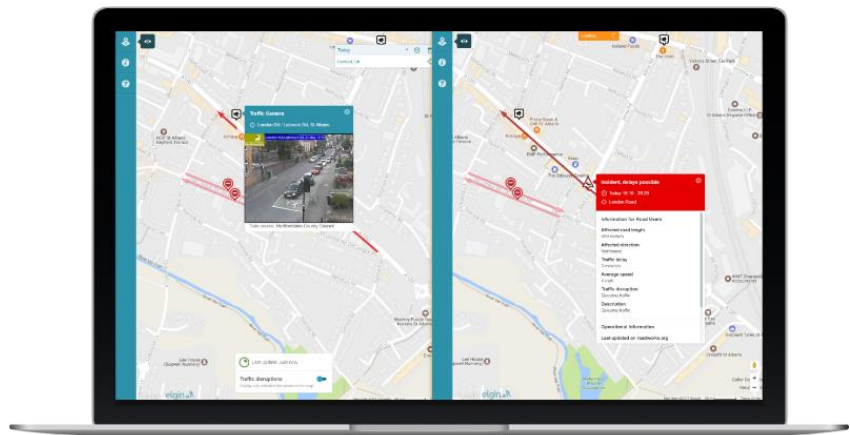


Real-Time Map is a “map dashboard” highlighting severe and unusual congestion. It is a decision support tool for traffic control centre users, streetworks professionals and public event organisers. It combines within a single integrated map information about roadworks and other planned disruptions along with a live view of the traffic conditions, providing a powerful tool to answer the question: “is something unexpected happening on our network?”.

It correlates, wherever possible, the cause of traffic jams against planned and unplanned disruptions such as roadworks, public events and incidents. It enables users to track the actual congestion caused by individual works, events and incidents, including overall delay in each direction, queue length and traffic speeds.

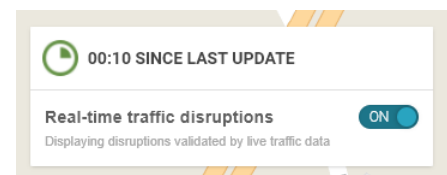


## Benefits

- Real-Time Network Management intelligence highlighting severe and unusual congestion
- Confirm when road closures are in force
- Toggle between view of actual traffic conditions and planned disruptions such as roadworks within a single integrated map
- Relate severe or unusual congestion to its cause where possible (e.g. roadworks or unplanned incidents), enabling adaptive strategies to be deployed, e.g. alteration of traffic signal timings
- No reliance on roadside infrastructure such as ANPR or Bluetooth
- Coverage: national and cross-boundary. All classes of road down to A roads and some major B roads.
- Integration of VMS, CCTV, car park availability and other UTM data sources

## Product Features

Real-Time Map differs from the standard roadworks.org map by offering a toggle switch whereby the user can instantly switch between “planned” and “real-time” views of traffic disruptions such as roadworks.



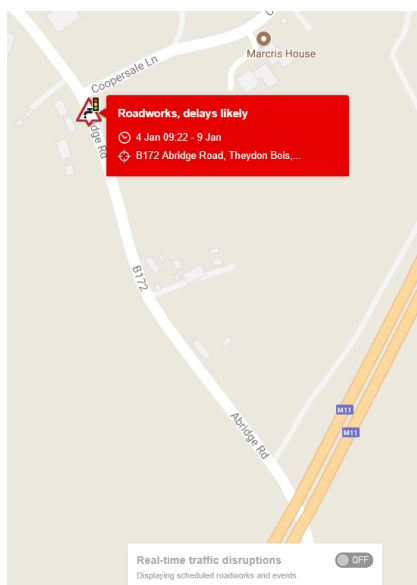
The information on the map is updated every 2 minutes using live traffic data from TomTom. When in “real-time” mode the map displays live traffic disruptions that are either severe, or differ substantially from normal patterns of congestion for the time of day. The following attribute data is displayed in the pop-up window (where known):

- Affected traffic direction and queue length
- Traffic delay (versus free flow conditions)
- Average speed (mph)
- Disruption type (incident / roadworks / lane closure / road closures, etc)

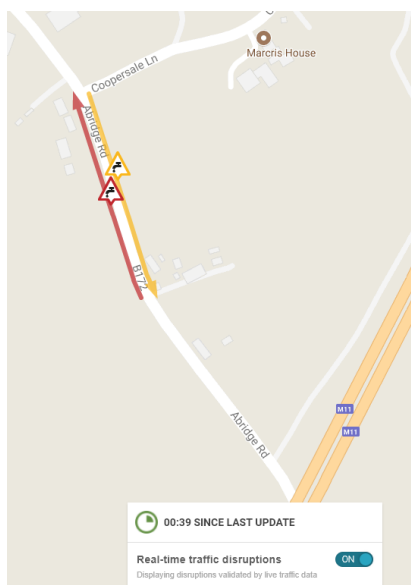
The affected section of the road network is indicated by a coloured line in the direction of traffic flow – indicated by an arrow head –in accordance with the following display rules:

Disruption Type	Description	Display Rules
Incidents and traffic jams	Live traffic incidents categorised by cause where known (e.g. vehicle collision, weather incident, etc.) Source: TomTom	<ul style="list-style-type: none"> <li>Stationary Traffic – max observed speed &lt;17.5% of free flow speed: Dark red</li> <li>Queueing Traffic – max observed speed &lt;27.5% of free flow speed: Bright red</li> <li>Slow Traffic – max observed speed &lt;75% of free flow speed: Amber</li> </ul>
Roadworks, road closures and lane closures	Live disruptions attributed to or associated with active roadworks and traffic management (road closures, lane closures). Source: roadworks.org data validated using TomTom live and historic traffic data.	<ul style="list-style-type: none"> <li>Road Closure – road closed to traffic: Bright red</li> <li>Lane Closure – lane closed to traffic: Bright red</li> <li>Roadworks (High Impact) – max observed speed &lt;56% of free flow speed: Light red</li> <li>Roadworks (Medium Impact) – max observed speed &lt;80% of free flow speed on highways or &lt;50% of free flow speed in cities: Amber</li> </ul>

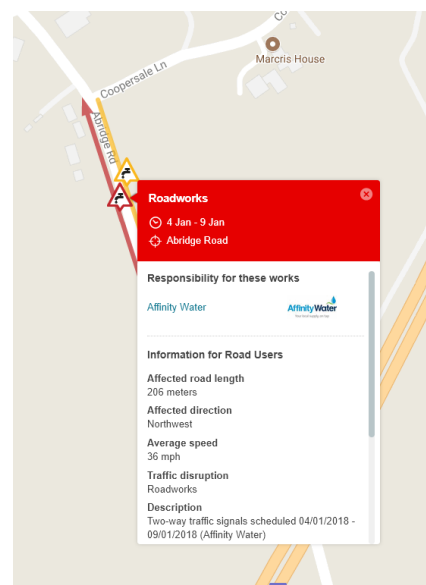
By toggling the map between “planned” and “real-time” views the user can correlate live traffic conditions to planned roadworks:



Planned Affinity Water roadworks showing on the map with the real-time toggle in the off position



Real-time view of same works showing severe and moderate traffic disruption in each direction



Real-time traffic details: northbound traffic flowing at 36 mph over a 206 m stretch of road

Real-time data sources such as VMS, CCTV, live car park availability and other UTM data sources can be integrated into the map, providing a holistic view of the road network.

