Live Traffic NSW

Developer Guide

transport.nsw.gov.au

August 2025

Acknowledgement of Country

Transport for NSW acknowledges the traditional custodians of the land on which we work and live.

We pay our respects to Elders past and present and celebrate the diversity of Aboriginal people and their ongoing cultures and connections to the lands and waters of NSW.

Many of the transport routes we use today – from rail lines, to roads, to water crossings – follow the traditional Songlines, trade routes and ceremonial paths in Country that our nation's First Peoples followed for tens of thousands of years.

Transport for NSW is committed to honouring Aboriginal peoples' cultural and spiritual connections to the lands, waters and seas and their rich contribution to society.



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Versions

Version	Amendment notes
1.0	Original version released in 2012
1.1	Deprecated properties subCategoryB, ubdRef, roadClosureUrl, and specialEventClearwaysUrl. Added new property publicTransport. Extended properties arrangementAttachments and arrangementElements from Major Events to all hazard types. Replaced attendingGroups value of "Heavy tow truck" with "Transport Operator"
1.2	Deleted properties ubdRef, roadClosureUrl, and specialEventClearwaysUrl. Added new property incidentKind. Updated descriptions for properties mainCategory, subCategoryA and isNewIncident. Added references to the new M2 travel time JSON file.
1.3	Updated document to reflect the move from livetraffic.rta.nsw.gov.au to data.livetraffic.com. See "Appendix A: Changes since version 1.0" for details of the changes to create version 1.4
1.4	Deleted Travel Times
1.5	Updated references from HTTP to HTTPS
1.6	Inclusion of new fields: expectedDelay, adviceC, geometry collections (Point, Polygon)
1.7	Introduction of new files: Iga-incident.json and Iga-participation.json
1.8	Passing polyline directional information to the json files, for both single and both directions. Incident category icon field added. Introduction of new field on whether the incident is on a Local Road or State Road.
1.9	Formatted for Transport for NSW Open Data Hub
1.10	New field introduced hideEndDate controls the visibility and formatting of the 'Planned To' date for planned incidents on the Live Traffic front-end

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1. Definitions

Term	Definition
TfNSW	Transport for NSW
Transport for NSW	Transport Management Centre

2. Introduction

2.1. Purpose

This document describes the format and interpretation of data files made available to developers via the Live Traffic NSW web site and apps.

2.2. Scope

Data used by the Live Traffic NSW web site and apps is available as a set of plain text GeoJSON files over HTTP, from various subdirectories of api.transport.nsw.gov.au/v1/live/. The GeoJSON format is described at http://www.geojson.org.

The data files fall into two broad categories:

1. Traffic hazards:

There are 7 types of traffic hazard separated into two categories, 'planned' and 'unplanned'. The hazards that fall under the 'unplanned' category are:

- Incident
- Fire
- Flood
- Alpine

The hazards under the 'planned' category are:

- Major Event
- Roadwork

2. Live traffic cameras:

There is a single GeoJSON file containing metadata about the traffic cameras whose images appear on the Live Traffic NSW website and apps. The metadata for each camera specifies the URL of the actual camera image.

Each of these categories is covered in a separate section of this document.

3. Traffic Hazards

3.1. Details

Traffic Hazards are divided into seven basic types:

- Incidents
- Fire
- Flood
- Alpine conditions
- Major Events
- Roadworks
- Local roads (containing a combination of the above six types)

For the purposes of this document, Major Events and Roadworks may be termed "Planned Hazards" and the other four hazard types as "Unplanned Hazards". Planned hazards are scheduled in advance of their occurrence. Unplanned hazards occur spontaneously because of circumstances. Local roads contain a combination of Planned and Unplanned hazards.

Planned hazards are displayed in two different ways on the Live Traffic NSW website and apps, depending on whether those plans currently have an impact on the road network or not. Major Events and Roadworks

whose impactingNetwork property has the value true are marked with 🚺 and 🤒 respectively.

to indicate a

Roadworks whose ${\tt impactingNetwork}$ property has the value ${\tt false}$ are marked with low impact roadwork.

There are three GeoJSON files produced for each type of hazard. Each file contains hazards of the same type.

Hazard	Open	Closed	Open & Closed
Alpine	alpine-open.json	alpine-closed.json	alpine.json
Fire	fire-open.json	fire-closed.json	fire.json
Flood	flood-open.json	flood-closed.json	flood.json
Incident	incident-open.json	incident-closed.json	incident.json
Major Events	majorevent-open.json	majorevent-closed.json	majorevent.json
Roadworks	roadwork-open.json	roadwork-closed.json	roadwork.json
Local roads	/regional/lga- incidents.json	/regional/lga-incidents- open.json	/regional/lga- incidents-closed.json

Table 1 GeoJSON files published for each type of hazard

GeoJSON files whose name ends in -open contain:

- Unplanned hazards that are currently having an impact on the road network
- Planned hazards whose scheduled period of operation has not yet concluded

GeoJSON files whose name ends in -closed contain:

- Unplanned hazards that are no longer having an impact on the road network
- Planned hazards whose scheduled period of operation has concluded

GeoJSON files not ending in -open or -closed:

Contain the union of the hazards in the corresponding -open and -closed files.

All the above JSON files have a base URL of https://api.transport.nsw.gov.au/v1/live/hazards/.

The json files are updated whenever a hazard they contain changes in some way. Do not expect them to all be updated at once or with some minimum frequency.

Note that the GeoJSON data files are generally not pretty-printed, having all their data on a single line of text. To make them more human readable, use an online JSON formatter.

Note: GeoJSON samples in this document have been pretty printed to increase readability.

Also note that at the present time, the hazard data files include many empty or null property values, such as:

- Empty arrays: e.g. "webLinks":[]
- Empty strings: e.g. "quadrant":""
- Whitespace-only strings: e.g. "subCategoryB":"

- Arrays with empty elements: e.g. "attendingGroups":[""]
- Null values e.g. "end":null

They have been removed from examples presented in this document, for brevity and clarity.

3.2. File Structure

All hazard data files conform to the same basic GeoJSON format, as follows:

```
"type": "FeatureCollection",
   "rights": {
        "copyright": String,
        "licence": String
},
   "layerName": String,
   "lastPublished": Number,
   "features": [ { Feature object } ]
```

Each hazard file contains exactly one GeoJSON FeatureCollection object, which aggregates zero or more Feature objects. Properties of that FeatureCollection object are described in the following table.

Property	Туре	Description		
features	[Object]	Array of Feature objects where each Feature object corresponds to a traffic hazard. All the traffic hazards are of the same type, which is identified by the layerName property. The ordering of Feature objects within the array is undefined.		
lastPublished	Number	When a new version of this file was last published to the Live Traffic web server, as a number of milliseconds since January 1, 1970 00:00:00 GMT (Unix Epoch). This corresponds approximately to the timestamp on the file.		
layerName	String	<pre>Type of hazard that appears in this file. Possible values are: Incident Fire Flood Alpine RoadWork MajorEvent LGA</pre>		
rights	Object	Copyright and licensing details for the data in this file		
type	String	Always "FeatureCollection", as per the GeoJSON standard.		

