

# Unplanned Disruptions – Road

Technical Documentation

The image features a light blue background with several overlapping geometric shapes. In the top right, there is a large yellow-green trapezoid. Below it, a smaller yellow-green triangle is partially visible. In the bottom left, there is a teal trapezoid with a darker teal triangle overlapping its top edge. The text 'Unplanned Disruptions – Road' is positioned in the upper left, and 'Technical Documentation' is centered in the upper left area.



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# Document Control

## Revision History

Version	Date	Author	Description
1	December, 2022	Liam Zylberberg	Creating initial version of document
1.1	February, 2022	Liam Zylberberg	Updated dataset attributes
1.2	April, 2023	Liam Zylberberg	Added more information to some field descriptions to clarify some details.

## References

Document Name	Location

# 1 Overview

Disruptions to the road network in Victoria affect many people as they plan and undertake their journeys. This information contains details of disruptions in near real-time on roads managed by the Victorian Department of Transport and Planning. The data includes the location and reason for the disruption along with which road it has occurred on.

The Department of Transport and Planning (DTP) wishes to improve customer experience and use of the transport network by establishing a sustainable organisation wide approach to sharing DTP data with third party data consumers (journey planning and wayfinding producers, developers, researchers, innovators, etc.).

An Application Programming Interface (API) is a way for two or more computer programs or applications to communicate with each other. APIs enable data to be transmitted between different IT systems and applications within and between organisations.

This document provides information about the Department of Transport and Planning 'Unplanned Disruptions – Road' API.

'Unplanned Disruptions – Road' includes the locations and details of unplanned disruptions, traffic alerts and tow truck allocations within the Melbourne Controlled Area (including Mornington Peninsula).

Data is collected from the Situation Report (SITREP) system managed by the Victorian Transport Operations Centre (TOC) as well as Probe, a 3rd party organisation that helps to manage tow allocations data for DTP.

## 2 API Meta Data

This dataset contains the locations and details of all unplanned road closures and traffic alerts recorded by the Department of Transport and Planning (DTP), in near real-time. Also included are tow truck allocations within the Melbourne Controlled Area (including Mornington Peninsula) which is done by the Accident Allocation Centre, managed under contract to the DTP. The records either represent a road disruption affecting either a point on a road or a length of road or tow trucks in the Melbourne Controlled Area attending an accident scene for vehicles with a gross vehicle mass less than 4 tonnes only after receiving an allocation number.

This dataset uses the GeoJSON format. For more information about the GeoJSON format, visit [geojson.org](http://geojson.org)

**NOTE:** This API endpoint has a rate limit of 6 calls per minute. Each query returns a maximum of 1000 records. To query additional data, please copy and paste the "nextPageToken" string into the nextPageToken field within the headers section. Once all records are returned then "hasMoreRecords" will be set to false.

### 2.1 Brief

**Resource Name:** Unplanned Disruptions – Road

**URL:** <https://data-exchange-api.vicroads.vic.gov.au/opendata/disruptions/v1/unplanned>

**Domain:** Disruptions (Roads)

**Update Frequency:** Every 2 minutes

**Data Format:** GeoJSON

**Data Type:** Geospatial Data (Line)

**Geographic Extent:** Victoria



## 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 objects. Refer to <b>Feature</b> object details.
<b>Feature</b>	<b>Object</b>	<b>A single road disruption event is represented as a single feature.</b>
Feature.type	String	Fixed Value: Feature
Feature.geometries	Object [GeometryCollection]	A collection of Geometry objects associated with the road disruption event. Refer to <b>GeometryCollection</b> object details.
Feature.properties	Object [Properties]	The properties of the road disruption event. Refer to <b>Properties</b> object details.
<b>GeometryCollection</b>	<b>Object</b>	<b>An object containing a collection of all the geometries for a single road disruption event.</b>
GeometryCollection.type	String	Fixed Value: GeometryCollection
GeometryCollection.geometries	Array [Geometry]	An array of Geometry objects. Refer to <b>Geometry</b> object details.
<b>Geometry</b>	<b>Object</b>	<b>A geographic representation of the road disruption event as specified by the GeoJSON specification.</b>
Geometry.type	String	One of the following: <b>LineString</b> <i>A linestring represents two or more geographic points that share a relationship as specified in the GeoJSON specification.</i> <b>Point</b> <i>A point represents a single geographic position as specified in the GeoJSON specification.</i>
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 <pre>1{ 2  "type": "Point", 3  "coordinates": [100.0, 0.0] 4 }</pre> Ex: when the geometry type is LineString <pre>1{ 2  "type": "LineString",</pre>



Name	Type	Definition
		<pre> 3   "coordinates": [ 4     [100.0, 0.0], 5     [101.0, 1.0] 6   ] 7   }</pre>
<b>Properties</b>	<b>Object</b>	<b>Properties of a road disruption event.</b>
Properties.id	String	[DisruptionType]:[SourceName]:[SourceId] Is an unique identifier for the road disruption event.
Properties.source	Object [Source]	An object that describes the information source. <i>Refer to <b>Source</b> object details.</i>
Properties.status	String	One of the following: <b>Pending</b> <i>Indicates that planned road disruption is currently not active.</i> <b>Active</b> <i>Indicates that planned road disruption is currently active and traffic management and changed road conditions may apply.</i>
Properties.eventType	String	One of the following: <b>Roadworks</b> <i>Indicates that the planned road disruption is roadwork or maintenance related.</i> <b>Special event</b> <i>Indicates that the planned road disruption is not roadwork or maintenance related.</i>
Properties.eventSubtype	String	The secondary type for this event, describes the event further. One of the following: <b>N/A</b> <i>When the event subtype is not definitive.</i> <b>Planned roadworks</b> <i>When planned road events event type is "Roadworks".</i>
Properties.closedRoadName	String	Name of the closed or impacted road.
Properties.declaredRoadName	String	Name of the road if it is a declared road. In some cases this name may be different than the local road name. May be blank or null.
Properties.declaredRoadNumber	String	VicRoads administrative road classification number. Possible values include: 2000-2999 (Freeway & State Highways) / 3000- 3999 (Forest roads) / 4000-4999 (Tourist roads) / 5000-5999 (Main Roads) / 9999 (Local Roads)
Properties.declaredRoadDirection	String	Indicates the road direction of the declared road affected by the disruption, relative to the nearest intersections. Possible values include:



