varchar2(15)	The Persistent Identifier is unique to the real world feature this record represents.	Υ	Υ	-	-	SL_ALI_PID
DATE_CREATED	date	Date this record was created.	N	Υ	-	-	DT_CREATE
DATE_RETIRED	date	Date this record was retired.	N	N	-	-	DT_RETIRE
STREET_LOCALITY_PID	varchar2(15)	Street locality persistent identifier.	N	Υ	STREET_LOCALITY	STREET_LOCALITY _PID	ST_LOC_PID
STREET_NAME	varchar2(100)	The street alias name. e.g. "POPLAR".	N	Υ	-	-	NAME
STREET_TYPE_CODE	varchar2(15)	The street type code. e.g. "PLACE"	N	N	STREET_TYPE_AUT	CODE	STTYP_CODE
STREET_SUFFIX_CODE	varchar2(15)	The street suffix code. e.g. "WEST"	N	N	STREET_SUFFIX_AUT	CODE	STSFX_CODE



#### Table 46: STREET\_LOCALITY\_ALIAS\_TYPE\_AUT

Name	Data Type	Description	Prim Key	Man	F K TABLE	F K Col	10 Char Alias
CODE	varchar2(10)	Street class code. This is the persistent Identifier of the record.	Υ	Υ	-	-	CODE_AUT
NAME	varchar2(50)	Name of the street locality alias type code.	N	Υ	-	-	NAME_AUT
DESCRIPTION	varchar2(15)	Description of what this street type code represents (e.g. Gazetted Street, Unconfirmed Street).	N	N	-	-	DSCPN_AUT

#### Table 47:STREET\_LOCALITY\_ALIAS\_TYPE\_AUT Codes

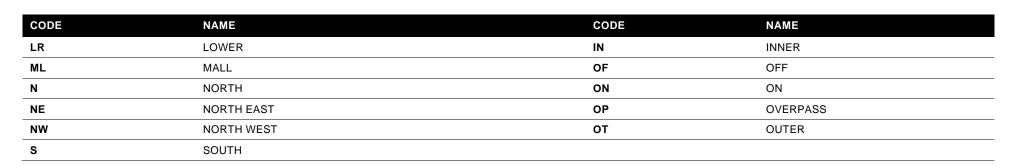
CODE	NAME
ALT	ALTERNATIVE
SYN	SYNONYM

#### Table 48: STREET\_SUFFIX\_AUT

Name	Data Type	Description	Prim Key	Man	F K TABLE	F K Col	10 Char Alias
CODE	varchar2(15)	Code (e.g. "WEST" or "W").(AS4590:2006 5.9.3). This is the persistent identifier.	Υ	Υ	-	-	CODE_AUT
NAME	varchar2(50)	The name of the street suffix code.	N	Y	-	-	NAME_AUT
DESCRIPTION	varchar2(30)	Description of street suffix code.	N	N	-	-	DSCPN_AUT

# Table 49: STREET\_SUFFIX\_AUT Codes

CODE	NAME	CODE	NAME
CN	CENTRAL	SE	SOUTH EAST
DE	DEVIATION	sw	SOUTH WEST
Е	EAST	UP	UPPER
EX	EXTENSION	W	WEST



#### Table 50: STATE

Name	Data Type	Description	Prim Key	Man	F K TABLE	F K Col	10 Char Alias
STATE_PID	varchar2(15)	The Persistent Identifier is unique to the real world feature this record represents.	Υ	Υ	-	-	STATE_PID
DATE_CREATED	date	Date this record was created.	N	Υ	-	-	DT_CREATE
DATE_RETIRED	date	Date this record was retired.	N	N	-	-	DT_RETIRE
STATE_NAME	varchar2(50)	The state or territory name. All in uppercase. E.g. TASMANIA.	N	Y	-	-	STATE_NAME
STATE_ABBREVIATION	varchar2(3)	The state or territory abbreviation.	N	Υ	-	-	ST_ABBREV