Table 2 Feature collection properties

3.3. Feature Structure

Each Feature in the file represents a traffic hazard, and has the following general format:

```
{
  "type": "Feature",
  "id": Number,
  "geometry": { Geometry object },
  "properties": { Properties object }
}
```

Properties of the Feature object are described in the following table.

Property Type		Description		
geometry	Object	See feature geometry below for details.		
id	Number	Uniquely identifies this hazard from all other hazards in the same layer (see layerName above).		
properties	Object	See Feature properties below for details		
type	String	Always 'Feature', as per the GeoJSON standard		

Table 3 Feature properties

3.3.1. Feature Geometry

Each Feature in the file has a mandatory single geometry property with the following general format:

```
"geometry": {
    "type": "Point",
    "coordinates": [ Number, Number ]
}
```

Each hazard's <code>geometry</code> property defines the geographic coordinate at which it occurs. Map markers are placed at this point. Note that any polylines associated with a feature are not considered part of its <code>GeoJSON</code> geometry, and are defined in the <code>encodedPolylines</code> property.

Property	Туре	Description			
coordinates	[Number]	The primary geographic point at which the hazard occurs. In the case of hazards that cover a broad area, this point is set to the approximate centroid of the area. This array always contains two numeric elements. The first element is a latitude in decimal degrees, the second element is a longitude in decimal degrees. Both values are expressed in the WGS84 coordinate system.			
type	String	Always "POINT", as per the GeoJSON standard			

Table 4 Feature Geometry properties

Each Feature in the file may have multiple additional geometry properties including secondary map markers and polygons, with the following general format:

```
"collections": [
  {
      "type": "Point",
      "coordinates": [
          Number,
          Number
     ]
  },
       "type": "Polygon",
      "coordinates": [
          [
                  Number,
                  Number
              ],
                  Number,
                  Number
              ],
                  Number,
                  Number
              ]
```

3.3.2. Feature Properties

The bulk of a traffic hazard's description is contained within the "properties" part of the Feature. The properties which can appear here are described in the following table. Some properties are only relevant to hazards from particular layers.

Property	Туре	Layers	Description
additionalInfo	[String]	All	Circumstantial information that supplements what appears in e.g. "Site cleared", "Persons trapped"
adviceA	String	All	The first standard piece of advice to motorists. At the present time, the following values are possible:
			 Allow extra travel time Avoid the area Check signage Delay journey Exercise caution Expect delays Police directing traffic Reduce speed Reduced speed limit Snow chains required Stay away Turn around, go back Use alternative route Use diversions Use public transport

			 Never drive through Floodwater Vehicle salvage in progress Plan your journey
adviceB	String	All	The second standard piece of advice to motorists. The possible values for adviceB are the same as the possible values for adviceA, however adviceB and adviceA cannot have the same values.
advice	String	All	The third standard piece of advice to motorists. The possible values for adviceC are the same as the possible values for adviceA and adviceB, however they cannot have the same values.
arrangementAttachments	[Object]	All	Hazards can have PDF documents associated with them, containing maps pertaining to the event. Each PDF document corresponds to an Arrangement Attachment object. The Live Traffic NSW website and apps displays these attachments in the same order in which they appear in the arrangementAttachments array, in a section whose title is always "Attachments". The "Attachments" titled section always appears after any titled sections specified by the arrangementElements property. See the "Error! Reference source not found." section below for details.
arrangementElements	[Object]	All	Hazards can have a large amount of descriptive information associated with them. To aid readability, this information can be broken down into titled sections. Each titled section corresponds to an Arrangement Element object. Example section titles include "Road Closures", "Special Event Clearways" and "Other Information". The Live Traffic NSW website and apps displays these sections in the same order in which the elements appear in the arrangementElements array. See the "Error! Reference source not found." section below for details.
attendingGroups	[String]	All	An array of strings, each one being the name of a group that is attending the scene of the traffic hazard. At the time of writing, the following values are possible:

			 Emergency Services Transport for NSW Tow Truck Motorway Crew Utility Company Local Council Rural Fire Service Helicopter Heavy Vehicle Inspectors Heavy Vehicle Tow Truck Crash Investigation Unit Mechanic Roadside Assistance There may be additional, free-form values entered by our staff.
created	Number	All	Date and time at which a record of the hazard was created in our internal tracking system, as a number of milliseconds since January 1, 1970 00:00:00 GMT. This property is a counterpart to the ended property.
displayName	String	All	Describes the particulars of a hazard. The description generally begins with a general hazard category in upper case, followed by details in lower case e.g. "ACCIDENT Two cars", "HAZARD Fallen tree". The displayName is incorporated into headings in both the Map View and Text View of the Live Traffic NSW website and apps.
diversions	String	All	Summary of any traffic diversions in place. The text may contain HTML markup.
duration	String	Planned	Planned duration of the hazard. This property is rarely used.
encodedPolylines	[Object]	All	A hazard may have zero or more polylines associated with it, representing stretches of road affected by the hazard. Rather than capture the polylines as a raw series of coordinates, that series is encoded into a string of printable characters. Each element of the array is an <code>Encoded Polyline</code> object associated with this hazard. The order of the polylines in the <code>encodedPolylines</code> array is undefined. The polylines need not be contiguous. See the "Error! Reference source not found." section below for details.

end	Number	Planned	Date on which a planned hazard is scheduled to end, as a number of milliseconds since January 1, 1970 00:00:00 GMT. This property is a counterpart to the start property.
ended	Boolean	All	true if the hazard has ended, otherwise false. Once ended, the hazard's record in our internal tracking system is closed and further modification becomes impossible unless the record is later re-opened. This property is a counterpart to the created property. When true, the lastUpdated property of the hazard will be the date/time when the hazard's record in the tracking system was closed.
expectedDelay	Number	All	The value is a numeric representation of expected delay in minutes. A value of 0 or -1 indicates that there is no delay information available. It is rarely used.
Headline	String	All	A one-line summary of the hazard, including its type, location and other high level details. The headline text of major hazards appears in the yellow "Major Incident Ticker" above the map in Map View.
hideEndDate	Boolean	Planned	Controls the visibility and formatting of the 'Planned To' date for planned incidents on the Live Traffic NSW front-end. When hideEndDate is true: 1. The 'Planned To' (end) date will be hidden from the front-end display. 2. The date string will be prefixed with "From", e.g., "From Fri 6 Jun 2025". When hideEndDate is false: • Both the 'Planned From' (start) and 'Planned To' (end) dates will be shown as a full date range, e.g., "Fri 6 Jun 2025 to Sun 8 Jun 2025".
impactingNetwork	Boolean	All	True if the hazard is currently having some impact on traffic on the road network.
incidentKind	String	All	Identifies the hazard as either Planned or Unplanned. The values for this property include: • Planned • Unplanned A Planned hazard must have the properties: start and end. And optionally the properties: duration and periods. An Unplanned hazard will not contain these properties.

