

Product:

PSMA | G-NAF[®]

May 2016



Data Product Description



Standard

This document is based on the AS/NZS ISO 19131:2008 Geographic information – Data product specifications standard. For more information, refer to www.saiglobal.com/online.

Acknowledgements

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1. Overview

1.1 Data product specification title

G-NAF Product Description

1.2 Reference date

May 2016

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. 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

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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 Terms and definitions

The following table lists the terms and definitions that are used by PSMA. This list defines some of the terms used 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 “ <i>parcel level</i> ” address
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.

Term	Definition
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 PSMA that is being made available for the purpose of 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 expressed 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 a parcel level geocode.
Geocode Priority	G-NAF is able to assign multiple geocodes to an address. The geocode priority is a priority order established by PSMA 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 uniquely identify an address.
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 PSMA 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	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 with a view to organising 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 share 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 an address except flat number information. Where flat 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 PSMA where identified by an address contributor (e.g. involves private road 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.
PSMA Online Data Delivery System	A suite of applications to store, quality assure and distribute PSMA's datasets.
Reference Data	Each address entering G-NAF is tested for to ensure it can be matched against the geospatial region to which it relates: state, locality and street. The datasets used for this geospatial verification are: National Road Centreline Dataset (PSMA Transport & Topography)

Term	Definition
	Gazetted Locality Boundaries for Australia (PSMA Administrative Boundaries). These two 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 with flat number information or more literally any address where flat_number_prefix, flat_number or flat_number_suffix is not null. Alternatively, a Secondary Address can be linked to a Primary Address by PSMA 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 PSMA's National Road Centreline Dataset (i.e. reference dataset) within PSMA's Transport & Topography.
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 treated as another street.
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 PSMA'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 Abbreviations and acronyms

Term	Definition
ABS	Australian Bureau of Statistics
ASGC	Australian Standard Geographical Classification
ASGS	Australian Statistical Geography Standard
AS4590:2006	Data interchange standard
AS/NZS 4819:2011	Rural and urban addressing standard
CD	Collection Districts (for Census collection)
DPS	Data Product Specification
FOI	Features of Interest
GDA94	Geocentric Datum of Australia 1994
GIDB	A copy of the IDB for use in Data Maintenance in Radius Studio™
G-NAF	Geocoded National Address File
GCCSA	Greater Capital City Statistical Areas
IARE	Indigenous Areas
ILOC	Indigenous Localities
IREG	Indigenous Regions
ICSM	Intergovernmental Committee on Surveying & Mapping
IDB	Integrated Database
IUF	Incremental Update File
MB	Mesh Blocks
NAMF	National Address Management Framework
PID	Persistent Identifier
SEB	State/Territory Electoral Boundaries
SLA	Statistical Local Area
UCL	Urban Centre Localities
UML	Unified Modelling Language
UUID	Universal Unique Identifiers

1.10 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.

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.

In order 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.

About AS4590:2006

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

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

About the National Address Management Framework

In addition, 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 on a regular basis.

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°

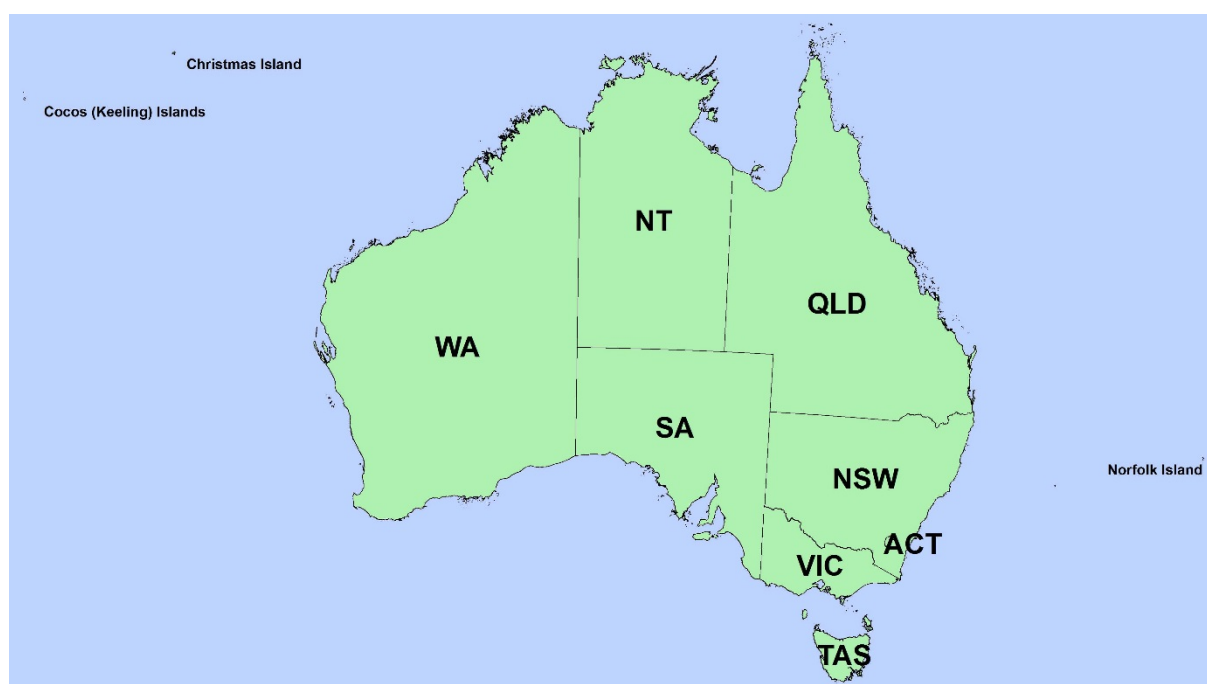
South bounding latitude: -45°

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:

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

Note: PSMA 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 in nature, 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. Reference System

5.1 Spatial reference system

GDA 94

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 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 PSMA's Administrative Boundaries and the roads layer of PSMA's Transport & Topography dataset.

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 proportion of the addresses associated with the locality centroid will be coded to an incorrect SA2.

Allocation of postcodes

Postcodes are included in G-NAF at the address record level (i.e. postcode field in the respective address_detail tables). The postcodes used are derived where possible from contributor data. Where the postcode is not available from a contributor it is validated via a spatial intersection from a PSMA created (and maintained) postcode polygon dataset with boundary information sourced from the Commonwealth. The supplied boundaries has been realigned to be consistent with the PSMA locality boundaries.

Postcodes are allocated to geographic areas to facilitate the efficient processing and delivery of mail. There is no mandatory requirement for inclusion of a postcode in an address.

6.3 Logical consistency

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

6.4 Completeness

Completeness is an assessment of the extent and range of the dataset with regard to 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 PSMA 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.

7. Data Capture

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

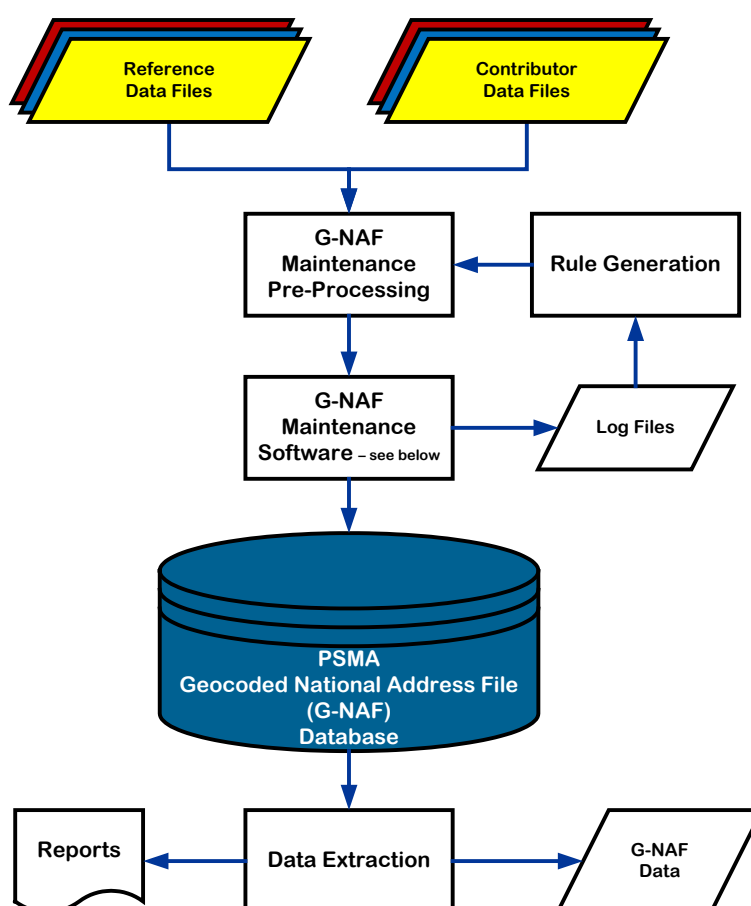
Data for changed objects within the current release time period.