#### Table 51: APPLIED GEOCODE PRIORITY ORDER

GEOCODE_TYPE_AUT NAME	PRIORITY ORDER	DESCRIPTION
BUILDING ACCESS POINT	1	Point of access to the building
FRONT DOOR ACCESS	2	Front door of building
BUILDING CENTROID	3	Point within the boundaries of a building that is often derived visually using imagery. However the point shall lie within the bounded polygon (e.g. for U shaped building).
UNIT CENTROID MANUAL	4	A centroid manually placed within the bounded polygon of the unit

GEOCODE_TYPE_AUT Name	PRIORITY ORDER	DESCRIPTION
UNIT CENTROID	5	Geometrically defined centre of unit. The point has to lie within the bounded polygon (e.g. for U shaped unit)
PROPERTY ACCESS POINT SETBACK	6	A point set back from the (centre of the) access point at the road frontage of the property. The setback should be specified]
EMERGENCY ACCESS	7	Specific building or property access point for emergency services
EMERGENCY ACCESS SECONDARY	8	Specific building or property secondary access point for emergency services
FRONTAGE CENTRE SETBACK	9	A point setback from the centre of the road frontage within an address site. The setback should be specified.
DRIVEWAY FRONTAGE	10	Centre of driveway on address site frontage
PROPERTY ACCESS POINT	11	Access point (centre of) at the road frontage of the property
FRONTAGE CENTRE	12	Point on the centre of the address site frontage
PROPERTY CENTROID MANUAL	13	A point manually placed within a property usually where the geometrically defined position would result in relative location issues such as being in the incorrect administrative in the case of large properties.
PROPERTY CENTROID	14	Geometrically defined centre of parcels making up a property. However the point shall lie within the bounded polygon (e.g. for U shaped property).
TELEPHONE CONNECTION POINT	15	The utility meter (e.g. box, or underground chamber). 'Service type' to be specified (e.g. water, electricity, gas, telephone)
INTERNET CONNECTION POINT	16	The utility meter (e.g. box, or underground chamber). 'Service type' to be specified (e.g. water, electricity, gas, telephone)
ELECTRICITY METER	17	The utility meter (e.g. box, or underground chamber). 'Service type' to be specified (e.g. water, electricity, gas, telephone)
GAS METER	18	The utility meter (e.g. box, or underground chamber). 'Service type' to be specified (e.g. water, electricity, gas, telephone)
WATER METER	19	The utility meter (e.g. box, or underground chamber). 'Service type' to be specified (e.g. water, electricity, gas, telephone)
LETTERBOX	20	The mailbox

GEOCODE_TYPE_AUT NAME	PRIORITY ORDER	DESCRIPTION
ELECTRICITY CONNECTION POINT	21	The utility meter (e.g. box, or underground chamber). 'Service type' to be specified (e.g. water, electricity, gas, telephone)
GAS CONNECTION POINT	22	The utility meter (e.g. box, or underground chamber). 'Service type' to be specified (e.g. water, electricity, gas, telephone)
WATER CONNECTION POINT	23	The utility meter (e.g. box, or underground chamber). 'Service type' to be specified (e.g. water, electricity, gas, telephone)
SEWERAGE CONNECTION POINT	24	The utility meter (e.g. box, or underground chamber). 'Service type' to be specified (e.g. water, electricity, gas, telephone)
CENTRE-LINE DROPPED FRONTAGE	25	A point on the road centreline opposite the centre of the road frontage of an address site
GAP GEOCODE	26	A geocode created programmatically based on address ranging in the absence of a geocode being allocated to a specific property. This geocode may not necessarily lie within a property polygon.
UNKNOWN	27	The approach to the allocation of the geocode location is not known.
STREET - LOCALITY	28	A geocode created for the centre of a street segment located within a particular locality.
LOCALITY	29	A geocode created approximately in the centre of the bounding area of the locality.