isInitialReport	Boolean	Unplanned	True if the hazard has been reported to Transport for NSW but some details are unconfirmed.
isMajor	Boolean	All	True if this hazard is regarded as having a particularly significant impact on the road network. The headline text of hazards with an isMajor value of true appear in the red "Major Hazard Ticker on Live Traffic NSW.
isNewIncident	Boolean	All	True if the hazard is new.
lastUpdated	Number	All	When the data for this hazard was last updated by our staff, as a number of milliseconds since January 1, 1970 00:00:00 GMT
mainCategory	String	All	The broad hazard category description assigned to the hazard by Transport for NSW. Used internally by Transport for NSW or reporting hazard statistics. Please note the values used by this property are subject to change and should not be relied upon.
media	[Object]	All	Unused
otherAdvice	String	All	Free form text containing advice to motorists, to supplement the standard advice conveyed in the adviceA and adviceB properties. This text may contain HTML markup.
periods	[Object]	Planned	Array of Period objects, each being a planned period of operation within which the road network will potentially be impacted. Each Period represents a series of consecutive days over which the same operating times apply. The order of elements in the periods array is undefined. See the "Error! Reference source not found." section below for details.
publicTransport	String	All	Free form text containing information about the public transport impact of this hazard. This text may contain HTML markup.
queueLength	Number	All	Approximate length of traffic queue, in kilometres.
roads	[Object]	All	Array of Road objects, each being a road that is impacted by this hazard. See the "Error! Reference source not found." section below for details.

speedLimit	Number	All	A special, restricted speed limit in km/h which is in force around this hazard. A value of 0 or -1 indicates that there is no such restriction in force. This field will only contain a value greater than 0 if adviceA adviceB or adviceC equals "Reduced speed limit".
start	Number	Planned	The date on which a planned hazard is scheduled to begin, as a number of milliseconds since 1970-01-01 00:00:000 (YYYY-MM-DD hh:mm:ss:nnn). This property is a counterpart to the end property.
subCategoryA	String	All	An optional refining hazard description for the assigned mainCategory. Used internally by Transport for NSW for reporting hazard statistics. Please note the values used by this property are subject to change and should not be relied upon.
subCategoryB	String	All	Unused.
webLinkName	String	All	Unused.
webLinks	[Object]	All	Array of WebLink objects in the order in which they should appear, top to bottom. Each WebLink represents a hyperlink to an external web site that provides information pertaining to the hazard. See the "Web Link" section below for details.
webLinkUrl			Unused.
orgName	String	lga- incidents	Name of the council
orgWebsite	String	lga- incidents	Website of the council
orgContact	String	lga- incidents	Contact number for the council

Table 5 Feature properties

The following sections describe each of the Object types referenced in the table above.

3.3.3. Arrangement Attachment

The following example illustrates how an Arrangement Attachment object is represented in the Text View of the Live Traffic NSW website and apps.

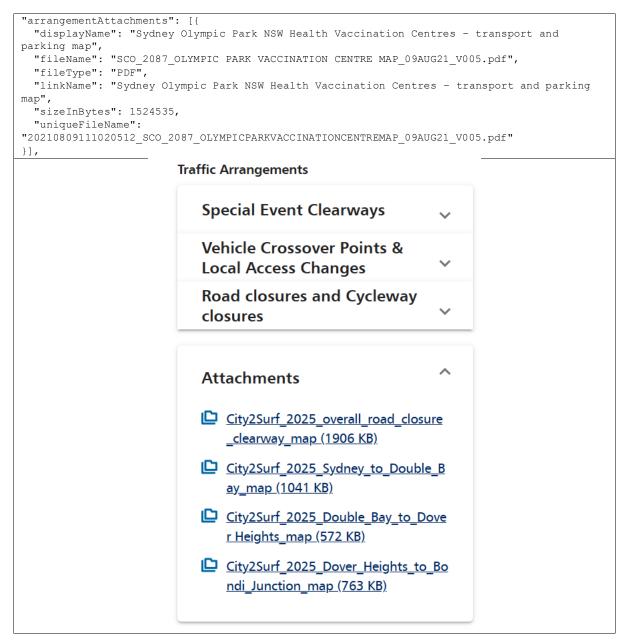


Table 6 Arrangement Attachment Example

Attachments are stored in the directory http://data.livetraffic.com/traffic/attach. Append the uniqueFileName to this base URL to get the complete URL of the document. The document will only be present in that directory so long as the associated hazard is open.

Note that revisions to an attachment document result in a new value for uniqueFileName.

|--|

displayName	string	Unused
fileName	String	Name the document originally had when first uploaded to our internal tracking system.
fileType	String	Code for the document type.
linkName	String	Text of the hyperlink to the document
sizeInBytes	Number	Size of the document file in bytes
uniqueFileName	String	Name of the document including an automatically generated suffix which ensures uniqueness amongst all attachments.

Table 7 Arrangement Attachment properties

3.3.4. Arrangement Element

The following example illustrates how an Arrangement Attachment object is represented in the Text View of the Live Traffic NSW website.

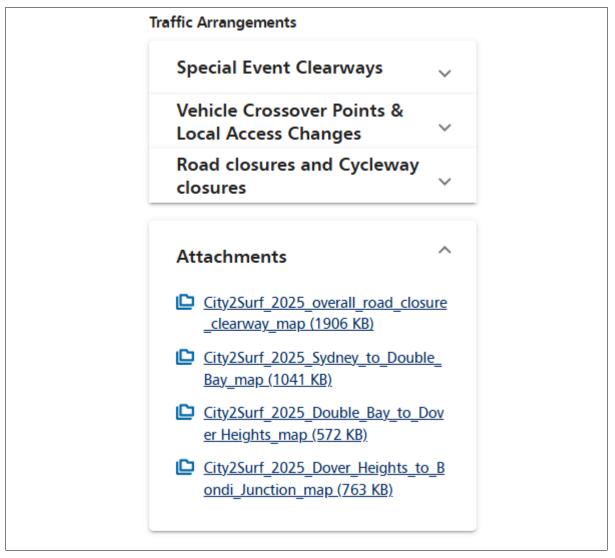


Table 8 Arrangement Element Example

Properties of an Arrangement Element object are as follows:

Property	Туре	Description
html	string	HTML content of the element
title	String	The title of the element

Table 9 Arrangement Element properties

3.3.5. Encoded Polyline

The following is an example of an <code>encodedPolylines</code> property whose value is an array containing a single or double <code>EncodedPolyline</code> object:

Table 10 Encoded Polyline example (ellipses indicate string truncation)

Properties of an Encoded Polyline object are as follows:

Property	Туре	Description
coords	String	The vertexes of a polyline accompanying this hazard in order from first to last. The polyline is encoded using the Google Maps algorithm for polyline encoding as presented in the following code:
		https://developers.google.com/maps/documentation/utilities/polylinealgorithm
		All Live Traffic polylines are encoded with 'forceEndpoints' set to true.
		For those using the Google Maps V3 API, these polylines may be decoded using the decodePath method of the class com.google.gwt. maps.client.geometrylib.EncodingUtils.
levels		Unused.
Directio n	Array of Strings	Represents the direction of the polyline. Example Value: "ONE DIRECTION"