8. Data Maintenance

Maintenance activities are triggered by PSMA 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 gives 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 PSMA 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.

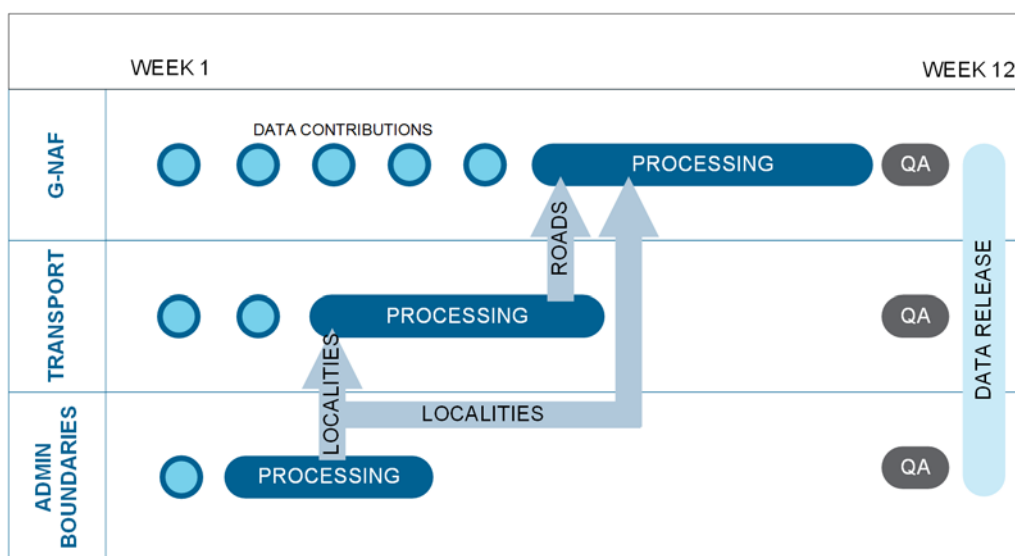
Data structure of an address

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 PSMA datasets. Below is a diagram which displays that relationship and order of production cycle for the release of PSMA datasets. PSMA’s Administrative Boundaries and PSMA’s Transport & Topography datasets need to be completed before G-NAF production can commence.



8.2 G-NAF maintenance software

The G-NAF maintenance software receives the data from the pre-process 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 data model)
- Data export to integrated maintenance database.

Geocoding

Multiple geocodes and multiple types of geocodes can be stored for each address. All geocodes are stored in G-NAF in the GDA94 spatial reference system. 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 descriptions are stored in the table GEOCODE_RELIABILITY_AUT. These descriptions together with examples are given in the table below.

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 access point close to address site boundary	a) Address level geocode was calculated as the geometric centre within the associated cadastral parcel b) Geocode for access point identified for a rural property c) Calculated geocode based on centre setback from road within cadastral parcel d) 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

Reliability Level	Description	Example
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. Whilst the data model and respective geocode types have been listed, in the vast majority of cases there is 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 an 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 with a view to assisting 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 [ADDRESS_DEFAULT_GEOCODE](#) 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 [ADDRESS_DETAIL](#) 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	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. This will be reflected in its confidence level value of -1. Retired addresses are retained in G-NAF for four releases at which time they are archived.

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

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 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 being only supported by one contributor will get a confidence of 0.

Existing G-NAF Record											
GNAF_PID	FLAT_TYPE	FLAT_NUMBER	BUILDING_NAME	NUMBER_FIRST	STREET_NAME	STREET_TYPE	LOCALITY_NAME	CONFIDENCE	DATE_CREATED	DATE_RETIRED	DATE_LAST_MODIFIED
GAVIC411711441	UNIT	3	PONDEROSA	21	SMITH	STREET	BURWOOD	2	29/04/2014		
Updated G-NAF Records											
GNAF_PID	FLAT_TYPE	FLAT_NUMBER	BUILDING_NAME	NUMBER_FIRST	STREET_NAME	STREET_TYPE	LOCALITY_NAME	CONFIDENCE	DATE_CREATED	DATE_RETIRED	DATE_LAST_MODIFIED
GAVIC411711441	UNIT	3	PONDEROSA	21	SMITH	STREET	BURWOOD	1*	29/04/2014		14/06/2014
GAVIC998999843	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. PSMA 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

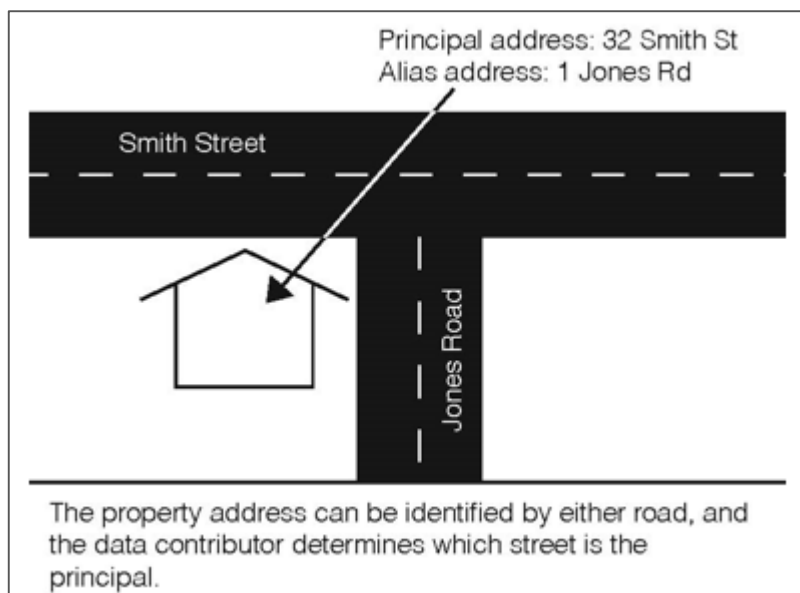
The usability of G-NAF is greatly enhanced by the inclusion of alias information that captures addresses in popular use irrespective of official status. PSMA recognises that G-NAF has a role to play in progressing usage of official gazetted addresses. However, it is also acknowledged that the issue cannot 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?
 - 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.
4. Is there an alias street/locality for the address?
 - 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 PSMA Data

Administrative Boundaries

There are two layers within the Administrative Boundaries product that have linkages to G-NAF:

1. Suburbs/Localities
2. Mesh block 2011 (ABS theme).

Suburbs/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.

Transport & Topography

The Roads layer within Transport & Topography is a reference dataset that it used is 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. Other Transport & Topography layers have no linkage to G-NAF.

CadLite

The ADDRESS_DETAIL table contains a field called legal_parcel_id, which is populated with information from the CadLite product. The information is obtained from the previous release of CadLite. For example, for the G-NAF February 2016 release, the CadLite information is obtained from the November 2015 release.

The legal_parcel_id is derived from the jurisdiction_id field from CadLite using a point in polygon process. G-NAF addresses are filtered to identify an appropriate point for each address to link with the most appropriate CadLite parcels.

The property_pid and gnaf_property_pid fields in G-NAF are not currently populated and have NULL values.

8.3 Update frequency

PSMA currently releases G-NAF on a quarterly basis in the months of February, May, August and November.

8.4 Maintenance scope

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

9. Data Product Delivery

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 PSMA Partner Network – Delivery format information

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

- Pipe Separated Value (PSV) files
- LYNX Proprietary Binary Files
- Oracle Dump
- Oracle Data Pump

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

LYNX Proprietary Binary files

Format Name:

LYNX binary file format

Specification:

This format uses PSMA's Data Importer utility to make loading G-NAF address data into a database a simple process. This format includes files with the following extension: *.lynx

Language:

English

Oracle Dump

Format Name:

Oracle 11g Dump Format

Specification:

A binary-format file created by the Oracle Export utility.

