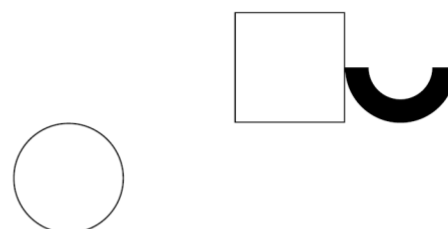
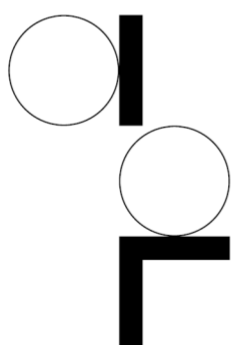
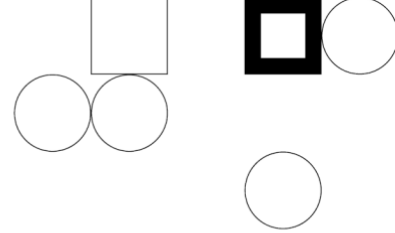


Roads

Product Description
Version 1.2





Standard

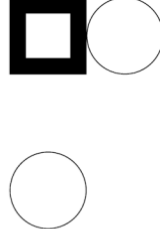
This document is based on the AS/NZS ISO 19131:2008 Geographic information – Data product specifications standard.

Disclaimer

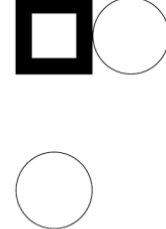
PSMA Australia believes this publication to be correct at the time of printing and does not accept responsibility for any consequences arising from the use of the information herein. Readers should rely on their own skill and judgement to apply information to particular issues.

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1. Overview

1.1 Delivery Organisation - about PSMA

Geoscape is created by PSMA Australia. It is consistently formatted spatial data that describes the buildings, addresses, land and transport networks across Australia's complex cities, regional centres and rural communities.

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 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 national digital basemap at street-level.

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

1.2 Data Product Specification Title

Roads Product Description

1.3 Data Scope

Roads is a digital representation of the road network of Australia. Roads contains linear features to describe surfaces that have been improved to enable vehicular transportation on land, and ferry routes that enable road vehicles to cross water bodies. Roads does not include railways, tramways, pathways, driveways, passenger ferry routes, walking tracks or cycleways.

1.4 Reference Date

July 2020

1.5 Responsible Party

PSMA Australia Limited

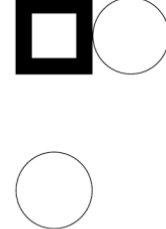
ABN: 23 089 912 710

Level 2, 113 Canberra Avenue, GRIFFITH ACT 2603 Australia

T: +61 2 6260 9000

E: enquiries@psma.com.au

URL: www.pdma.com.au



1.6 Language

English

1.7 Topic Category

Linear spatial representation of roads and related characteristics across Australia.

1.8 Informal Description of the Data Product

Roads is a national digital dataset which represents the road network across all States and Territories of Australia. Roads is the linear vector representation of a road attributed with its characteristics.

1.9 Distribution Format

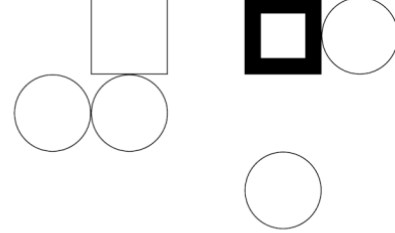
This document is available in PDF format. For other formats and use of this document, contact support@psma.com.au

1.10 Copyright and disclaimer

Please see www.pdma.com.au/psma-data-copyright-and-disclaimer

1.11 Privacy

PSMA products and services should not contain any personal or business names or other sensitive information. PSMA 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 PSMA products or services, please contact support@psma.com.au



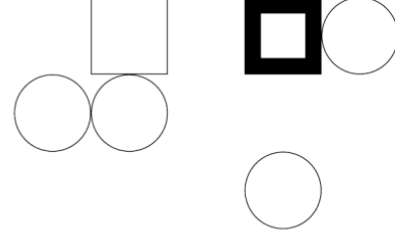
2. Specification Scope

2.1 Scope Identification

Roads is a standalone data theme containing a single layer also named Roads.

