

# Planned Disruptions – Road

Technical Documentation

The image features a light blue background with several overlapping geometric shapes. In the upper right, there is a large yellow-green triangle pointing upwards. Below it, a smaller yellow-green triangle points downwards. In the lower left, there is a teal triangle pointing upwards, with a darker teal triangle below it. The text 'Planned Disruptions – Road' is positioned in the top left, and 'Technical Documentation' is centered in the middle left.



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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, 2023	Liam Zylberberg	Added additional fields for heavy vehicle operators
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 'Planned Disruptions – Road' API.

'Planned Disruptions – Road' includes the locations and details of planned disruptions in near real-time on freeways and arterial roads managed by the Department of Transport and Planning.

## 2 API Meta Data

This dataset contains the locations and details of planned disruptions in near real-time on roads managed by the Victorian Department of Transport and Planning (DTP). The data includes (where available) the location of the disruption, road name, type of works being undertaken, which travel direction it affects, what time of the day works will be undertaken, how many lanes may be affected, how long the delay may be and other supporting information.

In accordance with the Road Management Act, the DTP is the coordinating road authority for all the arterial roads and freeways that are not privately owned in Victoria. For any works on, or that may affect, the road network, the DTP must manage the disruption in order to protect the community and help people continue on their journey.

The dataset is assessed to be of a very good quality. The data is captured in a consistent and timely manner by the Permits Team in the DTP. The data is validated prior to release and maintained over time as new information is received.

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 10 calls per minute and caching time of 10 minutes. 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:** Planned Disruptions – Road

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

**Domain:** Disruptions (Roads)

**Update Frequency:** Hourly

**Data Format:** GeoJSON

**Data Type:** Geospatial Data (Line and 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 objects. <i>Refer to <b>Feature</b> object details.</i>
<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.geometry	Object [GeometryCollection]	A collection of Geometry objects associated with the road disruption event. <i>Refer to <b>GeometryCollection</b> object details.</i>
Feature.properties	Object [Properties]	The properties of the road disruption event. <i>Refer to <b>Properties</b> object details.</i>
<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. <i>Refer to <b>Geometry</b> object details.</i>
<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 the 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.closedRoadName	String	Name of the closed or impacted road.
Properties.startIntersectionRoadName	String	Name of the road at the closest intersection to the beginning of the road disruption.
Properties.startIntersectionLocality	String	Local suburb at the closest intersection to the beginning of the road disruption.
Properties.endIntersectionRoadName	String	Name of the road at the closest intersection to the end of the road disruption.
Properties.endIntersectionLocality	String	Local suburb at the closest intersection to the end of the road disruption.
Properties.localGovernmentArea	String	Local government area that 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.rmaClass	String	Road Management Act class for the closed or impacted road. Possible values include: (FW) Freeway, (AH) Arterial - Highway, (AO) Arterial -



Name	Type	Definition
		Other, (MU) Municipal, (NR) Non-Arterial State Road, (RO) Road - Other
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 event subtype is not definitive.</i> <b>Planned roadworks</b> <i>When planned road events event type is "Roadworks"</i>
Properties.eventDueTo	String	The cause of the road disruption. Possible values include: 'Sporting/social event', 'Improvement Projects', 'ITS (Intelligent Transport Systems)', 'Road construction', 'Road maintenance', 'Public Transport Works', 'Road Construction Works', 'Road Maintenance Works', 'Building / 3rd Party Works', 'WGTP (West Gate Tunnel Project)', 'LXRP (Level Crossing Removal Project)', 'Metro Tunnel Project', 'Metro Assets (Roads, Roadside etc.)', 'Road Safety Camera Works', 'Safer Roads (Safe System Road Infrastructure Program)', 'Utility Works', 'WRU (Western Roads Upgrade)', 'Other DoT Works'
Properties.impact	Object [Impact]	Information about the impact of the disruption event. <i>Refer to <b>Impact</b> object details.</i>
Properties.duration	Object [Duration]	Information about the duration of the disruption event. <i>Refer to <b>Duration</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.lastUpdated	String	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.safeLaneWidth	Integer	The minimum width of a lane which a vehicle must be able to fit through to pass through the disrupted lane or road (in metres).
Properties.heightRestrictions	Integer	The maximum safe height of a vehicle which may pass through the disrupted lane or road (in metres).
Properties.intersectionImpacts	String	A comment describing the impact to intersections caused by this disruption.
Properties.suitableDetourInfo	String	A web link to the route of a suitable detour in Google Maps.



Name	Type	Definition
Properties.heavyContactInfo	String	Contact person for heavy vehicle operators.
<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 include: OneView, RWE, MTIA
Source.sourceId	String	Source system ID for 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
Impact.delay	String	Delay expected in the form of an approximate time range (e.g. '6 to 8 minutes').
Impact.numberLanesImpacted	String	Number of lanes impacted due to the road disruption.
Impact.speedLimitOnsite	String	Speed limit on-site you are expected to obey during the disruption.
<b>Duration</b>	<b>Object</b>	<b>Information about the duration of the disruption event.</b>
Duration.start	String	The date and time this event starts. ISO 8601 time string, Victorian local time. Format: [YYYY]-[MM]-[DD]T[HH]:[MM]:[SS]
Duration.end	String	The date and time this event stops. ISO 8601 time string, Victorian local time. Format: [YYYY]-[MM]-[DD]T[HH]:[MM]:[SS]
Duration.recurrences	Array [Recurrence]	An array of Recurrence objects. May be null or empty. <i>See <b>Recurrence</b> object details.</i>
<b>Recurrence</b>	<b>Object</b>	<b>Information about recurrences of the disruption event, if applicable.</b>
Recurrence[n].startDay	String	The day of week that the recurrence starts. Possible Values include: Monday, Tuesday, Wednesday, Thursday, Friday, Saturday, Sunday
Recurrence[n].daysDuration	Integer	The number of days of the recurrence. Values can range from 1 to 7, 1 meaning a single day, 7 all week.
Recurrence[n].startTime	String	ISO 8601 time string based on Victorian local time. Format: [HH]:[MM]





Name	Type	Definition
Recurrence[n].duration	String	ISO 8601 duration string. Hours and minutes. Duration can't be more than 24 hours. The string format must conform to the W3C XML Schema Part 2: Datatypes recommendation for duration. Format: PT[HH]H or PT[HH]H[MM]M
Recurrence[n].allDay	Boolean	Set to true if impact is for the entire day. <i>startTime</i> and <i>duration</i> are invalid if this is true.

## 2.3 Disruption Record Processing Workflow

The following diagram shows the workflow of a disruption record process. 'TM on' means that Traffic Management is in effect for the road disruption event. 'TM off' means that Traffic Management is no longer active for the road disruption event. This is used to determine the value of the 'Properties.status' field:

