Traffic Management
Optimisation

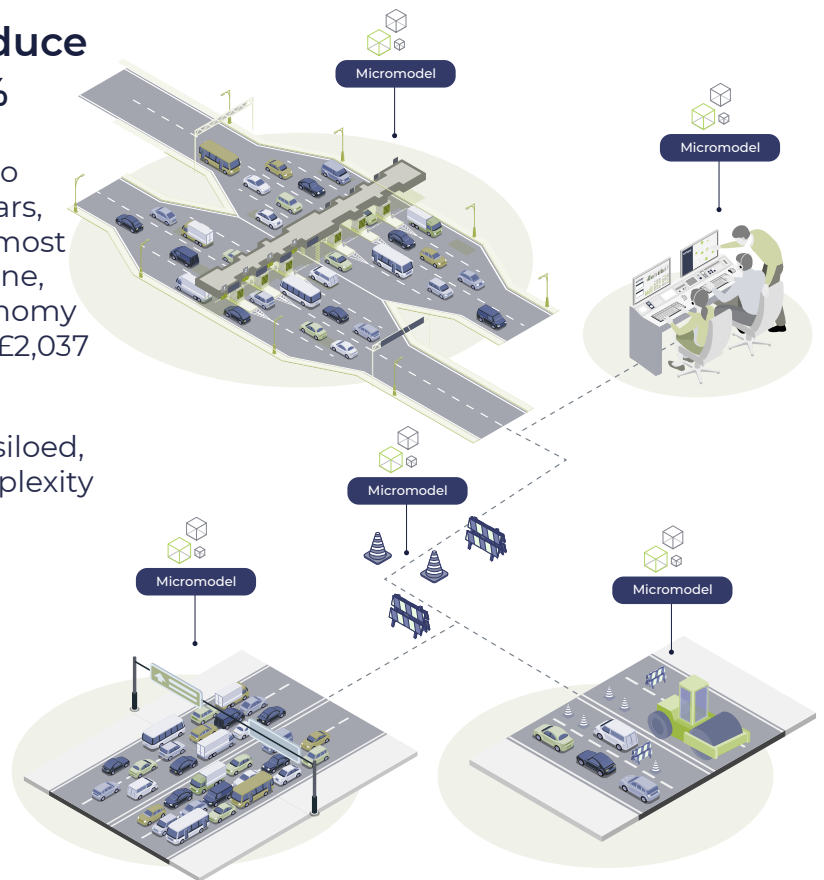### Decrease congestion and improve traffic flow with Entopy's AI platform

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Use decision intelligence to reduce traffic congestion by up to 50%

With global road traffic volumes expected to increase by more than 40% in the next 5 years, congestion is rapidly becoming one of the most pressing infrastructure issues. In the UK alone, traffic delays are forecasted to cost the economy £21.4 billion per year by 2030, equivalent to £2,037 per household.

Traditional traffic systems are reactive and siloed, unable to keep pace with the growing complexity of urban mobility, freight demand, and infrastructure pressures.

Entopy delivers predictive intelligence **4 weeks** in advance in 15-minute intervals and provides simulative capabilities for scenario testing.

Micromodel

Micromodel

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Challenges you face (and we solve)

- Reactive decision-making due to limited predictive insightLimited visibility
- Congestion hotspots forming faster than they can be managed
- Overlapping roadworks and poorly coordinated closures
- HGV surges leading to local disruption and safety risks
- Slow incident response due to lack of real-time operational visibility
- Public transport delays with no clear forecasting tools
- Fragmented data systems that make unified planning difficult

Benefits at a glance

Entopy enables smarter, faster decisions across the entire road network. Key benefits include:

Predictive diversion planning
Prepare signage, rerouting, and comms before congestion occurs.

HGV flow & holding intelligence
Prevent localised freight overflow and improve delivery coordination.

Roadworks scheduling
Avoid overlap with peak traffic times by aligning closures with predicted network patterns.

Dynamic staff deployment
Forecast-led rostering for faster, more targeted incident response.

Public transport management
Support smoother journeys and minimise disruption across modes.

Emergency services routing
Improve response times with predictive routing and asset positioning.

Real impact

Entopy's platform has shown the potential to reduce congestion in targeted areas by **10–50%,** improve public satisfaction, reduce negative news coverage, and increase operational efficiency across key mobility systems.

Why Entopy?

AI Micromodels
Predict traffic flows at a granular level (junctions, routes, zones) and integrate them into a full-network Digital Twin.

Real-time orchestration
Ingest data from sensors, social feeds, and APIs to monitor outlier events like accidents, roadworks, or weather disruptions.

Simulation & scenario testing
Model "what if" scenarios, such as diversions, major events, or incidents, to plan and respond with confidence.

AI Agent interface
Ask questions, generate charts, and interact with the Digital Twin using natural language for real-time insights.

Overcome data availability
Entopy uses synthetic data and ontologies to fill gaps, enabling insights even with limited data.

Ready to take control of congestion?

Let's explore how Entopy can support your traffic management strategy.

Book a 15-minute demo.

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Contact us:
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