2.2 Extent

National spatial coverage of Roads for Australia.



3. Data Product Identification

3.1 Title

Roads

3.2 Alternate Titles

Geoscape Roads

3.3 Abstract

Roads is a digital representation of roads for Australia. This dataset provides an optimised aggregated national view of road geometry and attribution. The dataset is created from multiple sources including jurisdictional data which is revised regularly and supplied in varying formats and at different levels of quality.

3.4 Purpose

The purpose of Roads is to provide a single national digital representation of Australian roads with detailed attribution to enable clients to undertake activities including visualisation, analysis, and logistics planning at both a national and local scale.

3.5 Topic Category

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

3.6 Geographic Description

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

- North bounding latitude: -9°
- South bounding latitude: -44°
- East bounding longitude: 160°
- West bounding longitude: 96°

The area covers the land mass of Australia, including offshore islands. Norfolk Island is currently not included.

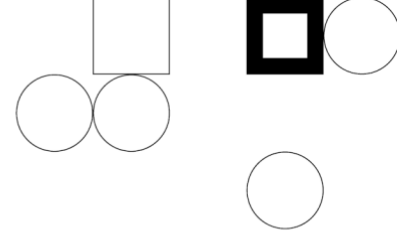
The States and Territories within Australia are represented by the following:

Table 1: Abbreviations for States and Territories in Australia

State or Territory Name	Abbreviation
Australian Capital Territory	ACT
New South Wales	NSW
Northern Territory	NT
Other Territories	OT
Queensland	QLD
South Australia	SA
Tasmania	TAS
Victoria	VIC

Other Territories of Australia are mapped to a State as described below:

- WA: Territory of Christmas Island, Territory of Cocos (Keeling) Islands
- NSW: Jervis Bay Territory



4. Data Content and Structure

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

4.1 Feature-Based Data

The feature type of a road is a spatial vector line. The table below outlines the features and their integration into related datasets.

Table 2: Feature descriptions and integration into related datasets

Entity	Description	Integration
Roads	A real-world road will have one or more linear spatial representations within the Roads dataset.	A road does not integrate with other PSMA products. A road has the state or territory abbreviation of the jurisdiction its linear geometry predominantly intersects.

4.2 Feature-Based Application Schema (Data Model)

The Roads Dataset Data Model Diagram is set out in Appendix A - Roads Data Model Diagram.

4.3 Data Dictionary

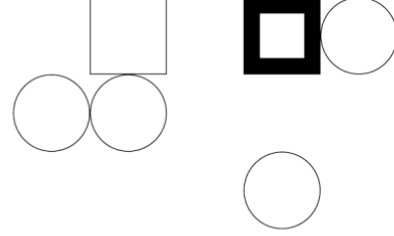
4.3.1 Feature-Based Feature Catalogue

The feature catalogue in support of the application schema is provided in Appendix B - Roads Data Dictionary. Spatial attributes are added to the feature catalogue in the same manner as other attributes for completeness and conformance to the application schema.

Table 3 refers to all tables in the Feature Catalogue.

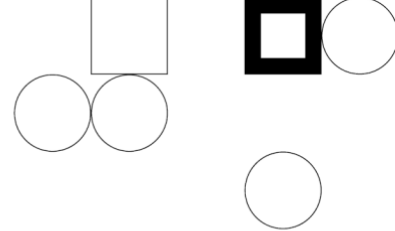
Table 3: Feature Catalogue

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



4.3.2 Feature-Based Content Scope

All geometry and metadata for lines within the Roads Dataset.



5. Reference System

5.1 Spatial Reference System

GDA94

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

Coordinate System: Geographic Coordinate System Geocentric Datum of Australia 1994 (GDA94).

GDA2020

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

Coordinate System: Geographic Coordinate System Geocentric Datum of Australia 2020 (GDA2020).

