

Connected Intelligent Transport Systems

Research Project Update



Project overview & aim

Develop a prototype system that utilises 3rd Party floating vehicle data analytics to trigger traffic management interventions in order to:

- Prevent build-up of traffic congestion on the local network
- Generate traffic management information that influences the flow of traffic through the network in fulfilment of local policy objectives, whether strategic, tactical, environmental, economic or community based

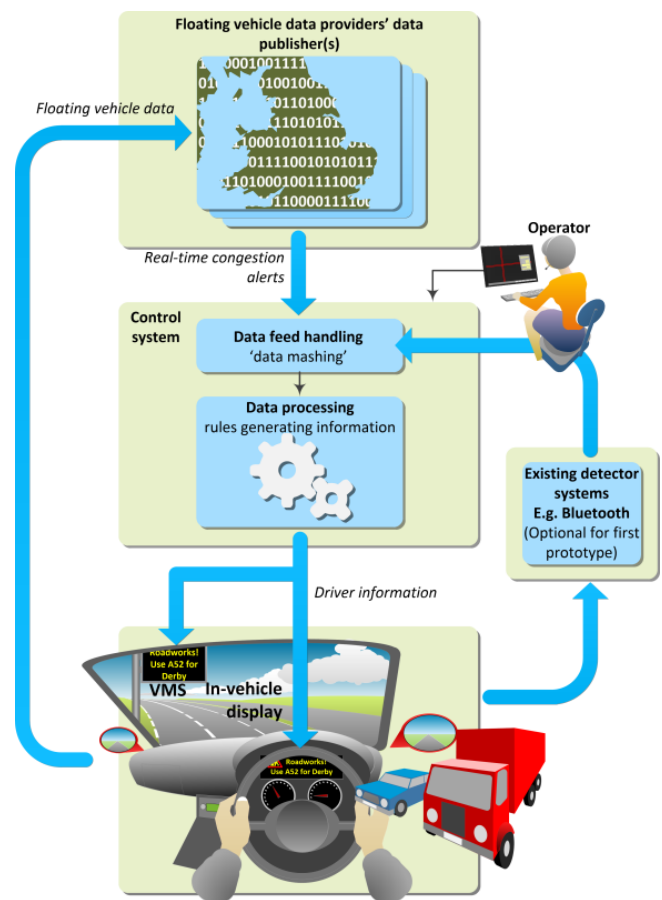
Information generated by the system will be published for display in-vehicle, via a mobile app, and on mobile roadside message signs.

Objectives

- Demonstrate how floating vehicle data can be utilised for an effective pre-emptive traffic management system
- Enable Derbyshire to own an evolving set of business rules that generate traffic management information - through operational experience this set of rules will increasingly be :
 - Pre-emptive of disruptive events
 - Responsive to community needs such as reducing vehicle emissions in sensitive areas and managing congestion around planned events.
- Achieve a high degree of decoupling of components in order to:
 - Ensure new and enabling technologies can be readily incorporated
 - Ensure competition in the supply of data and its quality
 - Preclude vendor lock-in

Outcomes

- A compact, versatile and portable traffic management system that does not lock the operator into a particular proprietary end-to-end solution that does not necessarily rely on dedicated roadside infrastructure
- Meeting and embracing the challenge of AI – working with industry to resolve conflict where they have their own information objectives.



Milestones

- System architecture design
- Network model
- Strategy development
- Traffic data & VMS procurement
- Rules engine development
- Operator interface development
- In-vehicle App development
- System integration
- System testing
- System trial in 2018
- Monitoring and evaluation



Progress to date

- System architecture design complete
- Traffic management strategy design complete
- TomTom floating vehicle data feed procured and in place
- Rules engine algorithm development continues
- User interface development continues

Deliverables

- Prototype traffic management system
- Prototype mobile Application
- Mobile variable message signs to display traffic information
- Trial of the system 2018

Partners



Derby City Council



Contact

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