Language:

English

Oracle Data Pump

Format Name:

Oracle 11g Data Pump Format

Specification:

The Data Pump (dump) file set is made up of one or more files that contain table data, database object metadata, and control information. More information is available from [Oracle](#)

Language:

English

9.3 Organisation responsible for delivery

PSMA was formed by the governments of Australia in 1993 to collate, transform and deliver their geospatial data as national datasets. PSMA's establishment reflected the desire of Australian governments to work together to establish a national location information infrastructure to advance the emerging information economy. The organisation's first major initiative was to support the 1996 Census through the provision of Australia's first digital map at a national street-level.

The value of PSMA's datasets is in the richness of the data, which enables a broad range of innovations and applications. To support the use of this data in business-ready formats, PSMA makes our data available to the market through a value-added reseller and integrator network. Our network includes traditional geospatial specialists and data engineers as well as software developers, marketing service providers, systems integrators and consultancies.

From February 2016, the Australian Government will make G-NAF available through data.gov.au under open data terms.

For further information on accessing PSMA Data, or becoming a value-added reseller contact:

PSMA Australia Limited

Unit 6, 113 Canberra Avenue, Griffith ACT 2603

T: 02 6260 9000

F: 02 6260 9001

E: enquiries@psma.com.au

W: www.psm.com.au

10. PSMA Data

DATASET	ACCESS	THEME	LAYER
Administrative Boundaries	Open Data (www.data.gov.au) PSMA Partner Network	ABS Boundaries	Mesh Blocks (MB) 2011
			Indigenous Location (ILOD)
			Indigenous Areas (IARE)
			Indigenous Region (IREG)
			Remoteness Areas (RA)
			Socio-Economic Indexes for Areas (SEIFA)
			Urban Centre Localities /Section of State
			Significant Urban Areas (SUA)
		Electoral Boundaries	Commonwealth Electoral Boundaries
			State Electoral Boundaries
			Local Government Areas (LGAs)
			Suburbs/Localities
			State Boundaries
			Town Points
			Wards
CadLite	PSMA Partner Network	Cadastral	Property
G-NAF	Open Data (www.data.gov.au) PSMA Partner Network	Geocoded physical addresses	
Land Tenure	PSMA Partner Network	Land Tenure	
Features of Interest	PSMA Partner Network	Features of Interest	
Postcodes	PSMA Partner Network	Spatial postcodes	Postcode Polygons
			Postcode Centroids
Transport & Topography	PSMA Partner Network	Transport	Roads
			Rail
			Rail Stations
			Airports
		Hydrology	Hydrology
		Greenspace	Greenspace

Appendix A – Addressing standards and NAMF relationship

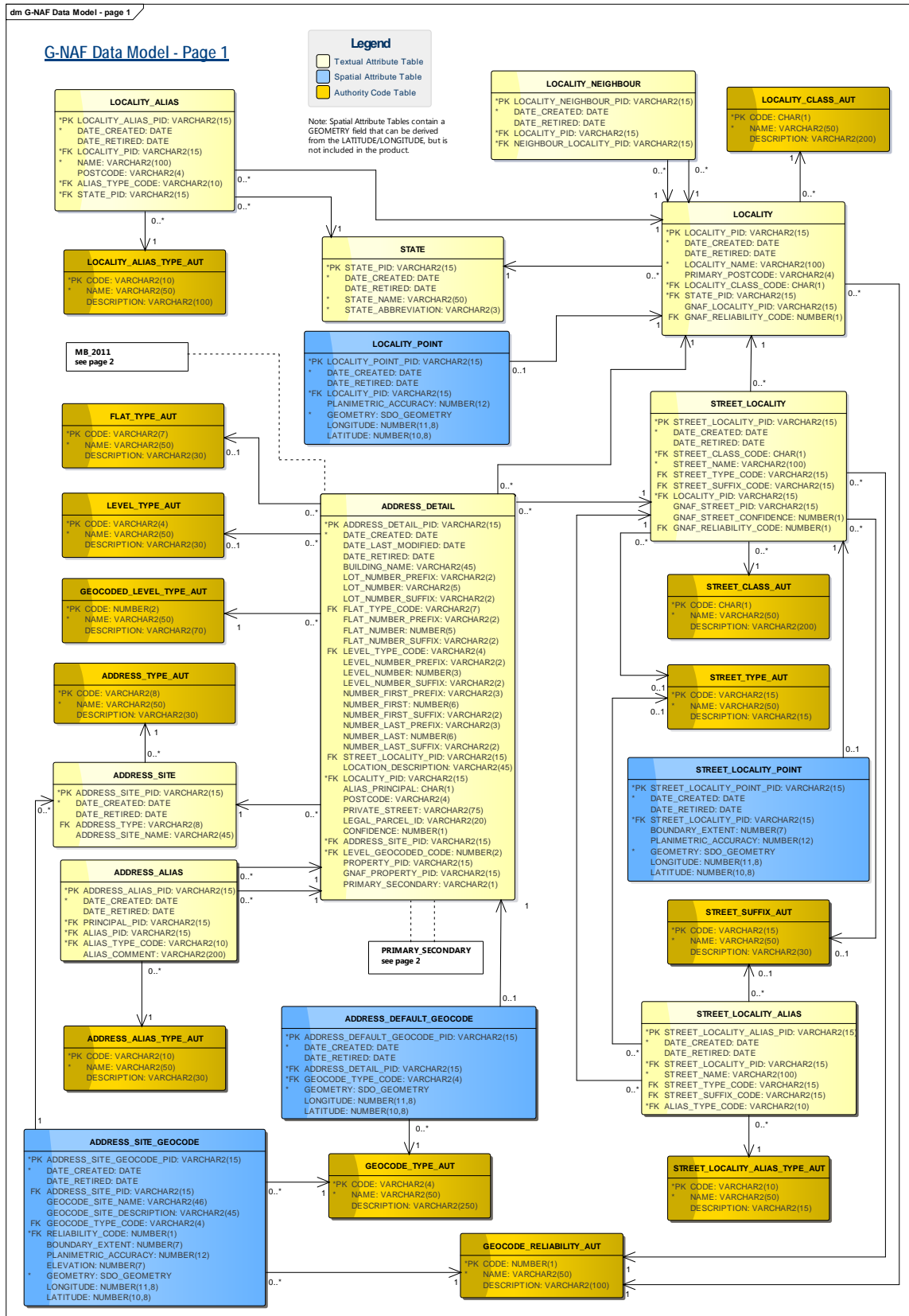
The field names used for G-NAF differ from those used by the address standard AS4590:2006 and the National Address Management Framework (NAMF). PSMA recommends applying the following G-NAF fields to provide the relationship to AS4590 and NAMF fields.