5.2 Temporal Reference System

Gregorian calendar

5.3 Reference System Scope

The spatial objects and temporal attribution for the Roads dataset.

6. Data Quality

6.1 Positional Accuracy

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

Relative spatial accuracy of Roads reflects that of the jurisdictional source data. The accuracy is +/- 2 metres in urban areas and +/- 10 metres in rural and remote areas. Localised deviations from these accuracy metrics does occur and improvement programs are being undertaken to provide wide scale consistent data accuracy.

6.2 Coordinates Referencing the GDA2020 Datum

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

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

6.3 Road Geometry Validity

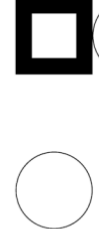
Road geometry is validated to ensure Road lines are valid in the definition of their linear representation and free of self-intersection. Issues being detected and resolved include spikes, bow ties, duplicate vertices, null geometries, multipart geometries, self-closing lines, and self-contacting lines.

6.4 Road Network Connectivity

Roads is a national roads product sourced predominantly from State and Territory scale datasets. The aggregation of isolated road networks into a single national network is focussed on providing the maximum consistency in road geometry and attribution across borders as well as ensuring the connectivity of Roads at State/Territory borders.

6.4.1 State/Territory Borders

All Roads at inland borders of States and Territories are manually reviewed for connectivity. Where disconnects in the road network were discovered and reference data exists to inform updates, then edits are applied to maintain connectivity.



6.4.2 Network Topology

Topology corrections are applied to the entire Road network. These corrections resolve issues introduced that impact the connectivity of the network and subsequently the networks applicability to any routing or journey planning activity. The specific issues detected and resolved through the topology rules are:

- **Undershoot:** An undershoot occurs where a Roads segment is disconnected at one end from the Road network and that Road end is within 1 metre of another Road end. Where these occur, the Road is extended to connect to the nearest Road within one metre.
- **Overshoot:** An overshoot occurs where a Road geometry crosses another Road geometry and ends within 1m of the other Roads feature. In these instances, the Roads are split at the intersection and are then assessed for small Roads < 1m that only connect to the network at one end, these small Roads are removed.
- **Duplicate Roads:** Where two Roads have the same geometric representation and are attributed as the same Road then one of these Roads is removed.
- **Small Isolated Geometry:** Where a Road has a length less than 100m and is not connected to the Road network at either end then this Road is not included within the Roads dataset.
- **Overlap:** When a Road has part of its geometry overlapping another Road geometry this overlap is resolved. Where the Road continues along the linear representation of another Road this overlapping segment is removed from one Road. Where a Road is snapped to a vertex on an adjoining Road not at the end but then overlaps the adjoining Road to connect to the end then this snapping location is removed to resolve the overlap.



7. Data Capture

7.1 Roads Data Sourcing

Roads provides a single national digital view of road centrelines across the entirety of Australia. Roads is continuously built through sourcing a broad range of datasets from many organisations. This data is quality assured, standardised, integrated, and topology-corrected before publication.

Road centrelines are primarily sourced from State and Territory governments and form the basis for the Roads network. Roads additional to the State and Territory provisions are digitised or integrated where reliable sources of road centrelines are identified that improves the quality and/or consistency of Roads nationally.

For attribution of Roads data sources refer to this webpage:

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

7.2 Roads Data Attribute Population

7.2.1 Data Population

Where a valid value cannot be populated for an attribute of Roads the attribute will be set as a NULL value.

7.2.2 State and Territory borders

The connectivity of all Roads has been reviewed around State and Territory borders and corrected where issues in connectivity were discovered.

7.2.3 Routes

A Road can have a State route and/or a National route assigned to it. These are represented as attributes of a Road.

7.2.4 Road Naming

Roads have attributes providing their road name, type, and suffix both in uppercase and in title case to enable labelling. Attributes `road_name`, `road_type` and `road_suffix` are all provided in uppercase. Attributes `road_name_label`, `road_type_label` and `road_suffix_label` are all provided in *title* case.