Table 11 Encoded Polyline properties

3.3.6. Impacted Lane

The following examples illustrate how various Impacted Lane objects are represented in the Text View of the Live Traffic NSW website and apps.

```
"impactedLanes":[
                                                         1 of 3 northbound lanes closed (lane 2).
   "affectedDirection": "Northbound",
   "closedLanes":"1",
   "description":"Lane 2",
   "extent": "Lanes closed",
   "numberOfLanes":"3"
"impactedLanes":[
                                                         Westbound traffic affected.
    "affectedDirection":"Westbound",
                                                                                      2
    "extent": "traffic affected"
"impactedLanes":[
    "affectedDirection": "Both directions",
                                                         Road closed in both directions.
   "extent": "Closed",
   "roadType":"Road"
```

Table 12 Impacted Lane examples

Properties of an Impacted Lane object are interpreted as follows:

Property	Туре	Description
affectedDirection	String	Direction/s of travel in which traffic is affected
closedLanes	String	Number of lanes closed
description	String	Description of the closed lane/s e.g. the lane number
extent	String	Nature of the impact
numberOfLanes	String	Number of lanes in total, including closedLanes.
roadType	String	Type of carriageway.

Table 13 Impacted Lane properties

3.3.7. Period

The following examples illustrate how various Period objects are represented in the popup bubbles in Map View of the Live Traffic NSW website and apps.

```
"periods": [{
  "closureType": "LANE CLOSURE",

    Scheduled roadwork

  "roadextent": "Lanes closed",
  "roadtype": "",
                                                             Weekdays (7:00am to 5:00pm)
  "direction": "Both directions",
                                                             Lanes closed in both directions
  "finishTime": "5:00pm",
  "fromDay": "Weekdays"
  "startTime": "7:00am",
  "toDay": ""
}],
"periods": [{
 "closureType": "ROAD_CLOSURE",
                                                            Scheduled roadwork
 "roadextent": "Affected",
                                                             Weekday Nights (6:00pm to 6:00am)
 "roadtype": "",
                                                             Traffic affected both directions
 "direction": "Both directions",
 "finishTime": "6:00am",
                                                             Weekend Nights (6:00pm to 6:00am)
 "fromDay": "Weekday Nights",
                                                             Traffic affected both directions
 "startTime": "6:00pm",
 "toDay": ""
},
 "closureType": "ROAD CLOSURE",
 "roadextent": "Affected",
  "roadtype": "",
 "direction": "Both directions",
 "finishTime": "6:00am",
 "fromDay": "Weekend Nights",
 "startTime": "6:00pm",
  "toDay": ""
} ],
"periods": [{
  "closureType": "ROAD CLOSURE",

    Scheduled roadwork

  "roadextent": "Closed",
  "roadtype": "Tunnel",
                                                             Mon (10:00pm to 4:00am)
  "direction": "Eastbound",
                                                             Tunnel closed eastbound
  "finishTime": "4:00am",
  "fromDay": "Monday",
                                                             Tue (10:00pm to 4:00am)
  "startTime": "10:00pm",
                                                             Tunnel closed eastbound
  "toDay": ""
},
                                                             Wed (10:00pm to 4:00am)
                                                             Tunnel closed eastbound
  "closureType": "ROAD CLOSURE",
  "roadextent": "Closed",
                                                             Thu (10:00pm to 4:00am)
  "roadtype": "Tunnel",
                                                             Tunnel closed eastbound
  "direction": "Eastbound",
  "finishTime": "4:00am",
  "fromDay": "Tuesday",
  "startTime": "10:00pm",
  "toDay": ""
},
  "closureType": "ROAD CLOSURE",
  "roadextent": "Closed",
  "roadtype": "Tunnel",
  "direction": "Eastbound",
  "finishTime": "4:00am",
  "fromDay": "Wednesday",
  "startTime": "10:00pm",
  "toDay": ""
},
  "closureType": "ROAD CLOSURE",
  "roadextent": "Closed",
  "roadtype": "Tunnel",
  "direction": "Eastbound",
  "finishTime": "4:00am",
  "fromDay": "Thursday",
  "startTime": "10:00pm",
```

```
"toDay": ""
"periods": [{
  "closureType": "ROAD_CLOSURE",

    Scheduled roadwork

  "roadextent": "Affected",
                                                             Every Day (all day)
  "roadtype": "Road",
                                                             Road affected both directions
  "direction": "Both directions",
  "finishTime": "",
  "fromDay": "Every Day",
  "startTime": "all day",
  "toDay": ""
}],
"periods": [{
 "closureType": "ROAD_CLOSURE",

    Scheduled roadwork

 "roadextent": "Affected",
                                                             Fri (8:00pm to 11:59pm)
 "roadtype": "",
                                                             Traffic affected both directions
 "direction": "Both directions",
 "finishTime": "11:59pm",
                                                             Sat (all day)
 "fromDay": "Friday",
                                                             Traffic affected both directions
 "startTime": "8:00pm",
 "toDay": ""
                                                             Sun (all day)
},
                                                             Traffic affected both directions
 "closureType": "ROAD CLOSURE",
                                                             Mon (12:00am to 6:00am)
 "roadextent": "Affected",
                                                             Traffic affected both directions
 "roadtype": "",
 "direction": "Both directions",
 "finishTime": "",
 "fromDay": "Saturday",
 "startTime": "all day",
  "toDay": ""
},
 "closureType": "ROAD_CLOSURE",
 "roadextent": "Affected",
 "roadtype": "",
 "direction": "Both directions",
 "finishTime": "",
 "fromDay": "Sunday",
 "startTime": "all day",
 "toDay": ""
},
 "closureType": "ROAD_CLOSURE",
 "roadextent": "Affected",
  "roadtype": "",
 "direction": "Both directions",
 "finishTime": "6:00am",
 "fromDay": "Monday",
  "startTime": "12:00am",
  "toDay": ""
}],
```

Table 16 Period examples

Properties of the Period object are as follows:

Property	Туре	Description
closureType	String	Symbolic constant representing the type of planned closure. Possible values are: ROAD_CLOSURE LANE_CLOSURE
direction	String	Direction/s in which closure will occur
finishTime	String	The time at which closure will end each day in this period
fromDay	String	The final day of this period
startTime	String	The time at which closure will commence each day in this period
toDay	String	The first day of this period

Table 17 Period properties

3.3.8. Road

The following examples illustrate how various Road objects are represented in the popup bubbles in Map View of the Live Traffic NSW website and apps.

