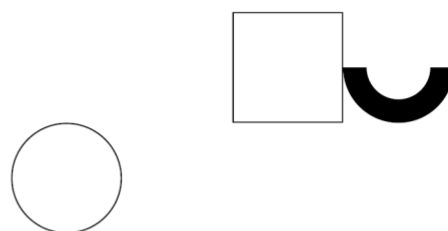
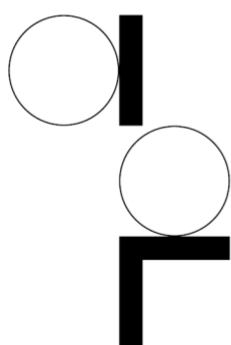
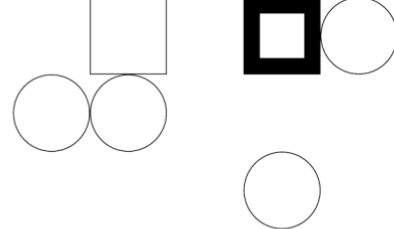


Roads

Product Description
Version 1.3





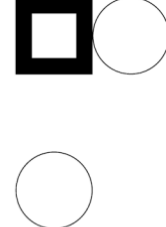
Standard

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

Disclaimer

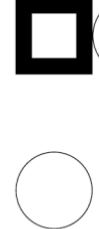
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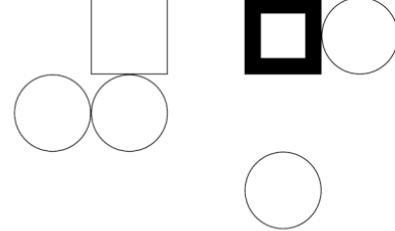


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1. Overview

1.1 Delivery Organisation - Geoscape Australia

Geoscape is the digital Australia – a comprehensive representation of our built environment. It is consistently formatted spatial data that describes the addresses, land, buildings and transport networks across Australia’s complex cities, regional centres and rural communities.

Geoscape Australia is the trading name of PSMA Australia Limited, a self-funded public company owned by the governments of Australia. 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.

We were incorporated in 2001 and tasked with collating, transforming and delivering national spatial datasets. Our establishment reflected the desire of Australian governments to work together to establish national, location information infrastructure to advance the emerging information economy. Geoscape Australia is now a trusted source of essential national location data, with a diverse ecosystem of data partners.

The value of Geoscape data is in its richness. It enables a range of innovations and applications. To support broad use of the data, it is available through online subscription services in business-ready formats, as well as customised enterprise plans. Geoscape Australia 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

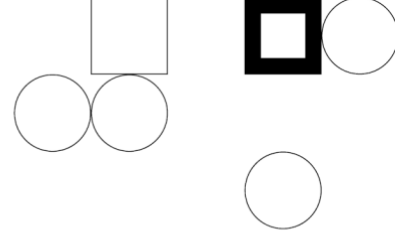
Roads Product Description

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, pedestrian and bicycle transportation on land and ferry routes that enable vehicles to cross water bodies. Roads does not include railways, tramways, driveways or passenger ferry routes.

1.4 Reference Date

March 2021



1.5 Responsible Party

PSMA Australia Limited trading as Geoscape Australia

ABN: 23 089 912 710

Unit 6, 113 Canberra Avenue, GRIFFITH ACT 2603 Australia

T: +61 2 6260 9000

E: info@geoscape.com.au

URL: www.geoscape.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

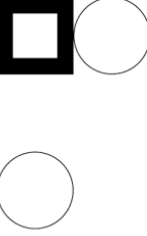
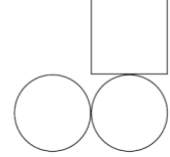
This document is available in PDF format. For other formats and use of this document, contact Geoscape Support (support@geoscape.com.au).

1.10 Copyright and disclaimer

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

1.11 Privacy

Geoscape products and services should not contain any personal or business names or other sensitive information. Geoscape undertakes reasonable data cleansing steps as part of its production processes to ensure that is the case. If you think that personal information may have inadvertently been included in Geoscape products or services, please contact support@geoscape.com.au.



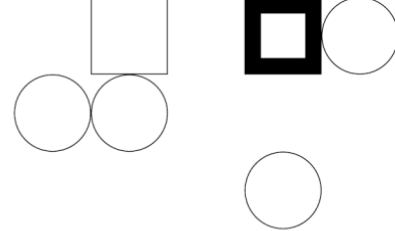
2. Specification Scope

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

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 Geoscape 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

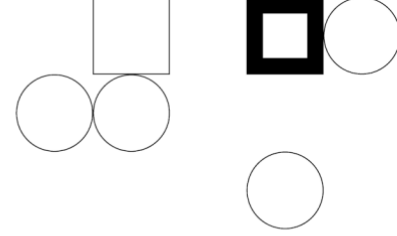
4.3.1 Feature-Based Feature Catalogue

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.