Table 4: Title case examples

Upper case road name	Title case road name label
COBRA-DAIRY CREEK	Cobra-Dairy Creek
EUCHRE VALLEY NATURE	Euchre Valley Nature
FAULKNERS NORTH	Faulkners North
GARDNER AND HOLMAN	Gardner and Holman
GORRIE/DRY	Gorrie/Dry
DICK MCKENZIE	Dick McKenzie
DON MCINTOSH	Don McIntosh
O'CONNOR	O'Connor
O'DEA	O'Dea

7.2.5 Road Direction

Allowed flow of traffic is provided in the attribute `one_way`. This attribute highlights where a road allows only one-way direction of travel or two-way direction of travel. The direction in which a vehicle can travel along a one-way road is currently not included in this product.

7.2.6 Subtypes

Bridges and tunnels are identified within the subtype attribute. Identification of the vertical relationship between two crossing roads is not currently available within the product and will be considered as a future enhancement. Where two roads cross and are considered to form a real-world junction the roads segments are split at this location.

7.2.7 Roundabouts

Roads identified with a subtype of 'ROUNDABOUT' will not be populated with a road name, type or suffix.

Each roundabout is represented by the centre line of the road segments representing the real-world roundabout. Connector segments are not provided within Roads.

7.2.8 Date Created

The date created attribute of a Road is based upon the original record creation date from the custodian of that record where this is available. Where the date of record creation is not available this date will reflect the first date when this record was supplied to PSMA and processed for inclusion into Roads.



8. Data Updates and Maintenance

8.1 Data Maintenance

Roads data is sourced and processed continuously, any changes to attribution or geometry for a Roads feature are applied to the Roads product. These include:

- When a new road feature is supplied, and it passes Roads validation rules then a new feature is created within the Roads dataset.
- When a road feature is supplied that is considered to be an existing road within the Roads dataset and it passes Roads validation rules, then if the supply contains changes to the Roads feature these are applied and the date_modified of the feature updated. If there is no change between the supplied road feature and the Roads feature no changes are applied.
- When a supply for a Road no longer provides the road or indicates the road has been removed then the corresponding Roads feature is retired from the Roads dataset.

8.2 Data Releases

Roads is released monthly through the [Online Data Delivery System](#).

8.3 Product Versioning

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

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

Therefore, Roads versioning will not increment with every data update, published releases will have a name e.g. 'June 2020' and will reference a version of the Roads product e.g. '1.1'.

9. Delivery Format

9.1 Components

Roads is a vector data product and is made available in a national supply for those formats that can store the size of data and maintain the data's spatial precision.

Vector data formats and the availability of a national file for each format is detailed in the below table.

Table 5: Supplied formats by geography of availability

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

9.1.1 ESRI Shapefile

Format name:

Shape – ESRI™

Specification:

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

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

Language:

English

9.1.2 MapInfo TAB

Format Name:

TAB – MapInfo Professional™

Specification:

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

The MapInfo TAB format is a popular geospatial vector data format for geographic information systems software. It is developed and regulated by MapInfo as a proprietary format. TAB files support geospatial standards such as Open GIS, the OGC, ISO, W3C and others.

Language:

English

9.1.3 File Geodatabase

Format name:

File Geodatabase – ESRI™

Specification:

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

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

Language:

English

9.1.4 GeoJSON

Format name:

GeoJSON

Specification:

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

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

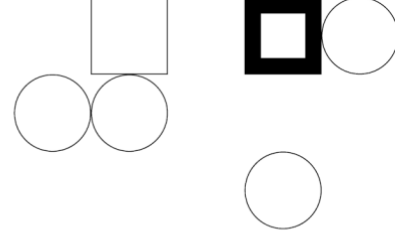
NOTE: The GeoJSON specification states that the coordinate reference system for all GeoJSON coordinates is:

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

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

Language:

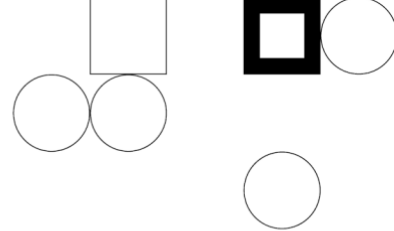
English



10. PSMA Partner Network

The value of PSMA's products is in the richness of the partner networks who have specialist skills and knowledge to provide business-ready solutions. Our network includes traditional geospatial specialists, data engineers, software developers, marketing service providers, system integrator, independent software vendors, research organisations and consultancies.