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

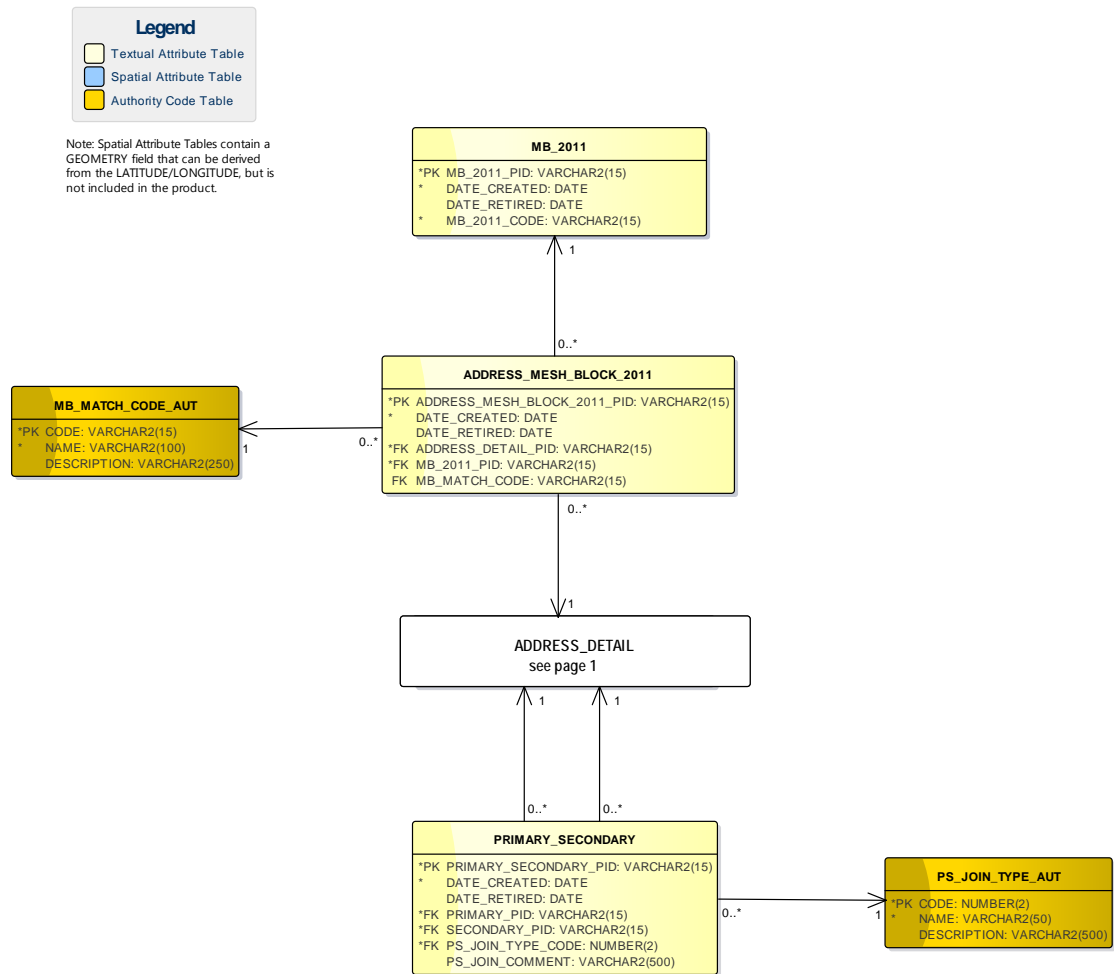
NAMF Field	AS4590 Field	G-NAF Field(s)	Description
complexLevelType	COMPLEX.LEVEL TYPE CODE	LEVEL_TYPE_AUT.DESCRPTION	Full name of level type
complexLevelNumber	COMPLEX.LEVEL NUMBER	ADDRESS_DETAIL.LEVEL_NUMBER_P PREFIX, ADDRESS_DETAIL.LEVEL_NUMBER, ADDRESS_DETAIL.LEVEL_NUMBER_S SUFFIX	Level number is a concatenation of the three fields
complexUnitType	COMPLEX.SUB DWELLING UNIT TYPE CODE	FLAT_TYPE_AUT.DESCRPTION	Full name of flat type
complexUnitIdentifier	COMPLEX.SUB DWELLING UNIT NUMBER	ADDRESS_DETAIL.FLAT_NUMBER_P PREFIX, ADDRESS_DETAIL.FLAT_NUMBER, ADDRESS_DETAIL.FLAT_NUMBER_S SUFFIX	Flat number is a concatenation of the three fields
complexStreetNumber1	COMPLEX.COMPLEX ROAD NUMBER 1	ADDRESS_DETAIL.NUMBER_FIRST_P PREFIX, ADDRESS_DETAIL.NUMBER_FIRST, ADDRESS_DETAIL.NUMBER_FIRST_S 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.COMPLEX ROAD NUMBER 2	ADDRESS_DETAIL.NUMBER_LAST_P PREFIX, ADDRESS_DETAIL.NUMBER_LAST, ADDRESS_DETAIL.NUMBER_LAST_S 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.COMPLEX 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.COMPLEX ROAD TYPE CODE	STREET_TYPE_AUT.DESCRPTION	Applicable if, and only if, a primary secondary relationship is identified in G-NAF. Abbreviation of street type of the secondary address
complexStreetSuffix	COMPLEX.COMPLEX ROAD SUFFIX CODE	STREET_SUFFIX_AUT.DESCRPTION	Applicable if, and only if, a primary secondary relationship is identified in G-NAF. Full name of street suffix of the secondary address
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.BUILDING_NAME IS NOT NULL THEN ADDRESS_DETAIL.BUILDING_NAME 3 ELSE ADDRESS_SITE.ADDRESS_SITE_NAME 4 END
lotIdentifier	ROAD NUMBER.LOT NUMBER	ADDRESS_DETAIL.LOT_NUMBER_P PREFIX, ADDRESS_DETAIL.LOT_NUMBER, ADDRESS_DETAIL.LOT_NUMBER_S SUFFIX	Lot number is a concatenation of the three fields
streetNumber1	ROAD NUMBER.ROAD NUMBER 1	ADDRESS_DETAIL.NUMBER_FIRST_P PREFIX,	The first street number is a concatenation of the three fields

NAMF Field	AS4590 Field	G-NAF Field(s)	Description
		ADDRESS_DETAIL.NUMBER_FIRST, ADDRESS_DETAIL.NUMBER_FIRST_S UFFIX	
streetNumber2	ROAD.NUMBER.ROAD NUMBER 2	ADDRESS_DETAIL.NUMBER_LAST_P REFIX, ADDRESS_DETAIL.NUMBER_LAST, ADDRESS_DETAIL.NUMBER_LAST_S UFFIX	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.DESCRPTION	Abbreviation of street type
streetSuffix	ROAD.ROAD SUFFIX CODE	STREET_SUFFIX_AUT.DESCRPTION	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
geoNorthSouthCoord inate	GEOCODE.GEOCODE LATITUDE	ADDRESS_SITE_GEOCODE.LATITUDE OR STREET_LOCALITY_POINT.LATITUDE OR LOCALITY_POINT.LATITUDE	Business rule: 1 CASE 2 WHEN ADDRESS_SITE_GEOCODE.LAT ITUDE IS NOT NULL THEN ADDRESS_SITE_GEOCODE.LAT ITUDE 3 WHEN STREET_LOCALITY_POINT.LATI TITUDE IS NOT NULL THEN STREET_LOCALITY_POINT.LATI TITUDE 4 ELSE LOCALITY_POINT.LATITUDE 5 END
geoEastWestCoordin ate	GEOCODE.GEOCODE LONGITUDE	ADDRESS_SITE_GEOCODE.LONGITU DE OR STREET_LOCALITY_POINT.LONGITUD E OR LOCALITY_POINT.LONGITUDE	Business rule: 1 CASE 2 WHEN ADDRESS_SITE_GEOCODE.LO NGITUDE IS NOT NULL THEN ADDRESS_SITE_GEOCODE.LO NGITUDE 3 WHEN STREET_LOCALITY_POINT.LON GITUDE IS NOT NULL THEN STREET_LOCALITY_POINT.LON GITUDE 4 ELSE LOCALITY_POINT.LONGITUDE 5 END
geoFeature	GEOCODE.GEOCODE FEATURE	GEOCODE_TYPE_AUT.NAME OR "STREET LOCALITY CENTROID" OR "LOCALITY CENTROID"	Business rule: 1 CASE 2 WHEN ADDRESS_SITE_GEOCODE.GE OCODE_TYPE_CODE IS NOT NULL THEN GEOCODE_TYPE_AUT.NAME 3 WHEN ADDRESS_SITE_GEOCODE.LO NGITUDE IS NOT NULL THEN 'PROPERTY/PARCEL GEOCODE' 4 WHEN STREET_LOCALITY_POINT.LON GITUDE IS NOT NULL THEN 'STREET LOCALITY CENTROID' 5 ELSE 'LOCALITY CENTROID' 6 END
geoDatumCode	GEOCODE.GEOCODE GEOGRAPHIC DATUM	"GDA94"	

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 2: 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.	Y	Y	-	-	add_al_pid
date_created	Date	Date this record was created.	N	Y	-	-	dt_create
date_retired	Date	Date this record was retired.	N	N	-	-	dt_retire
principal_pid	varchar2(15)	Persistent identifier (i.e. gnaf_pid) of the principal address	N	Y	ADDRESS_ DETAIL	principal_pid	princ_pid
alias_pid	varchar2(15)	Persistent identifier (i.e. gnaf_pid) of the alias address	N	Y	ADDRESS_ DETAIL	alias_pid	alias_pid

Name	Data Type	Description	Prim Key	Man	F K TABLE	F K Col	10 Char Alias
alias_type_code	varchar2(10)	Alias type (e.g. "Synonym").	N	Y	ADDRESS_ ALIAS _TYPE _AUT	code	altp_code
alias_comment	varchar2(200)	Comment about the alias (e.g. Corner address)	N	N	-	-	alias_cmt

Table 3: 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.	Y	Y	-	-	code_aut
name	varchar2(50)	Name	N	Y	-	-	name_aut
description	varchar2(30)	Description of type abbreviation.	N	N	-	-	dscpn_aut