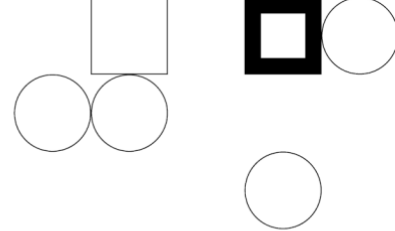
Table 3: Feature Catalogue

| 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

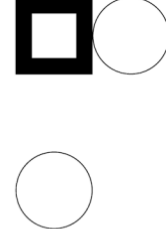
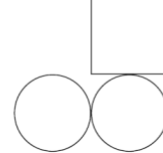
Road geometry is validated to ensure Road lines are valid in the definition of their linear representation and free of self-intersection. Issues being detected and resolved include spikes, bow ties, duplicate vertices, null geometries, multipart geometries, self-closing lines and self-contacting lines.

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

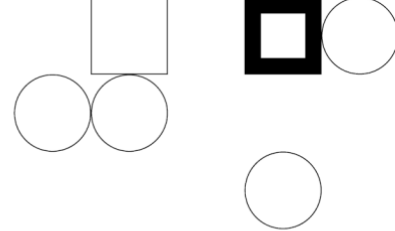
All Roads at inland borders of States and Territories are manually reviewed for connectivity. Where disconnects in the road network were discovered and reference data exists to inform updates, then edits are applied to maintain connectivity.



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:

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 provided in the attribute `travel_direction`. This attribute indicates whether a road is trafficable with or against the direction of digitisation.

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.

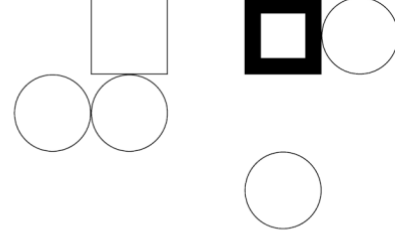
7.2.7 Roundabouts

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 Speed

The speed at which a vehicle can travel along a road is provided in the `speed` attribute. This attribute provides the posted speed limit in kilometres per hour for a section of road.



Speed has not been applied to the following road hierarchies:

- ACCESS ROAD
- VEHICLE TRACK

Speed has not been applied where the subtype is TUNNEL.

7.2.9 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 Geoscape 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:
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: tools.ietf.org/html/rfc7946

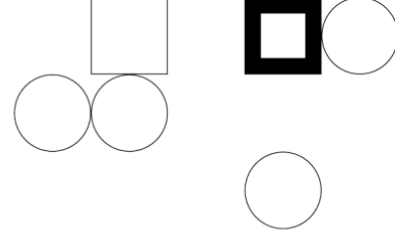
NOTE: The GeoJSON specification states that the coordinate reference system for all GeoJSON coordinates is:

"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:

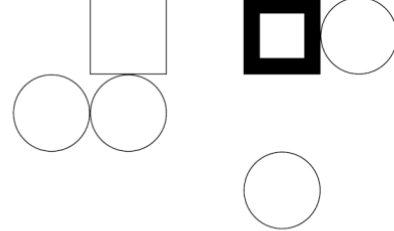
English



10. Geoscape Partner Network

The value of Geoscape'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.

geoscape.com.au/partners/



11. Contact Geoscape

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

Geoscape Australia Limited

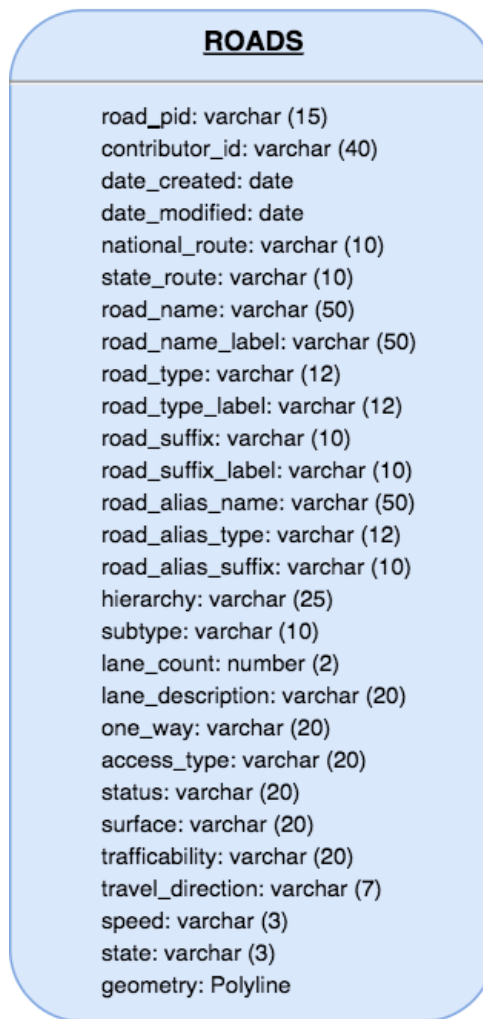
Unit 6, 113 Canberra Avenue, Griffith ACT 2603

