

Traffic: Road Incidents and Closures from Open Agency Feeds

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Version 1.0 — October 13, 2026

Abstract

This document describes Traffic, a road-conditions layer for Orbital Network, and sets out its use cases. Traffic plots live road incidents and construction closures from Ontario 511, the Ontario Ministry of Transportation's open traveller-information service, on the network's real-time globe. Each marker is an event the agency itself is publishing — a collision, a closure, a construction zone — shown with the roadway, the event type, and the agency's own description. Consistent with the network's data-provenance rules, every card names its source, and where no agency publishes openly, nothing is plotted: commercial traffic-flow feeds and ship positions that require their own keys are named in the layer's status line rather than simulated. The layer is live as of October 2026.

What the layer shows

Ontario 511 incidents and construction. When the layer is switched on, the page reads Ontario 511's two open feeds — current events and construction — and plots each mappable event (up to 140) at the latitude and longitude the agency publishes for it. A marker's title names the roadway and event type; its card carries the agency's description or headline, the direction of travel where the feed gives one, and the source line "Ontario 511 DOT · live incident feed." These are reported incidents and closures, not traffic speeds: the layer shows where something has happened or a road is closed, not how fast traffic is moving.

What is deliberately absent. TomTom and HERE traffic-flow data and AIS ship positions are not plotted. Those services give every user their own free key, and a static web page cannot hold a key on the visitor's behalf; the layer's status line names them as "free key needed, not plotted" instead of dressing other data up as theirs.

Provenance rules. Traffic follows the same rules as every Orbital Network layer: every reading is bound to a named public source; the card shows what the source published; and the system fails closed — if the 511 feeds cannot be reached, the layer reports that and plots nothing rather than estimating road conditions.

Use cases

Drivers and commuters in Ontario. A closure or collision on a planned route is visible before departure, in the agency's own words, instead of being discovered at the ramp.

Road-trippers and families. On a long drive day, a glance at the globe shows whether the corridor ahead carries active closures or construction, and the card's direction field tells whether it affects the way the family is travelling.

Emergency managers and road agencies. A regional picture of concurrent incidents and closures, timestamped by the publishing agency, complements official dashboards — awareness, not a replacement for them.

Journalists. A reported closure is citable to the DOT feed that published it, with the agency's description intact, rather than paraphrased from a scanner or a social post.

Educators. The layer is a clean demonstration of open government data: one province publishing machine-readable road events that any citizen's page can plot the moment they are issued.

Coverage and limitations

Coverage today is Ontario, because Ontario 511 is the road feed the page reads openly and keylessly; the layer claims no other geography. Most other road data is either commercial, key-gated per user, or published in formats a static page cannot hold a credential for — those sources are named in the status line, never faked. The layer shows incidents and closures only: it carries no speed, congestion, or travel-time data, and an empty map means the feed reported no mappable events, not that every road is clear. Events appear and clear on the agency's schedule; tapping the layer off and on re-reads the feeds.

Disclosure

Manuscript prepared with AI drafting assistance; all content was reviewed and approved by the author, who takes full responsibility for it.

The Orbital Network system described in this document operates at <https://godsky.net>. The white paper "Orbital Network: A Live Broadcast System for Real-Time Planetary Awareness" (Zenodo, DOI 10.5281/zenodo.23328433) describes the parent system.