<https://geoscape.com.au/partners/>



11. Contact PSMA

Contact us to provide feedback on the Roads product or for further information on accessing Geoscape Data:

PSMA Australia Limited

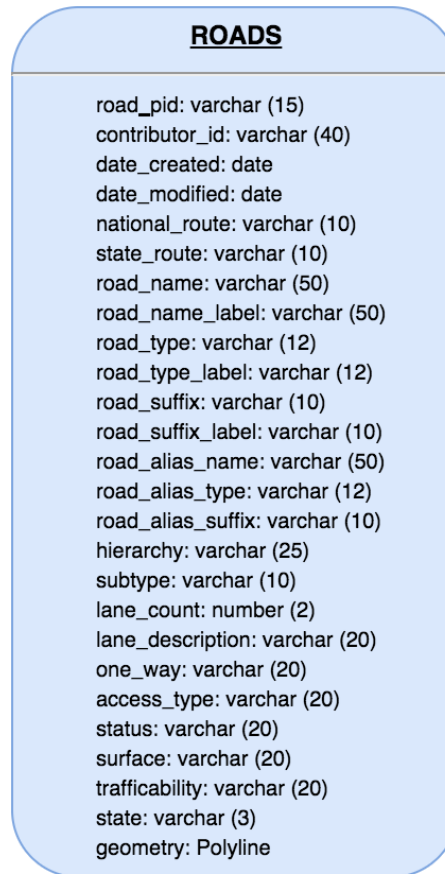
Unit 6, 113 Canberra Avenue, Griffith ACT 2603

T: 02 6260 9000

E: support@psma.com.au

W: <http://geoscape.com.au/>

Appendix A - Roads Data Model Diagram



Appendix B - Roads Data Dictionary

Table B1: Roads

Name	Data Type	Description	Primary Key	Mandatory Field	10 Character alias
road_pid	character string (15)	Persistent identifier for a Roads feature	yes	yes	road_pid
contributor_id	character string (40)	The contributor's identifier for a Roads segment	no	no	contrib_id
date_created	date (dd-mm-yyyy)	Date this record was created in the data custodian's system Where this date is not available, then the first date on which the feature was processed for inclusion within Roads	no	yes	dt_create
date_modified	date (dd-mm-yyyy)	Date this record was last updated	no	no	dt_mod
national_route	character string (10)	A route number to identify a route of National significance (e.g. C30)	no	no	nat_route
state_route	character string (10)	A route number to identify a route of State significance (e.g. A20)	no	no	sta_route
road_name	character string (50)	Name of the road (e.g. SMITH AND JOHN)	no	no	rd_name
road_name_label	character string (50)	Title Case of road_name (e.g. Smith and John)	no	no	rd_nam_lab
road_type	character string (12)	Type of road (e.g. ROAD, STREET, CIRCUIT, LANE)	no	no	rd_type
road_type_label	character string (12)	Title Case of road_type (e.g. Road, Street)	no	no	rd_typ_lab
road_suffix	character string (10)	Suffix of road (e.g. WEST)	no	no	rd_suffix
road_suffix_label	character string (10)	Title Case of road_suffix (e.g. West)	no	no	rd_suf_lab
road_alias_name	character string (50)	A secondary name of the road	no	no	rd_al_nam
road_alias_type	character string (12)	A secondary type of the road	no	no	rd_al_type
road_alias_suffix	character string (10)	A secondary suffix of the road	no	no	rd_al_suf
hierarchy	character string (25)	Hierarchy of the road (e.g. NATIONAL OR STATE HIGHWAY)	no	no	hierarchy
subtype	character string (10)	Physical type of a road (e.g. ROUNDABOUT)	no	no	subtype
lane_count	number (2)	Number of physical lanes represented as a total count	no	no	lane_count
lane_description	character string (20)	Description of the physical lane count of a road	no	no	lane_desc
one_way	character string (20)	Indicates if the road supports one-way or two-way traffic direction	no	no	one_way