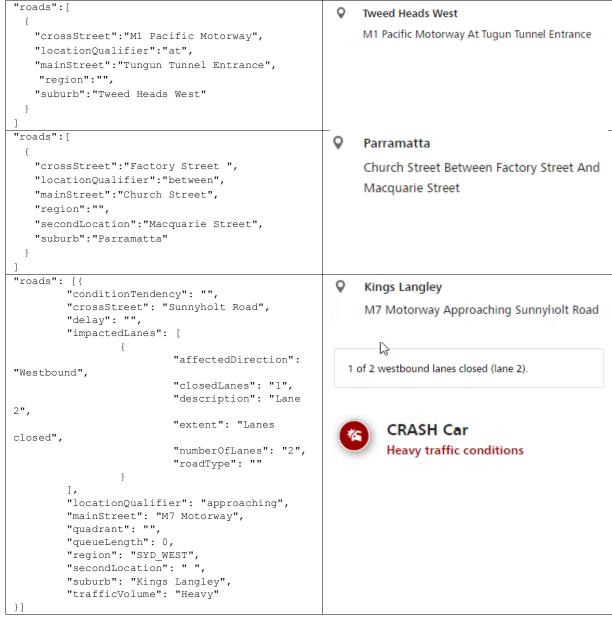


Table 18 Road examples

Properties of a Road object are as follows:

Property	Туре	Description
conditionTendency	String	Unused
crossStreet	String	Nearest street crossing this road
delay	Number	Approximate magnitude of the delay to motorists on this road. Possible values are: • 30 mins • 60s
impactedLanes	[Object]	An array of Impacted Lane objects which captures the lane/s of the road influenced by this hazard. The ordering of elements in the array is undefined. See the Error! Reference source not found. section for details.
locationQualifier	String	String separator that goes between the mainStreet and crossStreet when displayed. Describes the physical relationship between the two.
mainStreet	String	Name of this road
quadrant	String	Unused
queueLength	Number	Length of traffic queued along this road, in kilometres. A value of 0 or -1 indicates there is no queue.
region	String	The geographic region in which this road is located. Possible values are: "region": "Sydney" "region": "Blue Mountains" "region": "Central Coast" "region": "Central NSW" "region": "Far West NSW" "region": "Hunter" "region": "New England North West" "region": "North Coast NSW" "region": "Riverina" "region": "Snowy Mountains" "region": "South Coast" "region": "Southern Highlands" "region": "The Murray"
secondLocation	String	Displayed after locationQualifier in the format "and secondLocation"
suburb	String	Name of the suburb in which this road is located
trafficVolume	String	One word description of the traffic volume on this road. Possible values are:



Table 19 Road properties

3.3.9. Web Link

The following examples illustrate how various Web Link objects are represented in incident details on the Live Traffic NSW website and apps.



Table 20 Web Link examples

Properties of the Web Link object are interpreted as follows:

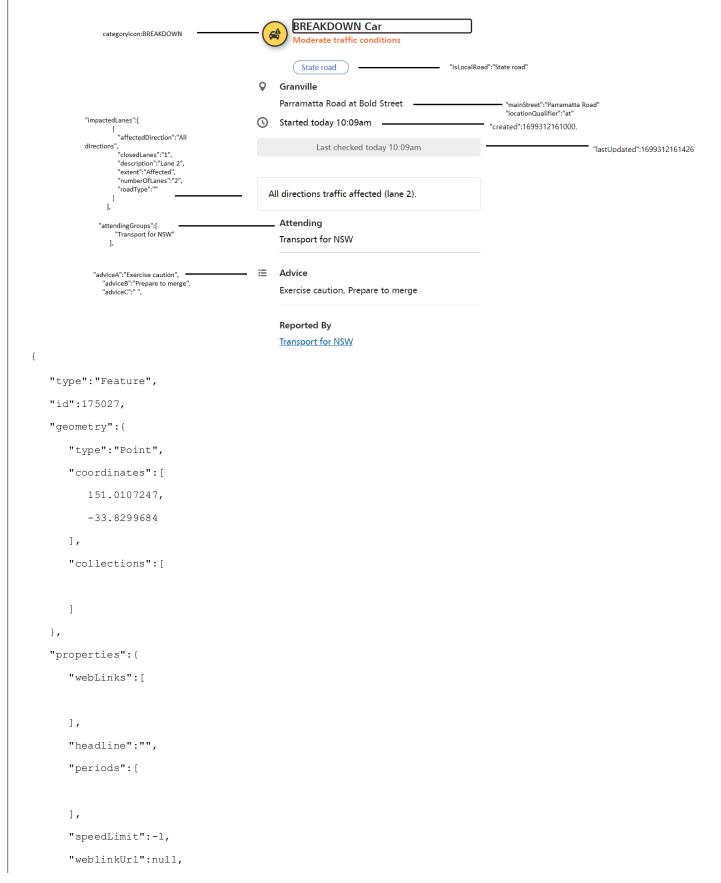
Property	Туре	Description
linkText	String	The text of the hyperlink
linkURL	String	The URL of the hyperlink

Table 21 Web Link properties

3.4. Traffic Hazard Examples

This section contains some examples of traffic hazards as presented on the Live Traffic NSW website and apps, with an emphasis on how the contents of the GeoJSON files describing them has been translated into an on-screen representation.

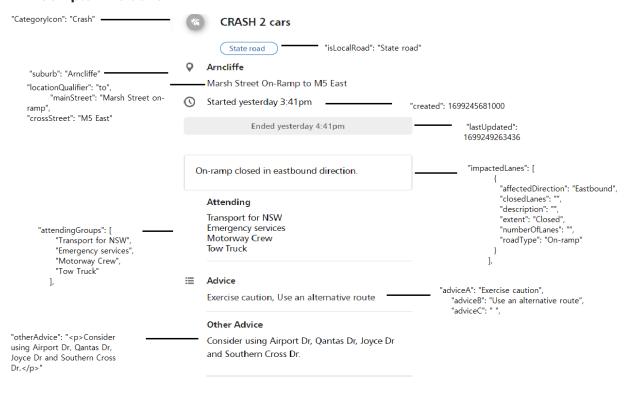
3.4.1. Simple Incident



```
"expectedDelay":-1,
"ended":false,
"isNewIncident":true,
"publicTransport":"",
"impactingNetwork":true,
"subCategoryB":null,
"arrangementAttachments":[
],
"isInitialReport":false,
"created":1699312161000,
"isMajor":false,
"name":null,
"subCategoryA":"Car",
"adviceA": "Exercise caution",
"adviceB": "Prepare to merge",
"adviceC":" ",
"incidentKind": "Unplanned",
"mainCategory": "BREAKDOWN",
"lastUpdated":1699312161426,
"otherAdvice":"",
"arrangementElements":[
],
"diversions":"",
"additionalInfo":[
],
"weblinkName":null,
"attendingGroups":[
   "Transport for NSW"
],
"encodedPolylines":[
"displayName": "BREAKDOWN Car",
"roads":[
   {
      "conditionTendency":"",
      "crossStreet": "Bold Street",
      "delay":"",
      "impactedLanes":[
            "affectedDirection": "All directions",
```

```
"closedLanes":"1",
             "description": "Lane 2",
             "extent": "Affected",
             "numberOfLanes": "2",
             "roadType":""
      ],
      "locationQualifier": "at",
      "mainStreet": "Parramatta Road",
      "quadrant":"",
      "queueLength":0,
      "region":"Sydney",
      "secondLocation":"",
      "suburb": "Granville",
      "trafficVolume": "Moderate"
],
"isLocalRoad": "State road",
"CategoryIcon": "Breakdown"
```

