

# **MAVE<sup>®</sup>-S** section related transport telematics



travel time and traffic density

automatic incident detection

section based analyzing and control



## **MAVE<sup>®</sup>-S** section related transport telematics

#### State of the art

Efficient surveillance, control, and management of traffic including detection of incidents requires a well grounded knowledge of actual traffic states. The same applies for traffic messages, routing systems etc.

Traffic counting with conventional detectors only provide the local presence of cars, their local speed, and the local amount (cars per time). Traffic behaviour in between the sections is not measured and perceived, attempts for compensation by enhancing the amount of measuring stations usually fail for technical and financial reasons.

Taking into account the actual section based travel-times and traffic densities (cars per section) result in a reliable description of the traffic situation. Model based methods unfortunately feature so called "phase transitions" just at the interesting states: Traffic is neither linear nor time-invariant.

### **MAVE<sup>®</sup>-S** principles

MAVE<sup>®</sup>-S directly measures the crucial section related properties. It relies on the fact, that a magnetic pattern of the car can be acquired and recognized at the entrance of the next section. A continuous recognition of vehicles can be achieved by correlative comparison of these patterns at subsequent section entries, enabling direct measurement of

- collective travel times and journey speeds,
- traffic density
- flow dissipation
- all local data as measured with conventional methods

 $\mathrm{MAVE}^{\circledast}$ -S delivers these data with a low number of measuring points.

#### Value

MAVE<sup>®</sup>-S systems are the key-components of integrated traffic management and feature:

- one-stop-solutions for traffic control and traffic management on highways as well as in urban environments and tunnels
- efficient section and network control centers
- dependable detection of congestions and incidents
- reliable information for drivers, police, and traffic network providers

Modifications subject to technical progress reserved without prior notice MAVE® is a registered trademark of ave Verkehrs- und Informationstechnik GmbH, Aachen, Germany