Name	Data Type	Description	Primary Key	Mandatory Field	10 Character alias
access_type	character string (20)	Accessibility of road (e.g. PRIVATE)	no	no	access_typ
status	character string (20)	Lifecycle stage of a road (e.g. OPERATIONAL)	no	no	status
surface	character string (20)	Surface of the road (e.g. SEALED)	no	no	surface
trafficability	character string (20)	Indicates the minimum type of vehicle advised to traverse the road (e.g. 2WD)	no	no	trffcbl
state	character string (3)	Indicates the state that supplied the road record (e.g. NSW)	no	yes	state
geometry	polyline	Geometry of road	no	yes	geometry

Table B2: Road Types

road_type/ road_alias_type	road_type_label
ACCESS	Access
ACRE	Acre
AIRWALK	Airwalk
ALLEY	Alley
ALLEYWAY	Alleyway
AMBLE	Amble
APPROACH	Approach
ARCADE	Arcade
ARTERIAL	Arterial
ARTERY	Artery
AVENUE	Avenue
BANAN	Banan
BANK	Bank
BAY	Bay
BEACH	Beach
BEND	Bend
BOARDWALK	Boardwalk
BOULEVARD	Boulevard
BOULEVARDE	Boulevarde
BOWL	Bowl
BRACE	Brace
BRAE	Brae
BRANCH	Branch
BREAK	Break
BRETT	Brett
BRIDGE	Bridge
BROADWALK	Broadwalk
BROADWAY	Broadway
BROW	Brow
BULL	Bull
BUSWAY	Busway
BYPASS	Bypass
BYWAY	Byway
CAUSEWAY	Causeway
CENTRE	Centre
CENTREWAY	Centreway
CHASE	Chase
CIRCLE	Circle
CIRCLET	Circlet

CIRCUIT	Circuit
CIRCUS	Circus
CLOSE	Close
CLUSTER	Cluster
COLONNADE	Colonnade
COMMON	Common
COMMONS	Commons
CONCORD	Concord
CONCOURSE	Concourse
CONNECTION	Connection
COPSE	Copse
CORNER	Corner
CORSO	Corso
COURSE	Course
COURT	Court
COURTYARD	Courtyard
COVE	Cove
CRESCENT	Crescent
CREST	Crest
CRIF	Crief
CROOK	Crook
CROSS	Cross
CROSSING	Crossing
CRUISEWAY	Cruiseway
CUL-DE-SAC	Cul-De-Sac
CUT	Cut
CUTTING	Cutting
DALE	Dale
DASH	Dash
DELL	Dell
DENE	Dene
DEVIATION	Deviation
DIP	Dip
DISTRIBUTOR	Distributor
DIVIDE	Divide
DOCK	Dock
DOMAIN	Domain
DOWN	Down
DOWNNS	Downns
DRIVE	Drive
DRIVEWAY	Driveway

EASEMENT	Easement
EAST	East
EDGE	Edge
ELBOW	Elbow
END	End
ENTRANCE	Entrance
ESPLANADE	Esplanade
ESTATE	Estate
EXPRESSWAY	Expressway
EXTENSION	Extension
FAIRWAY	Fairway
FIREBREAK	Firebreak
FIRELINE	Fireline
FIRETRACK	Firetrack
FIRETRAIL	Firetrail
FLAT	Flat
FLATS	Flats
FOLLOW	Follow
FOOTWAY	Footway
FORD	Ford
FORESHORE	Foreshore
FORK	Fork
FORMATION	Formation
FREEWAY	Freeway
FRONT	Front
FRONTAGE	Frontage
GAP	Gap
GARDEN	Garden
GARDENS	Gardens
GATE	Gate
GATEWAY	Gateway
GLADE	Glade
GLEN	Glen
GRANGE	Grange
GREEN	Green
GROVE	Grove
GULLY	Gully
HARBOUR	Harbour
HAVEN	Haven
HEATH	Heath
HEIGHTS	Heights