Table 4: 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 5: 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.	Y	Y	-	-	add_dt_pid
date_created	Date	Date this record was created.	N	Y	-	-	dt_create

Name	Data Type	Description	Prim Key	Man	F K TABLE	F K Col	10 Char Alias
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
building_name	varchar2(45)	Combines both building/property name fields. Field length: up to 45 alphanumeric characters (AS4590.8.5).	N	N	-	-	bldng_name
lot_number_prefix	varchar2(2)	Lot number prefix	N	N	-	-	ltnbr_pref
lot_number	varchar2(5)	Lot number. Field length: five alphanumeric characters (AS4590.8.7)	N	N	-	-	lot_number
lot_number_suffix	varchar2(2)	Lot number suffix. Field length: two alphanumeric characters (AS4590.8.7)	N	N	-	-	lt_nb_suff
flat_type_code	varchar2(7)	Specification of the type of a separately identifiable portion within a building/complex. Field Length: one to seven upper case alpha characters (AS4590.8.3)	N	N	FLAT_TYPE_AUT	code	fttyp_code
flat_number_prefix	varchar2(2)	Flat/unit number prefix. Field length: two alphanumeric characters (AS4590.8.3)	N	N	-	-	fltnb_pref
flat_number	number(5)	Flat/unit number. Field length: five numeric characters (AS4590.8.3)	N	N	-	-	flt_nbr
flat_number_suffix	varchar2(2)	Flat/unit number suffix Field length: two alphanumeric characters (AS4590.8.3)	N	N	-	-	fltnb_suff
level_type_code	varchar2(4)	Level type. Field length: two alpha characters (AS4590.8.4)	N	N	LEVEL_TYPE_AUT	code	lvtyp_code
level_number_prefix	varchar2(2)	Level number prefix. Field length: two alphanumeric characters (AS4590.8.4)	N	N	-	-	lvnb_pref
level_number	number(3)	Level number. Field length: three numeric characters (AS4590.8.4)	N	N	-	-	lvl_nbr
level_number_suffix	varchar2(2)	Level number suffix. Field length: two numeric characters (AS4590.8.4)	N	N	-	-	lvnb_suff
number_first_prefix	varchar2(3)	Prefix for the first (or only) number in range. Field length: two uppercase alphanumeric characters (AS4590.8.6).	N	N	-	-	nbfst_pref
number_first	number(6)	Identifies first (or only) street number in range. Field length: six numeric characters (AS4590.8.6).	N	N	-	-	nbr_frst

Name	Data Type	Description	Prim Key	Man	F K TABLE	F K Col	10 Char Alias
number_first_suffix	varchar2(2)	Suffix for the first (or only) number in range. Field length: two uppercase alphanumeric characters (AS4590.8.6).	N	N	-	-	nbfst_suff
number_last_prefix	varchar2(3)	Prefix for the last number in range. Field length: two uppercase alphanumeric characters (AS4590.8.6).	N	N	-	-	nbfst_pref
number_last	number(6)	Identifies last number in range. Field length: six numeric characters (AS4590.8.6).	N	N	-	-	nbr_last
number_last_suffix	varchar2(2)	Suffix for the last number in range. Field length: two uppercase alphanumeric characters (AS4590.8.6).	N	N	-	-	nbfst_suff
street_locality_pid	varchar2(15)	Street/Locality of this address - not mandatory as some records in G-NAF may not require street (e.g. remote rural property).	N	N	STREET_LOCALITY	street_locality_pid	st_loc_pid
location_description	varchar2(45)	A general field to capture various references to address locations alongside another physical location. Field length: up to 45 alphanumeric characters (AS4590.8.14)	N	N	-	-	loc_desc
locality_pid	varchar2(15)	The unique identifier for the locality	N	Y	LOCALITY	locality_pid	loc_pid
alias_principal	char(1)	A = Alias record, P = Principal record	N	N	-	-	als_pncpl
postcode	varchar2(4)	Postcodes are optional as prescribed by AS4819 and AS4590	N	N	-	-	postcode
private_street	varchar2(75)	Private street information. This is not broken up into name/type/suffix. Field length: up to 75 alphanumeric characters (AS4590.8.5).	N	N	-	-	priv_st
legal_parcel_id	varchar2(20)	Legal parcel id. Generic parcel id field derived from the PSMA Australia's CadLite parcel where available.	N	N	-	-	lgparc_id
confidence	number(1)	Reflects how many contributor databases this address appears in (0 = 1 database, 1 = 2 database etc.)	N	N	-	-	confidence
address_site_pid	varchar2(15)	Address site Persistent Identifier	N	Y	ADDRESS_SITE	address_site_pid	add_st_pid

Name	Data Type	Description	Prim Key	Man	F K TABLE	F K Col	10 Char Alias
level_geocoded_code	number(2)	Binary indicator of the level of geocoding this address has. e.g. 0 = 000 = (No geocode), 1 = 001 = (No Locality geocode, No Street geocode, Address geocode), etc.	N	Y	GEOCODED_LEVEL_TYPE_AUT	code	lvlgc_code
property_pid	varchar2(15)	Property persistent identifier referenced to relevant cadastral model	N	N	-	-	pr_pid
gnaf_property_pid	varchar2(15)	This field stores the G-NAF property_pid for the address.	N	N	-	-	gf_prp_pid
primary_secondary	varchar2(1)	P (Primary) or S (secondary)	N	N	-	-	prim_sec

Table 6: 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	-	-	prim_s_pid
date_created	date	Date this record was created.	N	Y	-	-	dt_create
date_retired	date	Date this record was retired.	N	N	-	-	dt_retire
primary_pid	varchar2(15)	Pid for the Primary address.-Defined as a principal address which does not have a flat number but which matches the Secondary address in all other respects OR is designated as owning Secondary addresses by PSMA (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 with a flat_number or more literally any address where flat_number_prefix, flat_number or flat_number_suffix is not null OR is designated as being linked to a Primary address by PSMA (e.g. involves private road in complex development)	N	Y	ADDRESS_DETAIL	address_detail_pid	sec_pid
ps_join_type_code	number(2)	Code of 1 OR 2 when the root address:- <ul style="list-style-type: none"> street number, street name (and type) and locality name components can be matched it is join type 1 Otherwise it is a join type 2. 	N	Y	PS_JOIN_TYPE_CODE_AUT	code	jntyp_code
ps_join_comment	varchar2(500)	Details of join type can be given.	N	N	-	-	ps_jn_cmnt

Table 7: 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").	Y	Y	-	-	code_aut
name	varchar2(50)	Name.	N	Y	-	-	name_aut
description	varchar2(500)	Description of the join type.	N	N	-	-	dscpn_aut

Table 8: PS_JOIN_TYPE_AUT Codes

CODE	DESCRIPTION	Name
1	AUTOMATICALLY MATCHED PRIMARY AND SECONDARY, BOTH PARENT AND CHILD HAVE THE SAME ROOT ADDRESS	AUTO
2	MANUALLY GENERATED LINK, MAY OR MAY NOT HAVE THE SAME ROOT ADDRESS	MANUAL

Table 9: ADDRESS_MESH_BLOCK_2011

Name	Data Type	Description	Prim Key	Man	F K TABLE	F K Col	10 Char Alias
address_mesh_block_2011_pid	varchar2(15)	The Persistent Identifier is unique to the real world feature this record represents.	Y	Y	-	-	a_mb_11pid
date_created	date	Date this record was created.	N	Y	-	-	dt_create
date_retired	date	Date this record was retired.	N	N	-	-	dt_retire
address_detail_pid	varchar2(15)	Persistent identifier (i.e. gnaf_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	Y	MB_MATCH_CODE	code	mb_matched
MB_2011_pid	varchar2(15)	mesh block 2011 Persistent Identifier	N	Y	MB_2011	mb_2011_pid	mb_11pid

Table 10: MB_MATCH_CODE_AUT

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.	Y	Y	-	-	code_aut
name	varchar2(100)	Name of the code. e.g. PARCEL LEVEL MATCH	N	Y	-	-	name_aut
description	varchar2(250)	Description of what the code means.	N	N	-	-	desc_aut

Table 11: MB_MATCH_CODE_AUT Codes

CODE	NAME	DESCRIPTION
1	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.
2	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.
3	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.
4	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.
5	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.