T: 02 6260 9000

E: support@geoscape.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 |
| travel_direction | character string (7) | Direction a vehicle is allowed to travel | no | no | TRADIR |
| speed | number (3) | Posted speed limit for the section of road to which it is attributed | no | no | SPEED |
| state | character string (3) | Indicates the State or Territory abbreviation of the jurisdiction its linear geometry predominantly intersects (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_l abel |
|-------------------------------|---------------------|
| 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 |

| road_type/ road_alias_type | road_type_l abel |
|-------------------------------|---------------------|
| 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 |

| road_type/ road_alias_type | road_type_l abel |
|-------------------------------|---------------------|
| 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 |

| road_type/ road_alias_type | road_type_l abel |
|-------------------------------|---------------------|
| 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 |

| road_type/ road_alias_type | road_type_l abel |
|-------------------------------|---------------------|
| 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 |

| road_type/ road_alias_type | road_type_l abel |
|-------------------------------|---------------------|
| 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 |
| THOROUGHFA RE | 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 |

| road_type/ road_alias_type | road_type_l abel |
|-------------------------------|---------------------|
| TWIST | Twist |
| UNDERPASS | Underpass |
| VALE | Vale |
| VALLEY | Valley |
| VERGE | Verge |
| VIADUCT | Viaduct |
| VIEW | View |
| VIEWS | Views |
| VILLA | Villa |

| road_type/ road_alias_type | road_type_l abel |
|-------------------------------|---------------------|
| VILLAGE | Village |
| VILLAS | Villas |
| VISTA | Vista |
| VUE | Vue |
| WADE | Wade |
| WALK | Walk |
| WALKWAY | Walkway |
| WATERS | Waters |
| WATERWAY | Waterway |

| road_type/ road_alias_type | road_type_l abel |
|-------------------------------|---------------------|
| WAY | Way |
| WEST | West |
| WHARF | Wharf |
| WOOD | Wood |
| WOODS | Woods |
| WYND | Wynd |
| YARD | Yard |

Table B3: Road Suffix

| road_suffix/ road_alias_suff ix | road_suffix_la bel |
|---------------------------------------|-----------------------|
| CENTRAL | Central |
| DEVIATION | Deviation |
| EAST | East |
| EXTENSION | Extension |
| INNER | Inner |
| LOWER | Lower |
| MALL | Mall |

| road_suffix/ road_alias_suff ix | road_suffix_la bel |
|---------------------------------------|-----------------------|
| NORTH | North |
| NORTH EAST | North East |
| NORTH WEST | North West |
| OFF | Off |
| ON | On |
| OUTER | Outer |
| OVERPASS | Overpass |

| road_suffix/ road_alias_suff ix | road_suffix_la bel |
|---------------------------------------|-----------------------|
| 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. |
| FOOTPATH | Features that are intended for use of pedestrians. |

| Domain Value | Domain Value Description |
|--------------|--|
| CYCLEPATH | Features that are intended for bicycle transportation. |

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. |
| PATHWAY | Default value for Hierarchies of FOOTPATH or CYCLEPATH. Classification of a FOOTPATH or CYCLEPATH Hierarchy that is not classified as any of the other subtypes (e.g. BRIDGE or TUNNEL) |

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: Travel Direction

| Domain Values | Description |
|---------------|--|
| FROM TO | Traffic with the direction of digitisation. |
| TO FROM | Traffic against the direction of digitisation. |
| BOTH | Traffic can travel either direction. |

Table B13: Speed

| Domain Values | Description |
|---------------|---|
| 10 | This section of road has a speed limit of 10 km/h. |
| 20 | This section of road has a speed limit of 20 km/h. |
| 30 | This section of road has a speed limit of 30 km/h. |
| 40 | This section of road has a speed limit of 40 km/h. |
| 50 | This section of road has a speed limit of 50 km/h. |
| 60 | This section of road has a speed limit of 60 km/h. |
| 70 | This section of road has a speed limit of 70 km/h. |
| 80 | This section of road has a speed limit of 80 km/h. |
| 90 | This section of road has a speed limit of 90 km/h. |
| 100 | This section of road has a speed limit of 100 km/h. |
| 110 | This section of road has a speed limit of 110 km/h. |

Table B14: 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 |