HIGHROAD	Highroad
HIGHWAY	Highway
HIKE	Hike
HILL	Hill
HILLS	Hills
HOLLOW	Hollow
HUB	Hub
INLET	Inlet
INTERCHANGE	Interchange
ISLAND	Island
JUNCTION	Junction
KEY	Key
KEYS	Keys
KNOLL	Knoll
LADDER	Ladder
LANDING	Landing
LANE	Lane
LANEWAY	Laneway
LEAD	Lead
LEADER	Leader
LINE	Line
LINK	Link
LOOKOUT	Lookout
LOOP	Loop
LYNNE	Lynne
MALL	Mall
MANOR	Manor
MART	Mart
MAZE	Maze
MEAD	Mead
MEANDER	Meander
MEW	Mew
MEWS	Mews
MILE	Mile
MOTORWAY	Motorway
NOOK	Nook
NORTH	North
OUTLET	Outlet
OUTLOOK	Outlook
OVAL	Oval
PALMS	Palms
PARADE	Parade
PARADISE	Paradise

PARK	Park
PARKWAY	Parkway
PART	Part
PASS	Pass
PASSAGE	Passage
PATH	Path
PATHWAY	Pathway
PENINSULA	Peninsula
PIAZZA	Piazza
PLACE	Place
PLAZA	Plaza
POCKET	Pocket
POINT	Point
PORT	Port
PRECINCT	Precinct
PROMENADE	Promenade
PURSUIT	Pursuit
QUAD	Quad
QUADRANT	Quadrant
QUAY	Quay
QUAYS	Quays
RAMBLE	Ramble
RAMP	Ramp
RANGE	Range
REACH	Reach
REEF	Reef
RESERVE	Reserve
REST	Rest
RETREAT	Retreat
RETURN	Return
RIDE	Ride
RIDGE	Ridge
RIGHT OF WAY	Right Of Way
RING	Ring
RISE	Rise
RISING	Rising
RIVER	River
ROAD	Road
ROADS	Roads
ROADWAY	Roadway
ROTARY	Rotary
ROUND	Round
ROUTE	Route

ROW	Row
ROWE	Rowe
RUE	Rue
RUN	Run
SERVICEWAY	Serviceway
SHUNT	Shunt
SKYLINE	Skyline
SLOPE	Slope
SOUTH	South
SPUR	Spur
SQUARE	Square
STEPS	Steps
STRAIGHT	Straight
STRAIT	Strait
STRAND	Strand
STREET	Street
STRIP	Strip
SUBWAY	Subway
TARN	Tarn
TERRACE	Terrace
THOROUGHFARE	Thoroughfare
THROUGHWAY	Throughway
TOLLWAY	Tollway
TOP	Top
TOR	Tor
TRACK	Track
TRAIL	Trail
TRAMWAY	Tramway
TRAVERSE	Traverse
TRIANGLE	Triangle
TRUNKWAY	Trunkway
TUNNEL	Tunnel
TURN	Turn
TWIST	Twist
UNDERPASS	Underpass
VALE	Vale
VALLEY	Valley
VERGE	Verge
VIADUCT	Viaduct
VIEW	View
VIEWS	Views
VILLA	Villa
VILLAGE	Village

VILLAS	Villas
VISTA	Vista
VUE	Vue
WADE	Wade
WALK	Walk

WALKWAY	Walkway
WATERS	Waters
WATERWAY	Waterway
WAY	Way
WEST	West

WHARF	Wharf
WOOD	Wood
WOODS	Woods
WYND	Wynd
YARD	Yard

Table B3: Road Suffix

road_suffix/ road_alias_suffix	road_suffix_label
CENTRAL	Central
DEVIATION	Deviation
EAST	East
EXTENSION	Extension
INNER	Inner