Table 12: 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.	Y	Y	-	-	add_st_pid
date_created	date	Date this record was created.	N	Y	-	-	dt_create
date_retired	date	Date this record was retired.	N	N	-	-	dt_retire
address_type	varchar2(8)	Address type (e.g. "Postal", Physical")	N	N	ADDRESS_TYPE_A UT	code	addr_type

Name	Data Type	Description	Prim Key	Man	F K TABLE	F K Col	10 Char Alias
address_site_name	varchar2(45)	Address site name. Equates Complex name of AS4590.8.5. Field length: forty-five alphanumeric characters (AS4590.8.5)	N	N	-	-	name

Table 13: 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.	Y	Y	-	-	as_gcd_pid
date_created	date	Date this record was created.	N	Y	-	-	dt_create
date_retired	date	Date this record was retired.	N	N	-	-	dt_retire
address_site_pid	varchar2(15)	Address site Persistent Identifier	N	N	ADDRESS_SITE	address_site_pid	add_st_pid
geocode_site_name	varchar2(46)	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). AS4590.8.16	N	Y	GEOCODE_RELIABILITY_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	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 14: 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")	Y	Y	-	-	code_aut
name	varchar2(50)	Name	N	Y	-	-	name_aut
description	varchar2(30)	Description of address type	N	N	-	-	dscpn_aut

Table 15: 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

CODE	NAME	CODE	NAME
UN/BLOCK	Unknown Block	UR/HOUSE	Urban House
UN/CABIN	Unknown Cabin	UR/LOT	Urban Lot
UN/CTGE	Unknown Cottage	UR/RES	Urban Reserve
UN/CVAN	Unknown Caravan	UR/RMB	Urban Roadside mail box
UN/FARM	Unknown Farm	UR/RMS	Unknown Roadside mail service
UN/FLAT	Unknown Flat	UR/ROOM	Urban Room
UN/GD	Unknown Ground Floor	UR/RSD	Urban Roadside mail delivery
UN/HOUSE	Unknown House	UR/RSM	Urban Roadside mail service
UN/LOC	Unknown Location	UR/SEC	Urban Section
UN/LOT	Unknown Lot	UR/SITE	Urban Site
UN/LWR	Unknown Lower	UR/UNIT	Urban Unit

Table 16: 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 (AS4590.8.3). This is the persistent identifier.	Y	Y	-	-	code_aut
name	varchar2(50)	Name	N	Y	-	-	name_aut
description	varchar2(30)	Description of flat type	N	N	-	-	dscpn_aut

Table 17: FLAT_TYPE_AUT Codes

CODE	NAME	CODE	NAME
ANT	ANTENNA	OFFC	OFFICE
APT	APARTMENT	PTHS	PENTHOUSE
ATM	AUTOMATED TELLER MACHINE	REAR	REAR

CODE	NAME	CODE	NAME
BBQ	BARBECUE	ROOM	ROOM
BLCK	BLOCK	RESV	RESERVE
BTSD	BOATSHED	SE	SUITE
BLDG	BUILDING	SEC	SECTION
BNGW	BUNGALOW	SHED	SHED
CAGE	CAGE	SHOP	SHOP
CARP	CARPARK	SHRM	SHOWROOM
CARS	CARSPACE	SIGN	SIGN
CLUB	CLUB	SITE	SITE
COOL	COOLROOM	STLL	STALL
CTGE	COTTAGE	STOR	STORE
DUPL	DUPLEX	STU	STUDIO
FLAT	FLAT	STR	STRATA UNIT
FCTY	FACTORY	SUBS	SUBSTATION
GRGE	GARAGE	TNCY	TENANCY
HALL	HALL	TNHS	TOWNHOUSE
HSE	HOUSE	TWR	TOWER
KSK	KIOSK	UNIT	UNIT
LBBY	LOBBY	VLLA	VILLA
LOFT	LOFT	VLT	VAULT
LOT	LOT	WARD	WARD
LSE	LEASE	WHSE	WAREHOUSE
MBTH	MARINE BERTH	WKSH	WORKSHOP
MSNT	MAISONETTE		

Table 18: 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.	Y	Y	-	-	code_aut
name	varchar2(50)	Name	N	Y	-	-	name_aut
description	varchar2(100)	Description	N	N	-	-	dscpn_aut

Table 19: 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 20: 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.	Y	Y	-	-	code_aut
name	varchar2(50)	Name	N	Y	-	-	name_aut
description	varchar2(250)	Description of geocode type	N	N	-	-	dscpn_aut

Table 21: GEOCODE_TYPE_AUT Codes

CODE	NAME	DESCRIPTION
BAP	BUILDING ACCESS POINT	POINT OF ACCESS TO THE BUILDING.
BC	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.
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).

CODE	NAME	DESCRIPTION
TCP	TELEPHONE CONNECTION POINT	TELEPHONE CONNECTION POINT (E.G. BOX, OR UNDERGROUND CHAMBER).
ECP	ELECTRICITY CONNECTION POINT	ELECTRICITY CONNECTION POINT (E.G. BOX, OR UNDERGROUND CHAMBER).
EM	ELECTRICITY METER	ELECTRICITY METER POINT (E.G. BOX, OR UNDERGROUND CHAMBER).
ICP	INTERNET CONNECTION POINT	INTERNET CONNECTION POINT (E.G. BOX, OR UNDERGROUND CHAMBER).
UNK	UNKNOWN	THE TYPE OF REAL WORLD FEATURE THE POINT REPRESENTS IS NOT KNOWN.
STL	STREET LOCALITY	POINT REPRESENTING THE EXTENT OF A STREET WITHIN A LOCALITY
LOC	LOCALITY	POINT REPRESENTING A LOCALITY

Table 22: ADDRESS_DEFAULT_GEOCODE

Name	Data Type	Description	Prim Key	Man	F K TABLE	F K Col	10 Char Alias
address_default_geocode	varchar2(15)	The Persistent Identifier is unique to the real world feature this record represents.	Y	Y	-	-	a_d_g_pid
date_created	date	Date this record was created.	N	Y	-	-	dt_create
date_retired	date	Date this record was retired.	N	N	-	-	dt_retire
address_detail_pid	varchar2(15)	Persistent identifier from the address_detail table	N	Y	ADDRESS_DETAIL	address_detail_pid	add_dt_pid
geocode_type_code	varchar2(4)	Unique abbreviation for geocode	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 23: 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)	Y	Y	-	-	code_aut

name	varchar2(50)	Name	N	Y	-	-	name_aut
description	varchar2(70)	Description of geocode type	N	N	-	-	dscpn_aut

Table 24: 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 25: 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: two alpha characters (AS4590.8.4). This is the persistent identifier.	Y	Y	-	-	code_aut
name	varchar2(50)	Name	N	Y	-	-	name_aut
description	varchar2(30)	Description of level type	N	N	-	-	dscpn_aut

Table 26: LEVEL_TYPE_AUT Codes

CODE	NAME	CODE	NAME
B	BASEMENT	P	PARKING
FL	FLOOR	PTHS	PENTHOUSE

CODE	NAME	CODE	NAME
G	GROUND	PDM	PODIUM
L	LEVEL	PLF	PLATFORM
LB	LOBBY	RT	ROOFTOP
LG	LOWER GROUND FLOOR	SB	SUB-BASEMENT
M	MEZZANINE	UG	UPPER GROUND FLOOR
OD	OBSERVATION DECK		

Table 27: LOCALITY_CLASS_AUT

Name	Data Type	Description	Prim Key	Man	F K T	F K Col	10 Char Alias
code	char(1)	Locality class code. This is the persistent Identifier of the record.	Y	Y	-	-	code_aut
name	varchar2(50)	Name	N	Y	-	-	name_aut
description	varchar2(200)	Description of what this locality type represents (e.g. Gazetted Locality).	N	N	-	-	dscpn_aut

Table 28: LOCALITY_CLASS_AUT Codes

CODE	NAME	DESCRIPTION
A	ALIAS ONLY LOCALITY	ALIAS ONLY LOCALITY
D	DISTRICT	DISTRICT
G	GAZETTED LOCALITY	GAZETTED LOCALITY
H	HUNDRED	HUNDRED
M	MANUALLY VALIDATED	MANUALLY VALIDATED
T	TOPOGRAPHIC LOCALITY	TOPOGRAPHIC LOCALITY
U	UNOFFICIAL SUBURB	UNOFFICIAL SUBURB
V	UNOFFICIAL TOPOGRAPHIC FEATURE	UNOFFICIAL TOPOGRAPHIC FEATURE

