Use Case

Traffic Management.

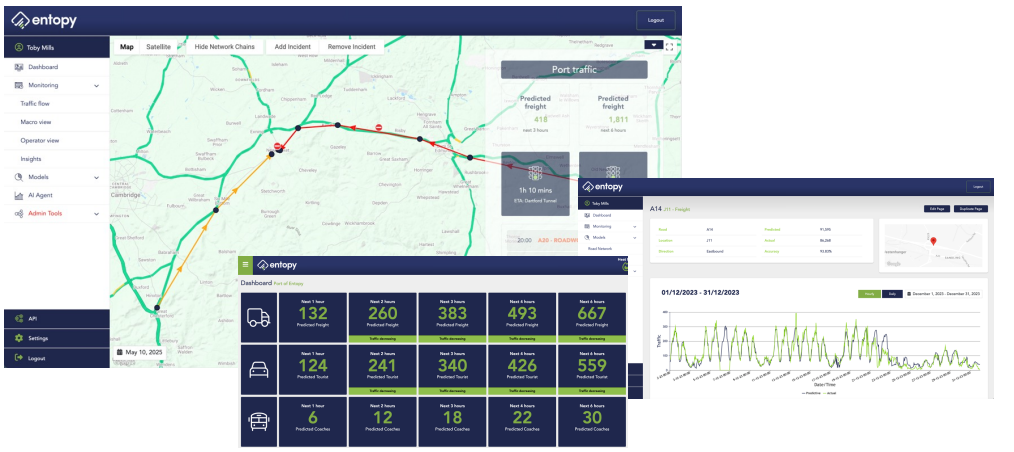
Global road traffic volumes are expected to increase to >2 billion vehicles by 2030 compared to 1.4 billion today, driven by population growth, urbanization and increasing vehicle ownership. With road traffic volumes expected to outpace infrastructure developments, traffic congestion is an increasing problem.

It is estimated that road traffic congestion costs on average 1-2% of GDP for most countries and is expected to cost the UK economy £21.4 billion by 2030. Per household, the cost is estimated to be £2,037 by 2030.

Entopy's AI-enabled Digital Twin platform helps operators across critical infrastructure to manage traffic flows. Using a network of AI micromodels integrated into an overall Digital Twin and combining with real-time data, Entopy's software delivers accurate and dynamic predictive intelligence as far as 4 weeks in advance in 15-minute intervals as well as supporting simulation capabilities to test future scenarios.

Entopy features.

- **AI micromodels:** Entopy deploys many smaller and more focused AI micromodels across a strategic road network for the target location, predicting traffic flows at specific junctions and integrating them into an overall Digital Twin. Outputs are orchestrated with events data in real-time captured from various sources including social media and APIs.
- **Intuitive dashboards:** Entopy's intuitive dashboards enabled seamless integration with the derived intelligence, displaying heads-up display showing predictive traffic volumes across different transport modes (cars, freight, coaches etc.) as well as offering the ability to drill down into the performance of predictive models and the overall road network.
- **Simulation:** Entopy's software provides the capability to test scenarios such as staffing, road closures and accidents using the network of AI micromodels as a base. .
- **AI Agent:** Ask questions of the Digital Twin through Entopy's AI Agent, building analysis, charts/graphs, testing future scenarios and monitoring specific operational aspects.



Benefits.

- Improved planning and staffing
- Targeted traffic management intervention
- Improved passenger experience
- Reduced negative news coverage
- Ability to test future scenarios, events and investments
- Reduce traffic congestion in target locations by 10-50%