Name	Type	Definition
		<p><b>Forward</b>  <i>The unplanned disruption occurs in the direction of travel when travelling from the start intersection to the end intersection.</i></p> <p><b>Reverse</b>  <i>The unplanned disruption occurs in the direction of travel when travelling from the end intersection to the start intersection.</i></p>
Properties.startIntersectionRoadName	String	Name of the road at the start intersection.
Properties.startIntersectionDistance	String	The distance (in metres) from the start intersection to the road disruption.
Properties.startIntersectionDirection	String	The direction towards the road disruption from the start intersection. Possible values include: North, NorthEast, East, SouthEast, South, SouthWest, West, NorthWest
Properties.startIntersectionLocality	String	Local suburb at the start intersection.
Properties.endIntersectionRoadName	String	Name of the road at the end intersection.
Properties.endIntersectionDistance	String	The distance (in metres) from the end intersection to the road disruption.
Properties.endIntersectionDirection	String	The direction towards the road disruption from the end intersection. Possible values include: North, NorthEast, East, SouthEast, South, SouthWest, West, NorthWest
Properties.endIntersectionLocality	String	Local suburb at the end intersection.
Properties.localGovernmentArea	String	Local government area where the impacted road belongs to.
Properties.srns	String	Statewide Route Numbering System (SRNS class). Possible values include: One of M, A, B or C representing the route classification + 1, 2 or 3 digit integer representing the route number (e.g. A123). May be blank or null.
Properties.sesRegion	String	Emergency services (SES) region. Possible values include: 'MELBOURNE METROPOLITAN (CENTRAL)', 'GIPPSLAND (EAST)', 'GRAMPIANS (MID WEST)', 'HUME (NORTH EAST)', 'LODDON MALLEE (NORTH WEST)', 'BARWON (SOUTH WEST)' May be blank or null.
Properties.closedRoadVICRoadsRegion	String	VicRoads administrative region. Possible values include: NORTHERN, NORTH EASTERN, EASTERN, METRO SOUTH EAST, METRO NORTH WEST, SOUTH WESTERN, WESTERN



Name	Type	Definition
		If a road disruption takes place over multiple regions, multiple values will be listed.
Properties.closedRoadTramRoute	String	A list of tram routes affected by the road disruption. May be empty or null.
Properties.closedRoadBusRoute	String	A list of bus routes affected by the road disruption. May be empty or null.
Properties.rmaClass	String	Road Management Act class for the closed or impacted road. Possible values include: (FW) Freeway, (AH) Arterial - Highway, (AO) Arterial - Other, (MU) Municipal, (NR) Non-Arterial State Road, (RO) Road - Other
Properties.impact	Object [Impact]	Information about the impact of the disruption event. <i>Refer to <b>Impact</b> object details.</i>
Properties.description	String	A short description outlining information specific to this event. For example, the name of the event and a short impact indication.
Properties.melway	String	Grid reference for the location of the road disruption in the Melway street directory.
Properties.vcsd	String	Grid reference for the location of the road disruption in the VicRoads Country State Directory (VCS D)
Properties.midPointLat	String	Latitude coordinate for a point in the centre of the road disruption location.
Properties.midPointLong	String	Longitude coordinate for a point in the centre of the road disruption location.
Properties.created	String	The date time this event was created in the system. ISO 8601 time string, Victorian local time. Format: [YYYY]-[MM]-[DD]T[HH]:[MM]:[SS]
Properties.lastUpdated	ISO Date Timestamp	The date time this event was last updated in the system. ISO 8601 time string, Victorian local time. Format: [YYYY]-[MM]-[DD]T[HH]:[MM]:[SS]
Properties.dtPublishUntil	String	The date time that this road disruption will stop being displayed to the public, if applicable. ISO 8601 time string, Victorian local time. Format: [YYYY]-[MM]-[DD]T[HH]:[MM]:[SS] If no date time is set, the value will be '2000-01-01T00:00:00'.
Properties.dtLastLnUpdate	String	The date time the road disruption record was last updated in the system. ISO 8601 time string, Victorian local time. Format: [YYYY]-[MM]-[DD]T[HH]:[MM]:[SS]





Name	Type	Definition
Properties.incidentPublish	String	Whether this road disruption record should be displayed to the public. Value will always be set to 'true'.
<b>Source</b>	<b>Object</b>	<b>Information about the source of the disruption event.</b>
Source.sourceName	String	Name of the source system where the disruption is recorded. Possible values: Sitreps, Tow Allocations
Source.sourceId	String	Source system ID of the road disruption.
<b>Impact</b>	<b>Object</b>	<b>Information about the impact of the disruption event.</b>
Impact.direction	String	Always one of the following Northbound, Southbound, Eastbound, Westbound, Inbound, Outbound, Both directions, All direction, Unknown
Impact.impactType	String	Always one of the following: N/A, Closures, Lanes affected, Lanes blocked, Road restricted, No blockage