Table 29: 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.	Y	Y	-	-	loc_pid
date_created	date	Date this record was created.	N	Y	-	-	dt_create
date_retired	date	Date this record was retired.	N	N	-	-	dt_retire
locality_name	varchar2(100)	name	N	Y	-	-	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	Y	LOCALITY_CLASS_AUT	code	loccl_code
state_pid	varchar2(15)	State Persistent Identifier	N	Y	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). AS4590.8.16	N	N	GEOCODE_RELIABILITY_AUT	code	gf_rl_code

Table 30: LOCALITY_ALIAS

Name	Data Type	Description	Prim Key	Man	F K TABLE	F K Col	10 Char Alias
locality_alias_pid	varchar2(15)	The Persistent Identifier is unique to the real world feature this record represents.	Y	Y	-	-	loc_al_pid
date_created	date	Date this record was created.	N	Y	-	-	dt_create
date_retired	date	Date this record was retired.	N	N	-	-	dt_retire
locality_pid	varchar2(15)	locality persistent identifier	N	Y	LOCALITY	locality_pid	loc_pid
name	varchar2(100)	The alias name	N	Y	-	-	name
postcode	varchar2(4)	postcode	N	N	-	-	postcode
alias_type	varchar2(10)	alias type code	N	Y	LOCALITY_ALIAS_TYPE_AUT	code	altp_code

Name	Data Type	Description	Prim Key	Man	F K TABLE	F K Col	10 Char Alias
_code							
state_pid	varchar2(15)	State persistent identifier	N	Y	STATE	state_pid	state_pid

Table 31: LOCALITY_ALIAS_TYPE_AUT

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.	Y	Y	-	-	code_aut
name	varchar2(50)	Name	N	Y	-	-	name_aut
description	varchar2(100)	Description of what the code means (e.g. Spatially Related).	N	N	-	-	dscpn_aut

Table 32: LOCALITY_ALIAS_TYPE_AUT Codes

CODE	NAME
SR	SPATIALLY RELATED
SYN	SYNONYM

Table 33: 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.	Y	Y	-	-	loc_nb_pid
date_created	date	Date this record was created.	N	Y	-	-	dt_create
date_retired	date	Date this record was retired.	N	N	-	-	dt_retire
locality_pid	varchar2(15)	Locality persistent identifier.	N	Y	LOCALITY	locality_pid	loc_pid
neighbour_locality_pid	varchar2(15)	neighbour locality Persistent Identifier	N	Y	LOCALITY	neighbour_locality_pid	nb_loc_pid

Table 34: 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.	Y	Y	-	-	lc_pnt_pid
date_created	date	Date this record was created.	N	Y	-	-	dt_create
date_retired	date	Date this record was retired.	N	N	-	-	dt_retire
locality_pid	varchar2(15)	Locality persistent identifier.	N	Y	LOCALITY	locality_pid	loc_pid
planimetric_accuracy	number(12)	Planimetric accuracy of geocode (if known)	N	N	-	-	planim_acc

Name	Data Type	Description	Prim Key	Man	F K TABLE	F K Col	10 Char Alias
geometry	point	Point geometry – calculated by the longitude/latitude of record (not part of the product).	N	Y	-	-	geometry
longitude	number(11,8)	Longitude of calculated geocode of gazetted locality	N	Y	-	-	longitude
latitude	number(10,8)	Latitude of calculated geocode of gazetted locality.	N	Y	-	-	latitude

Table 35: MB_2011

Name	Data Type	Description	Prim Key	Man	F K TABLE	F K Col	10 Char Alias
mb_2011 _pid	varchar2(15)	The Persistent Identifier is unique to the real world feature this record represents.	Y	Y	-	-	mb_pid
date_created	date	Date this record was created.	N	Y	-	-	dt_create
date_retired	date	Date this record was retired.	N	N	-	-	dt_retire
mb_2011 _code	varchar2(15)	mesh block code	N	Y	-	-	mb_code

Table 36: 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.	Y	Y	-	-	code_aut
name	varchar2(50)	Name	N	Y	-	-	name_aut
description	varchar2(200)	Description of what this street type represents (e.g. Gazetted Street, Unconfirmed Street)	N	N	-	-	dscpn_aut

Table 37: STREET_CLASS_AUT Codes

CODE	NAME	DESCRIPTION
C	CONFIRMED	A confirmed street is present in the roads data of the PSMA Transport and Topography product for the same release.

U	UNCONFIRMED	An unconfirmed street is NOT present in the roads data of the PSMA Transport and Topography product for the same release and will not have a street locality geocode.
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Table 38: 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.	Y	Y	-	-	
name	varchar2(50)	Street type as an abbreviation (e.g. AV, PDE, ST), based on AS4590 road types, where applicable.	N	Y	-	-	
description	varchar2(15)	Street type as an abbreviation (e.g. AV, PDE, ST), based on AS4590 road types, where applicable.	N	N	-	-	

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 39: 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 (PSMA's Transport & Topography 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	CODE	NAME	CODE	NAME
ACCESS	ACCS	FAIRWAY	FAWY	PROMENADE	PROM
ACRE	ACRE	FIREBREAK	FBRK	PURSUIT	PRST
AIRWALK	AWLK	FIRELINE	FLNE	QUAD	QUAD
ALLEY	ALLY	FIRETRACK	FTRK	QUADRANT	QDRT
ALLEYWAY	ALWY	FIRETRAIL	FITR	QUAY	QY
AMBLE	AMBL	FLAT	FLAT	QUAYS	QYS
APPROACH	APP	FLATS	FLTS	RAMBLE	RMBL
ARCADE	ARC	FOLLOW	FOLW	RAMP	RAMP
ARTERIAL	ARTL	FOOTWAY	FTWY	RANGE	RNGE

CODE	NAME	CODE	NAME	CODE	NAME
ARTERY	ARTY	FORD	FORD	REACH	RCH
AVENUE	AV	FORESHORE	FSHR	REEF	REEF
BANAN	BA	FORK	FORK	RESERVE	RES
BANK	BANK	FORMATION	FORM	REST	REST
BAY	BAY	FREEWAY	FWY	RETREAT	RTT
BEACH	BCH	FRONT	FRNT	RETURN	RTN
BEND	BEND	FRONTAGE	FRTG	RIDE	RIDE
BOARDWALK	BWLK	GAP	GAP	RIDGE	RDGE
BOULEVARD	BVD	GARDEN	GDN	RIGHT OF WAY	ROFW
BOULEVARDE	BVDE	GARDENS	GDNS	RING	RING
BOWL	BOWL	GATE	GTE	RISE	RISE
BRACE	BR	GATEWAY	GWY	RISING	RSNG
BRAE	BRAE	GLADE	GLDE	RIVER	RVR
BRANCH	BRAN	GLEN	GLEN	ROAD	RD
BREAK	BRK	GRANGE	GRA	ROADS	RDS
BRETT	BRET	GREEN	GRN	ROADWAY	RDWY
BRIDGE	BDGE	GROVE	GR	ROTARY	RTY
BROADWALK	BRDWLK	GULLY	GLY	ROUND	RND
BROADWAY	BDWY	HARBOUR	HRBR	ROUTE	RTE
BROW	BROW	HAVEN	HVN	ROW	ROW
BULL	BULL	HEATH	HTH	ROWE	ROWE
BUSWAY	BSWY	HEIGHTS	HTS	RUE	RUE
BYPASS	BYPA	HIGHROAD	HIRD	RUN	RUN
BYWAY	BYWY	HIGHWAY	HWY	SERVICeway	SVWY
CAUSEWAY	CSWY	HIKE	HIKE	SHUNT	SHUN
CENTRE	CTR	HILL	HILL	SKYLINE	SKLN

