Heavy Vehicle Network – Structures Technical Documentation

Contents

Document Control

Revision History

Version	Date	Author	Description
1	December, 2022	Liam Zylberberg	Creating initial version of document

References

Document Name	Location

1 Overview

VicRoads is committed to providing the heavy vehicle industry with up to date information on the Victorian road network. Having information available about height clearances and locations is important in ensuring the safety and productivity of all heavy vehicles in Victoria.

The Department maintains maps of Victoria's heavy vehicle networks to assist drivers of heavy vehicles to understand which roads have been approved for heavy vehicle access. Roads that have not been approved require road manager approval for access via permit, with the exception of signed detours, or if directed by an authorised officer.

This dataset contains the location and details of bridges and major culverts on freeways and arterial roads in Victoria for B-Doubles. Structure details such as bridge condition, bridge type, feature crossed, length, width, date of construction, date of last inspection and height clearance are included.

2 API Meta Data

This dataset contains the location and details of bridges and major culverts on freeways and arterial roads in Victoria for B-Doubles. Structure details such as bridge condition, bridge type, feature crossed, length, width, date of construction, date of last inspection and height clearance are included.

2.1 Brief

Resource Name: Heavy Vehicle Network – Structures

URL: https://data-exchange-api.vicroads.vic.gov.au/opendata/network/static/hvr/v1/structures

Domain: Freight

Update Frequency: Weekly (Monday Morning)

Data Format: GeoJSON

Data Type: Geospatial Data (Point)

Geographic Extent: Victoria (Declared Roads Only)

2.2 Dataset Attributes

We have produced a table below outlining each of the data Fields and Values contained within this dataset.

Table 1 Dataset Attributes

Name	Type	Definition
type	String	Fixed Value: FeatureCollection
features	Array [Feature]	Array of Feature object. Refer to Feature object details.
Feature	**Object**	**A single structure is represented as a single feature in Geo Json.**
Feature.type	String	Fixed Value: Feature
Feature.geometries	Array [Geometry]	Array of Geometry object. Refer to Geometry object details.

Name	Type	Definition
Feature.properties	Object [Property]	The properties of the structure. Refer to Property object details.
Geometry	**Object**	**The geo coordinate representation of the structure as specified by the Geo Json.**
Geometry.type	String Enumeration	LineString A linestring represents two or more geographic points that share a relationship as specified in the GeoJson spec. Point A point represents a single geographic position as specified in the GeoJson spec.
Geometry.coordinates	Array [double]	Coordinates are in x, y order (longitude, and latitude for geographic coordinates) precisely in that order and using double values. Altitude or elevation MAY be included as an optional third parameter while creating this object. Ex: when the geometry type is point 1{ 2 "type": "Point", 3 "coordinates": [100.0, 0.0] 4 } 5 Ex: when the geometry type is LineString 1{ 2 "type": "LineString", 3 "coordinates": [4 [100.0, 0.0], 5 [101.0, 1.0] 6] 7 } 8
Property	**Object**	**Properties of the structure.**
Property.source	Object [Source]	Information about the source of the structure data
Property.bridgeType	String	Structure function
Property.colloquialName	String	Alternative Structure Name
Property.colloquialName1	String	Alternative Structure Name 1
Property.colloquialName2	String	Alternative Structure Name 2
Property.featureCrossed	String	Bridge crossing information
Property.federalRoadCategory	String	Federal Road Category (i.e. National Highway, Rural Arterial, Rural Local)
Property.material	String	Structure Material (i.e. Concrete, Steel, Masonry)
Property.minClearance	String	Structure minimum clearance height (m)

Name	Type	Definition
Property.noSpans	String	Number of spans of bridge
Property.overallLength	String	Structure overall length(m)
Property.overallWidth	String	Structure overall width(m)
Property.structureFormCode	String	Structure Form (Bridge or Culvert)
Property.structureType	String	Structure Type (i.e. Precast Culvert, Super Tee Beam Bridge)
Property.trafficWidth	String	Width of structure available for traffic use(m)
Property.yearConstructed	String	Year constructed
Property.carriagewayDirection	String	Carriageway direction
Property.heightConstraint	String	Height constraint
Property.idAgencyResponsible	String	Agency Responsible
Property.dateRecentSurvey	String	Date of the latest Level 2 inspection
Property.dateSecondSurvey	String	Date of the second latest Level 2 inspection
Property.localRoadName	String	Local Road Name (if the structure is on a local road)
Property.structureStatus	String	Structure Status (Open/Disused/Under Construction/Proposed/Leased/Other)
Property.declaredRoad	String	Structure is on Declared Road
Property.undeclaredRoad	String	Structure is on Undeclared Road
Property.heightOfCell	String	Height of Cells of Culvert (m)
Property.idMaintenanceResponsible	String	Maintenance Responsible
Property.cdStateClass	String	State Road Classification (i.e. Main Road, Highway, Freeway, Tourist Road)
Property.roadName	String	Road Name
Property.roadType	String	Road type
Property.nbRoad	String	VicRoads administrative road classification number
Property.roadSuffix	String	Road Name Suffix
Property.inDivided	String	Divided or Undivided Road
Source	**Object**	**Information about the source of the structure.**
Source.sourceName	String Enumeration	Fixed value: NHVR Approved Structures
Source.sourceId	String	Source system identification of the structure.