3.4.2. Complex Incident



OFFICIAL

```
"type":"Feature",
"id":174968,
"geometry":{
    "type":"Point",
  "coordinates":[
    151.1553055,
     -33.9396123
  1.
  "collections":[
  ]
"properties":{
  "webLinks":[
  "headline":"CRASH 2 cars ARNCLIFFE Marsh Street on-ramp to M5 East",
  "periods":[
  "speedLimit":-1,
"weblinkUrl":null,
  "expectedDelay":-1,
  "ended":true,
  "isNewIncident":false,
  "publicTransport":"",
  "impactingNetwork":true,
  "subCategoryB":null,
  "arrangementAttachments":[
  "isInitialReport":false,
  "created":1699245681000,
  "isMajor":true,
  "name":null,
  "subCategoryA":"2 cars",
  "adviceA": "Exercise caution",
  "adviceB": "Use an alternative route",
  "adviceC":" ",
  "incidentKind": "Unplanned",
"mainCategory": "CRASH",
  "lastUpdated":1699249263436,
  "otherAdvice":"Consider using Airport Dr, Qantas Dr, Joyce Dr and Southern Cross Dr.",
  "arrangementElements":[
  "diversions":"",
  "additionalInfo":[
  "weblinkName":null,
  "attendingGroups":[
    "Transport for NSW",
     "Emergency services",
     "Motorway Crew",
     "Tow Truck"
  "encodedPolylines":[
  "displayName":"CRASH 2 cars",
  "roads":[
     {
        "conditionTendency":"",
        "crossStreet":"M5 East",
"delay":"",
        "impactedLanes":[
          {
              "affectedDirection": "Eastbound",
             "closedLanes":"",
"description":"",
             "extent": "Closed",
             "numberOfLanes":"",
              "roadType":"On-ramp"
          }
        "locationQualifier":"to",
        "mainStreet": "Marsh Street on-ramp",
"quadrant": "",
        "queueLength":0,
        "region": "Sydney"
        "secondLocation":"",
```

```
"suburb":"Arncliffe",
    "trafficVolume":""

    ],
    "isLocalRoad":"State road",
    "CategoryIcon":"Crash"
}
```

3.4.3. Roadworks

```
"roads":[
                                                                                                                                                                                          "conditionTendency":"",
                                                                                                                                                                                          "crossStreet":"Old Nelligen Road",
"delay":"",
                                                                                                                                                                                          "impactedLanes":[
                                                                                              SCHEDULED ROADWORK Nelligen
                                                                                                                                                                                          ],
"locationQualifier":"between",
                                                                                              Bridge replacement project
                                                                                              State road
                                                                                                                                                                                          "mainStreet":"Kings Highway",
                                                                                          Nelligen
                                                                                                                                                                                          "quadrant":"
                                                                                           Kings Highway between Old Nelligen Road and Reid
                                                                                                                                                                                           "gueueLength":0,
                     "closureType":"ROAD_CLOSURE",
"roadextent":"Affected",
"roadtype":"",
                                                                                                                                                                                          "region":"South Coast",
                                                                                                                                                                                          "secondLocation":"Reid Street",
"suburb":"Nelligen",
"trafficVolume":""
                                                                                     m Mon 22 Feb 2021 to Tue 31 Dec 2024
                      "direction":"Both directions",
                     "finishTime":"6:00pm",
"fromDay":"Weekdays",
"startTime":"7:00am",
                                                                                        Scheduled roadwork
                                                                                             Weekdays (7:00am to 6:00pm)
Traffic affected both directions
                      "toDay":""
                                                                                             Sat (8:00am to 1:00pm)
Traffic affected both directions
                                                                                                                                                          "webLinks":[
                     "closureType":"ROAD_CLOSURE",
"roadextent"."Affected",
"roadtype":"",
"direction"."Both directions",
"finishTime":"1:00pm",
"fromDay"."Saturday",
"startTime"."8:00am",
"toDay":"
                                                                                           Nelligen Bridge replacement project
                                                                                                                                                                            "linkText":"Nelligen Bridge replacement project",
                                                                                                                                                                           "linkURL": "https://www.rms.nsw.gov.au/projects/nelligen-
                                                                                                                                                         bridge/index.html"
                                                                                           Reduced speed limit (40km/h), Check signage
                                                                                          Other Advice
                                                                                          Alternating (stop/slow) traffic conditions will be in
place during weekday work.
                                                                                                                                                                        "otherAdvice":"Alternating (stop/slow) traffic
                                                                                                                                                                       conditions will be in place during weekday work.
Reduced speed limits will be in place during and outside
                                                                                           Reduced speed limits will be in place during and
              1,
                                                                                           outside of work hours.
                                                                                                                                                                       of work hours.",
"adviceA":"Reduced speed limit",
                                                                                           Reported By
          "adviceB":"Check signage",
"adviceC":" "
                                                                                           Transport for NSW
```

```
"type": "Feature",
"id":82681,
"geometry":{
   "type": "Point",
   "coordinates":[
      150.1431796,
      -35.6474524
  ],
   "collections":[
  ]
},
"properties":{
   "webLinks":[
         "linkText": "Nelligen Bridge replacement project",
         "linkURL": "https://www.rms.nsw.gov.au/projects/nelligen-bridge/index.html"
  1,
   "headline":"",
   "periods":[
         "closureType": "ROAD_CLOSURE",
```

```
"roadextent": "Affected",
      "roadtype":"",
      "direction": "Both directions",
      "finishTime":"6:00pm",
      "fromDay": "Weekdays",
      "startTime":"7:00am",
      "toDay":""
   },
      "closureType": "ROAD CLOSURE",
      "roadextent": "Affected",
      "roadtype":"",
      "direction": "Both directions",
      "finishTime":"1:00pm",
      "fromDay": "Saturday",
      "startTime":"8:00am",
      "toDay":""
   }
],
"speedLimit":40,
"weblinkUrl":null,
"expectedDelay":-1,
"ended":false,
"isNewIncident":false,
"publicTransport":"",
"impactingNetwork":true,
"subCategoryB":null,
"arrangementAttachments":[
],
"isInitialReport":false,
"created":1613102486000,
"isMajor":false,
"name":null,
"subCategoryA":"null",
"adviceA": "Reduced speed limit",
"adviceB": "Check signage",
"adviceC":" ",
"end":1735628400000,
"incidentKind": "Planned",
"mainCategory": "SCHEDULED ROADWORK",
"lastUpdated":1678574710604,
```

```
"otherAdvice":"Alternating (stop/slow) traffic conditions will be in place during weekday
\verb|work.| equal to the property work of the property with the property work of the prope
                                 "arrangementElements":[
                                 ],
                                 "diversions":"",
                                 "additionalInfo":[
                                 ],
                                 "weblinkName":null,
                                 "attendingGroups":null,
                                 "encodedPolylines":[
                                 ],
                                 "duration":null,
                                 "start":1613912400000,
                                 "displayName": "SCHEDULED ROADWORK Nelligen Bridge replacement project",
                                 "media":[
                                 ],
                                 "roads":[
                                             {
                                                        "conditionTendency":"",
                                                        "crossStreet": "Old Nelligen Road",
                                                        "delay":"",
                                                        "impactedLanes":[
                                                        ],
                                                        "locationQualifier": "between",
                                                        "mainStreet": "Kings Highway",
                                                        "quadrant":"",
                                                         "queueLength":0,
                                                        "region": "South Coast",
                                                         "secondLocation": "Reid Street",
                                                        "suburb": "Nelligen",
                                                        "trafficVolume":""
                                            }
                                 ]
```