CODE	NAME	CODE	NAME	CODE	NAME
CENTREWAY	CNWX	HILLS	HILLS	SLOPE	SLPE
CHASE	CH	HOLLOW	HLLW	SOUTH	STH
CIRCLE	CIR	HUB	HUB	SPUR	SPUR
CIRCLET	CLT	INLET	INLT	SQUARE	SQ
CIRCUIT	CCT	INTERCHANGE	INTG	STEPS	STPS
CIRCUS	CRCS	ISLAND	ID	STRAIGHT	STRT
CLOSE	CL	JUNCTION	JNC	STRAIT	STAI
CLUSTER	CLR	KEY	KEY	STRAND	STRA
COLONNADE	CLDE	KEYS	KEYS	STREET	ST
COMMON	CMMN	KNOLL	KNOL	STRIP	STRP
COMMONS	CMMNS	LADDER	LADR	SUBWAY	SBWY
CONCORD	CNCD	LANDING	LDG	TARN	TARN
CONCOURSE	CON	LANE	LANE	TERRACE	TCE
CONNECTION	CNTN	LANEWAY	LNWY	THOROUGHFARE	THFR
COPSE	CPS	LEAD	LEAD	THROUGHWAY	THRU
CORNER	CNR	LEADER	LEDR	TOLLWAY	TLWY
CORSO	CSO	LINE	LINE	TOP	TOP
COURSE	CRSE	LINK	LINK	TOR	TOR
COURT	CT	LOOKOUT	LKT	TRACK	TRK
COURTYARD	CTYD	LOOP	LOOP	TRAIL	TRL
COVE	COVE	LYNNE	LYNN	TRAMWAY	TMWY
CRESCENT	CR	MALL	MALL	TRAVERSE	TVSE
CREST	CRST	MANOR	MANR	TRUNKWAY	TKWY
CRIEF	CRF	MART	MART	TUNNEL	TUNL
CROOK	CRK	MAZE	MAZE	TURN	TURN
CROSS	CRSS	MEAD	MEAD	TWIST	TWIST

CODE	NAME	CODE	NAME	CODE	NAME
CROSSING	CRSG	MEANDER	MNDR	UNDERPASS	UPAS
CRUISEWAY	CUWY	MEW	MEW	VALE	VALE
CUL-DE-SAC	CSAC	MEWS	MEWS	VALLEY	VLLY
CUT	CUT	MILE	MILE	VERGE	VERGE
CUTTING	CUTT	MOTORWAY	MTWY	VIADUCT	VIAD
DALE	DALE	NOOK	NOOK	VIEW	VIEW
DASH	DASH	NORTH	NTH	VIEWS	VWS
DELL	DELL	NULL	NULL	VILLA	VLLA
DENE	DENE	OUTLET	OTLT	VILLAGE	VLGE
DEVIATION	DE	OUTLOOK	OTLK	VILLAS	VLLS
DIP	DIP	OVAL	OVAL	VISTA	VSTA
DISTRIBUTOR	DSTR	PALMS	PLMS	VUE	VUE
DIVIDE	DIV	PARADE	PDE	WADE	WADE
DOCK	DOCK	PARADISE	PRDS	WALK	WALK
DOMAIN	DOM	PARK	PARK	WALKWAY	WKWY
DOWN	DOWN	PARKWAY	PWY	WATERS	WTRS
DOWNS	DWNS	PART	PART	WATERWAY	WTWY
DRIVE	DR	PASS	PASS	WAY	WAY
DRIVEWAY	DVWY	PASSAGE	PSGE	WEST	WEST
EASEMENT	ESMT	PATH	PATH	WHARF	WHRF
EAST	EAST	PATHWAY	PWAY	WOOD	WD
EDGE	EDGE	PENINSULA	PSLA	WOODS	WDS
ELBOW	ELB	PIAZZA	PIAZ	WYND	WYND
END	END	PLACE	PL	YARD	YARD
ENTRANCE	ENT	PLAZA	PLZA		
ESPLANADE	ESP	POCKET	PKT		

CODE	NAME	CODE	NAME	CODE	NAME
ESTATE	EST	POINT	PNT		
EXPRESSWAY	EXP	PORT	PORT		
EXTENSION	EXTN	PRECINCT	PREC		

Table 40: 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.	Y	Y	-	-	st_loc_pid
date_created	date	Date this record was created.	N	Y	-	-	dt_create
date_retired	date	Date this record was retired.	N	N	-	-	dt_retire
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	Y	-	-	name
street_type_code	varchar2(15)	street type. e.g. "PLACE"	N	N	STREET_TYPE_AUT	code	sttyp_code
street_suffix_code	varchar2(15)	street suffix. e.g. "WEST"	N	N	STREET_SUFFIX_AUT	code	stsfx_code
locality_pid	varchar2(15)	locality persistent identifier	N	Y	LOCALITY	locality_pid	loc_pid
gnaf_street_pid	varchar2(15)	Internal identifier used in the management of G-NAF	N	N	-	-	gf_st_pid
gnaf_street_confidence	number(1)	Street confidence	N	N	-	-	gnaf_s_cnf
gnaf_reliability_code	number(1)	Always = 4. 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) AS4590.8.16	N	N	GEOCODE_RELIABILITY_AUT	code	gf_rl_code

Table 41: 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.	Y	Y	-	-	sl_pnt_pid
date_created	date	Date this record was created.	N	Y	-	-	dt_create
date_retired	date	Date this record was retired.	N	N	-	-	dt_retire
street_locality_pid	varchar2(15)	Street locality persistent identifier	N	Y	STREET_LOCALITY	street_locality_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	Y	-	-	geometry
longitude	number(11,8)	Longitude of programmatically calculated centroid of street centreline within the gazetted locality	N	Y	-	-	longitude
latitude	number(10,8)	Latitude of programmatically calculated centroid of street centreline within the gazetted locality	N	Y	-	-	latitude

Table 42: 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.	Y	Y	-	-	sl_ali_pid
date_created	date	Date this record was created.	N	Y	-	-	dt_create
date_retired	date	Date this record was retired.	N	N	-	-	dt_retire
street_locality_pid	varchar2(15)	street locality persistent identifier	N	Y	STREET_LOCALITY	street_locality_pid	st_loc_pid

street_name	varchar2(100)	street alias name. e.g. "POPLAR"	N	Y	-	-	name
street_type_code	varchar2(15)	street type. e.g. "PLACE"	N	N	STREET_TYPE_AUT	code	sttyp_code
street_suffix_code	varchar2(15)	street suffix. e.g. "WEST"	N	N	STREET_SUFFIX_AUT	code	stsfx_code
alias_type_code	varchar2(10)	alias type	N	Y	STREET_LOCALITY_ALIAS_TYPE_AUT	code	altp_code

Table 43: 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.	Y	Y	-	-	code_aut
name	varchar2(50)	Name	N	Y	-	-	name_aut
description	varchar2(15)	Description of what this street type represents (e.g. Gazetted Street, Unconfirmed Street)	N	N	-	-	dscpn_aut

Table 44: STREET_LOCALITY_ALIAS_TYPE_AUT Codes

CODE	NAME
ALT	ALTERNATIVE
SYN	SYNONYM

Table 45: 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").(AS4590.8.8). This is the persistent identifier.	Y	Y	-	-	code_aut
name	varchar2(50)	Name	N	Y	-	-	name_aut
description	varchar2(30)	Description of street suffixes	N	N	-	-	dscpn_aut

Table 46: STREET_SUFFIX_AUT Codes

CODE	NAME	CODE	NAME
CN	CENTRAL	SE	SOUTH EAST
DE	DEVIATION	SW	SOUTH WEST
E	EAST	UP	UPPER
EX	EXTENSION	W	WEST
LR	LOWER	IN	INNER
ML	MALL	OF	OFF
N	NORTH	ON	ON
NE	NORTH EAST	OP	OVERPASS
NW	NORTH WEST	OT	OUTER
S	SOUTH		

Table 47: 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.	Y	Y	-	-	state_pid
date_created	date	Date this record was created.	N	Y	-	-	dt_create
date_retired	date	Date this record was retired.	N	N	-	-	dt_retire
state_name	varchar2(50)	Feature name. All in uppercase. e.g. TASMANIA	N	Y	-	-	state_name
state_abbreviation	varchar2(3)	state abbreviation	N	Y	-	-	st_abbrev

Table 48: APPLIED GEOCODE PRIORITY ORDER

GEOCODE_TYPE_AUT NAME	Priority Order	DESCRIPTION
EMERGENCY ACCESS	1	Specific building or property access point for emergency services
EMERGENCY ACCESS SECONDARY	2	Specific building or property secondary access point for emergency services
BUILDING ACCESS POINT	3	Point of access to the building
FRONT DOOR ACCESS	4	Front door of building
BUILDING CENTROID	5	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	6	A centroid manually placed within the bounded polygon of the unit
UNIT CENTROID	7	Geometrically defined centre of unit. The point has to lie within the bounded polygon (e.g. for U shaped unit)
PROPERTY ACCESS POINT SETBACK	8	A point set back from the (centre of the) access point at the road frontage of the property. The setback should be specified]
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
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.