LOWER	Lower
MALL	Mall
NORTH	North
NORTH EAST	North East
NORTH WEST	North West
OFF	Off
ON	On

OUTER	Outer
OVERPASS	Overpass
SOUTH	South
SOUTH EAST	South East
SOUTH WEST	South West
UPPER	Upper
WEST	West

Table B4: Hierarchy

Domain Value	Domain Value Description
NATIONAL OR STATE HIGHWAY	Roads which are of importance in a national sense, and/or are major interstate through route, principal connector roads between capitals, major regions, key towns, commercial centres or inter-transport hubs.
ARTERIAL ROAD	Well maintained and widely used roads which are major connectors for national highways or state highways, major centres, key towns, or have major tourist importance or which main function is to form the principal avenue of communication for metropolitan traffic movements.
SUB-ARTERIAL ROAD	Acts as connector between highways and/or arterial roads, or as an alternative for arterial roads, or a principal avenue for massive traffic movements.
COLLECTOR ROAD	Provides for traffic movement between sub-arterial and local roads or to distribute traffic to local street systems.
LOCAL ROAD	Local area roads, often in residential areas. Includes service roads that may share the same name as higher order roads.
ACCESS ROAD	Road designed to provide access to the rear of, into or within a property but may not necessarily be part of the public road network. Would be applied to urban service lanes, driveways or and tracks.
VEHICLE TRACK	Unimproved roads which are generally restricted to a single lane with occasional passing opportunities. These roads are influenced by seasonal and weather conditions restricting access to particular vehicle types.
BUSWAY	A road which has been dedicated as a rapid bus-only transit way. This does not include roads which have bus-only lanes.
FERRY	A route which requires a ferry to traverse a body of water. These can be both passenger and vehicular transport.

Table B5: Subtype

Domain Values	Description
ROAD	Default value. Road with ability to be addressed if required. Would include emergency crossovers.
ROUNDBABOUT	Road segment part of an intersection designed to allow smooth integration but also slow traffic. It must be circular or elliptical in design, have one-way flow, and would generally not have addresses on it.
RAMP	An access ramp to or from one road to another, to allow smooth integration of traffic. Travel flow is in one direction only, Ramps are always sealed and mostly have a single lane.

TUNNEL	An underground passage utilised by vehicular traffic to travel between point a and b quickly.
FIRE TRAIL	Primarily utilised by management vehicles and emergency services. May be open to access by the public.
BRIDGE	Structure erected over a depression or obstacle to carry traffic.
FERRY	The feature represents a ferry route.

Table B6: Lane Description

Domain Values	Description
ONE	Road has one lane in each permitted traffic direction or is a single lane road.
TWO OR MORE	Road has two or more lanes in at least one permitted traffic direction.

Table B7: One Way

Domain Values	Description
ONE WAY	Allows for traffic in one direction only.
TWO WAY	Allows for traffic in two directions.

Table B8: Access Type

Domain Values	Description
PUBLIC	Is open to the general public.
PRIVATE	May be blocked by a fence or gate.
MANAGEMENT ONLY	For management purposes only and therefore may be blocked by a fence or gate.

Table B9: Status

Domain Values	Description
OPERATIONAL	Can be used for transport.
UNDER CONSTRUCTION	Currently being built.
PROPOSED	Not yet built and may still be awaiting approval.
CLOSED	No longer used for traffic. Can include historical roads that are no longer maintained.

Table B10: Surface

Domain Values	Description
SEALED	The road has a constructed surface e.g. brick, concrete, asphalt.
UNSEALED	The surface does not have a constructed surface.

Table B11: Trafficability

Domain Values	Description
2WD	The minimum vehicle requirement recommended is a 2-wheel drive capable vehicle.
4WD	The minimum vehicle requirement recommended is a 4-wheel drive capable vehicle.

Table B12: State

Domain Values	Description
ACT	Australian Capital Territory
NSW	New South Wales
NT	Northern Territory
QLD	Queensland
SA	South Australia
TAS	Tasmania
VIC	Victoria
WA	Western Australia