3.4.4. Fire

```
"mainCategory": "BUILDING FIRE",
                                                      BUILDING FIRE
             "Categorylcon": "Fire"
                                                      Heavy traffic conditions
                                                      State road
              "locationQualifier":
                                                                                  "isLocalRoad": "State road",
                                                  Manly
         "between"
               "mainStreet":
                                                   Pittwater Road between Denison Street and
         "Pittwater Road",
                                                   Raglan Street
               "region": "Sydney",
               "secondLocation":
                                                  Started today 12:03pm
         "Raglan Street",
"suburb": "Manly",
                                                              Ended today 12:54pm
  "roads": [
                                                Road closed in southbound direction.
        "conditionTendency": ""
        "crossStreet": "Denison Street",
                                                  Attending
                                                                                                 "attendingGroups": [
        "delay": "
                                                                                                 "Emergency services",
       "impactedLanes": [
                                                  Emergency services
                                                                                                 "Transport for NSW"
                                                  Transport for NSW
         "affectedDirection":
  "Southbound",
         "closedLanes": "",
                                             "adviceA": "Avoid the area",
"adviceB": "Use an alternative route",
"adviceC": "Plan your journey",
         "description": "
                                                  Avoid the area, use an alternative route, plan
         "extent": "Closed",
                                                  your journey.
         "numberOfLanes":
         "roadType": "Road"
                                                  Reported By
       ],
                                                  Transport for NSW
{
          "type": "Feature",
          "id": 244812,
          "geometry": {
             "type": "Point",
             "coordinates": [151.2852001, -33.794859],
             "collections": []
         },
          "properties": {
             "webLinks": [],
             "headline": "",
             "periods": [],
             "speedLimit": -1,
             "weblinkUrl": null,
             "expectedDelay": -1,
             "ended": true,
             "isNewIncident": false,
```

```
"publicTransport": "",
"impactingNetwork": true,
"subCategoryB": null,
"arrangementAttachments": [],
"isInitialReport": false,
"created": 1754445816000,
"isMajor": false,
"name": null,
"subCategoryA": "null",
"adviceA": "Avoid the area",
"adviceB": "Use an alternative route",
"adviceC": "Plan your journey",
"incidentKind": "Unplanned",
"mainCategory": "BUILDING FIRE",
"lastUpdated": 1754448877354,
"otherAdvice": "",
"arrangementElements": [],
"diversions": "",
"additionalInfo": [],
"weblinkName": null,
"attendingGroups": [
  "Emergency services",
  "Transport for NSW"
],
"encodedPolylines": [],
"displayName": "BUILDING FIRE",
"roads": [
  {
    "conditionTendency": "",
    "crossStreet": "Denison Street",
    "delay": "",
    "impactedLanes":[
      {
         "affectedDirection": "Southbound",
```

```
"closedLanes": "",
             "description": "",
             "extent": "Closed",
             "numberOfLanes": "",
             "roadType": "Road"
           }
         ],
         "locationQualifier": "between",
         "mainStreet": "Pittwater Road",
         "quadrant": "",
         "queueLength": 0,
         "region": "Sydney",
         "secondLocation": "Raglan Street",
         "suburb": "Manly",
         "trafficVolume": "Heavy"
      }
    ],
    "isLocalRoad": "State road",
    "Categorylcon": "Fire"
  }
}
```

4. Live Traffic Cameras

4.1. Details

Traffic camera data resides in a GeoJSON file that can be accessed from https://api.transport.nsw.gov.au/v1/live/cameras

4.1.1. File Structure

The basic format of the traffic-cam.json GeoJSON file is as follows:

```
"type": "FeatureCollection",
    "rights": {
         "copyright": String,
         "licence": String
}.
```

```
"features": [ { Feature object } ]
```

Properties of the FeatureCollection object are described in the following table.

Property	Туре	Description
features	[Object]	Array of Feature objects where each Feature object corresponds to a traffic camera. The ordering of Feature objects within the array is undefined.
rights	Object	Copyright and licensing details for the data in this file
type	String	Always "FeatureCollection", as per the GeoJSON standard.

Table 22 Feature Collection properties

4.2. Feature Structure

The following example illustrates how a GeoJSON Feature corresponds to a single traffic camera.

```
"type": "Feature",
                                                             5 Ways
  "id": "d2e386",
                                                             Miranda
  "geometry": {
   "type": "Point",
   "coordinates": [
    151.10533,
     -34.02977
  "properties": {
    "region": "SYD SOUTH",
    "title": "5 Ways (Miranda)",
    "view": "5 ways at The Boulevarde looking
west towards Sutherland.",
    "direction": "W",
    "href":
"https://www.livetraffic.com/traffic-
cameras/all-nsw/5-ways-miranda"
                                                         5 Ways at The Boulevarde looking west towards
                                                         Sutherland.
                                                         New images are uploaded every 15 seconds.
```

Table 23 Traffic Camera example

Properties of the Feature are as follows:

Property	Туре	Description
direction	String	The direction the camera is facing. Possible values are: • N
		SEWN-W

		N-ES-WS-E
href	String	URL of the camera image. The image is always in JPEG format. Note that the date, time and URL of live traffic are part of the image.
region	String	The name of an area used to segment NSW within which the camera is located.
title	String	Short name of this camera
view	String	Single sentence description of the view the camera has

Table 24 Camera properties

5. LGA Participation

5.1. Details

A list of councils currently providing information via Live Traffic NSW is summarised in the JSON file https://api.transport.nsw.gov.au/v1/live/hazards/regional-lga-participation/all

5.2. File Structure

Each Feature in the file represents a participating local council, and has the following general format:

5.3. Object Properties

Properties of the Feature are as follows:

Property	Туре	Description
website	String	URL of the council website
name	String	Name of the council
email	String	Email address of the council
contact	String	Phone number of the council
id	Number	System-generated number (unused on Live Traffic NSW)

Table 25 Object properties

6. Site Status

6.1. Details

The current status of Live Traffic NSW as a whole is summarised in the JSON file api.transport.nsw.gov.au/v1/live/status

File Structure:

This file contains a single object with three properties.

```
{
    "status": "AVAILABLE",
    "topLine": "",
    "bottomLine": ""
}
```

If the status is not AVAILABLE this does not necessarily mean that the data in the GeoJSON files described here is invalid or out of date.

6.2. Object Properties

This properties of the object are as follows:

Property	Туре	Description
bottomLine	String	Second line of message in case of status not being AVAILABLE. This generally describes when the site is expected to be available again e.g. "Normal service will resume at approximately 3pm today.".
status	String	Under normal circumstances the status is AVAILABLE. If it is anything else, the site is off line.
topLine	String	First line of message in case of status not being AVAILABLE. This generally describes why the site is offline. E.g. "The Live Traffic NSW website is down for planned maintenance."

Table 26 Object properties

7. Appendix A:

7.1. Changes since version 1.0

The following summarises the differences between versions 1.0 and 1.1 of this document.

- The properties subCategoryB, ubdRef, roadClosureUrl and specialEventClearwaysUrl are no longer in use. GeoJSON properties with these names will still appear against GeoJSON objects but their values will be the empty string.
- The arrangementAttachments and arrangementElements properties are no longer limited to hazards of type Major Event. These properties may now be supplied for hazards of any type.
- A new property called publicTransport has been introduced to hazards of all types. It's value is a String which may contain HTML.
- The list of possible values of the attendingGroups property now excludes the value "Transport Operator", and includes the new value "Heavy tow truck" in its place.

7.2. Changes since version 1.1

The following summarises the differences between versions 1.1 and 1.2 of this document.

- The properties ubdRef, roadClosureUrl and specialEventClearwaysUrl have been removed from the GeoJSON properties section of all hazard types.
- The new property incidentKind has been added to the GeoJSON properties section of all hazard types.
- Updated descriptions for properties mainCategory, subCategoryA and isNewIncident.
- Updated Travel Time section to include references to the new M2 travel time JSON file.

7.3. Changes since version 1.2

The following summarises the differences between versions 1.2 and 1.3 of this document.

- Updated the RMS document image to TfNSW image.
- Removed RMS contact details and the Copyright statement.
- Changed URL references from livetraffic.rta.nsw.gov.au to data.livetraffic.com.
- Removed references to 131500 in JSON examples.
- Changed URL reference from http://www.131500.com.au to http://www.transportnsw.info in JSON examples.
- Changed URL references from http://livetraffic.rta.nsw.gov.au/data-2/traffic-cam.json to http://data.livetraffic.com/cameras/traffic-cam.json
- Changed URL reference from www.rta.nsw.gov.au to www.rms.nsw.gov.au in JSON examples.

- Changed text references from F3 to M1
- Removed the Map Options section from the document. The files previously described in this section:

hvcs.json	Heavy vehicle checking stations
stc.json	Safe-T-Cams
rest-area.json	Rest areas

will not be available from data.livetraffic.com and are for use in the Live Traffic Website only.

7.4. Changes since version 1.3

The following summarises the differences between versions 1.3 and 1.4 of this document.

 Removed the Travel Times section from the document. The files previously described in this section:

f3.json	M1 Pacific Motorway
m2.json	M2 Motorway
m4.json	M4 Western Motorway
m7.json	M7 Motorway

will not be available from data.livetraffic.com and are for use in the Live Traffic Website only.

7.5. Changes since version 1.4

The following summarises the differences between versions 1.4 and 1.5 of this document.

Updated references from HTTP to HTTPS

7.6. Changes since version 1.5

The following summarises the differences between versions 1.5 and 1.6 of this document.

- Inclusion of new fields:
 - o expectedDelay
 - o adviceC
 - o geometry \rightarrow collections
 - Point
 - Polygon

7.7. Changes since version 1.6

The following summarises the differences between versions 1.6 and 1.7 of this document.

- Inclusion of local road information files
 - o https://data.uat.livetraffic.com/traffic/hazards/regional/lgaincidents.json

- o https://data.uat.livetraffic.com/traffic/hazards/regional/lgaincidents-open.json
- o https://data.uat.livetraffic.com/traffic/hazards/regional/lgaincidents-closed.json
- Inclusion of LGA Participation file
 - o https://data.uat.livetraffic.com/traffic/hazards/regional/lgaparticipation.json

7.8. Changes since version 1.7

The following summarises the differences between versions 1.7 and 1.8 of this documents.

- Inclusion of Local and State Road field for incidents
- Inclusion of categoryIcon field for all incidents
- Inclusion of Single and Double polylines

7.9. Changes since version 1.8

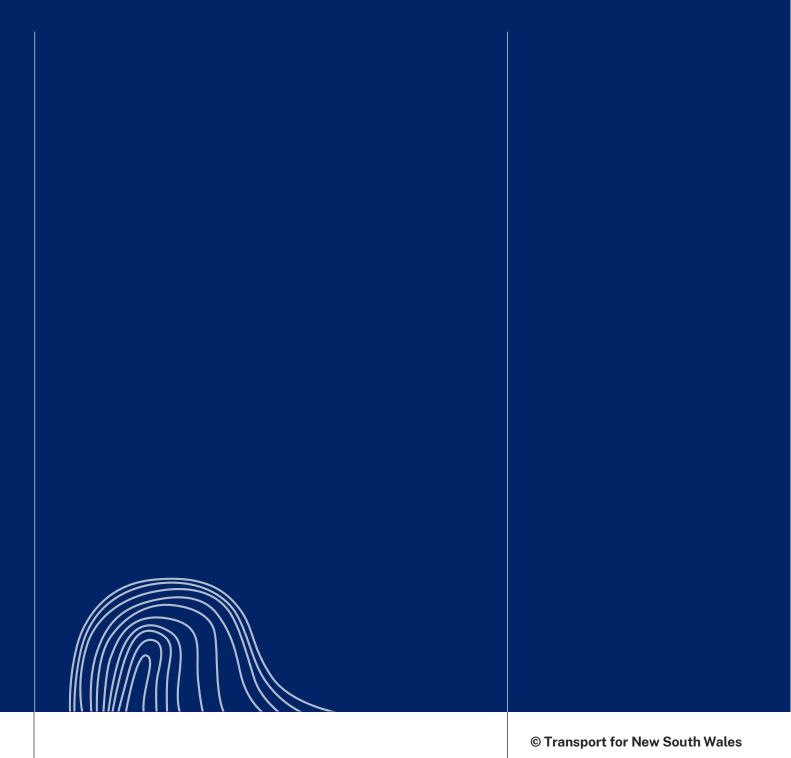
The following summarises the differences between versions 1.8 and 1.9 of this documents.

Update of data.livetraffic.com to api.transport.nsw.gov.au

7.10. Changes since version 1.9

The following summarises the differences between versions 1.9 and 1.10 this document.

 New field introduced hideEndDate controls the visibility and formatting of the 'Planned To' date for planned incidents on the Live Traffic front-end.



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