



## AIT AUSTRIAN INSTITUTE OF TECHNOLOGY

The AIT Austrian Institute of Technology is Austria's largest research and technology organisation. With its seven Centers, the AIT regards itself as a highly specialised research and development partner for industry, and its researchers are tackling the key infrastructural challenges of the future: Energy, Health & Bioresources, Digital Safety & Security, Vision, Automation & Control, Transport Technologies, Technology Experience and Innovation Systems & Policy.

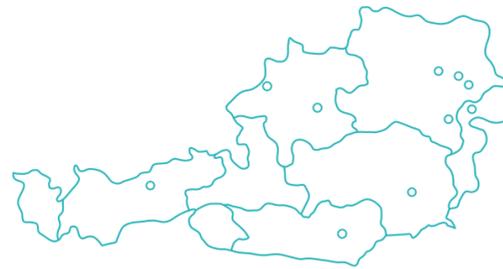
## CENTER FOR TRANSPORT TECHNOLOGIES

Mobility is a core pillar of human society and therefore a central factor in our economic system. At the AIT Center for Transport Technologies, around 200 experts are working on solutions for sustainable, safe, intelligent and thus future-proof mobility. The focus of the research and development work is on material-based lightweight design, on the electrification of the propulsion train and the storage of electrical energy, as well as on a resilient and safe transport infrastructure. This also includes environmentally compatible and intelligent production technologies for mobility components. Comprehensive system know-how, scientific excellence, state-of-the-art laboratory infrastructure and many years of international experience enable AIT experts to drive innovations in the field of climate-friendly mobility and thus to serve industry and society already today with the solutions of tomorrow.

MORE ABOUT TRAFFIC:



<https://www.ait.ac.at/en/traffic>



**1.400**  
EMPLOYEES

**10** LOCATIONS

**7** CENTERS

**AUSTRIA'S LARGEST  
RESEARCH AND TECHNOLOGY  
ORGANISATION**



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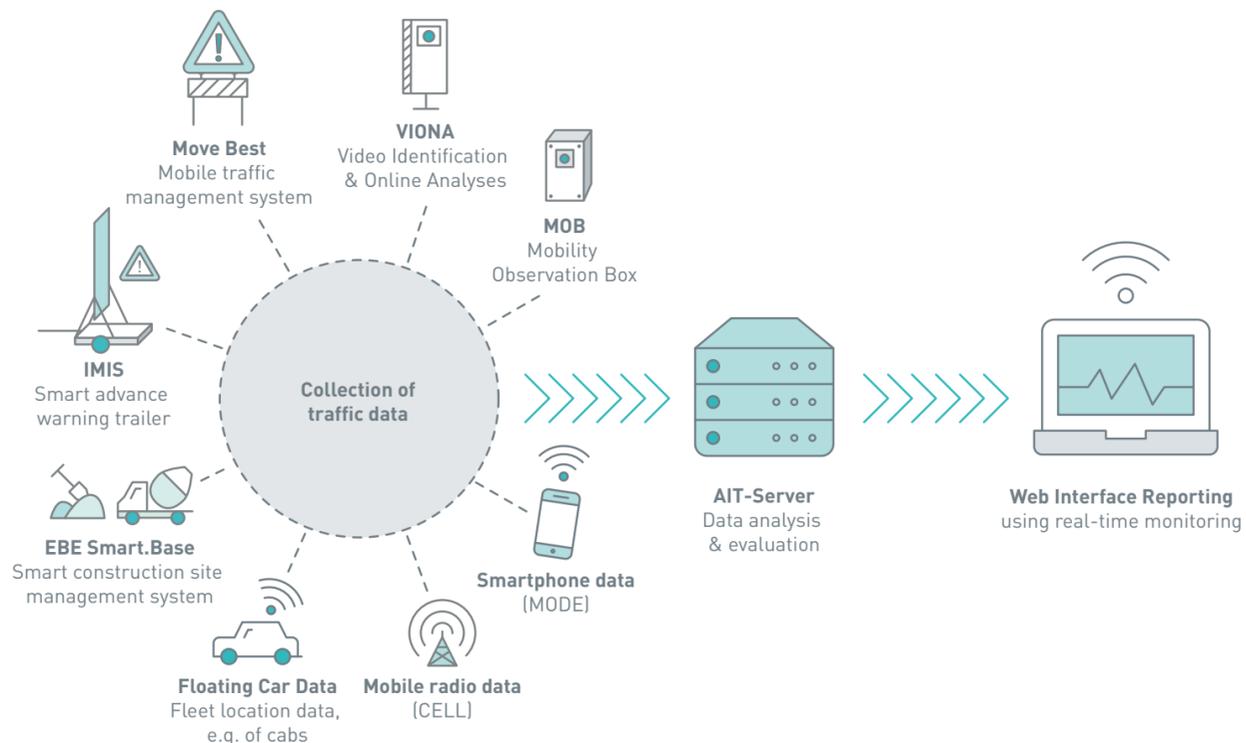


**TRAFFIC**  
Data collection and traffic condition analysis



# TRAFFIC: OBSERVATION AND MEASUREMENT OF REAL-TIME TRAFFIC CONDITIONS

With TRAFFIC, we use state-of-the-art technologies and systems to analyse traffic events and the effects of traffic-related measures, enabling you to make your transport infrastructure safer and more efficient.

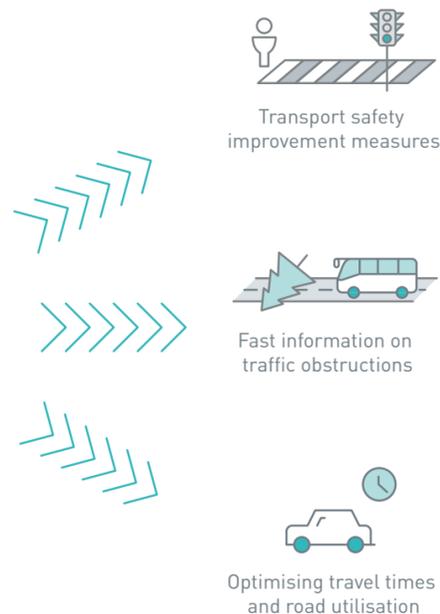


## TRAFFIC LEVERAGES MULTIPLE DATA COLLECTION SYSTEMS

We utilise a wide variety of different systems for the vast amount of data we generate, conducting counts, capturing license plates, and analysing traffic flows, among other things. For this purpose, we monitor key spots for traffic safety and events at construction zones, track traffic conditions and record all conflicts. In addition, multimodal traffic patterns can be captured using AIT-Solutions.

## OUR SYSTEMS MEASURE A WIDE VARIETY OF DIFFERENT PARAMETERS

The systems we use provide a wide range of real-time information and cover a wide range of traffic-related key parameters – from lane changes and transit surveys to traffic disruptions, from speed measurements and traffic counts to travel times and overtaking manoeuvres, from traffic lights to structural measures to parking space evaluation.



## DETAILED INFORMATION FROM ALL SURVEYS AT YOUR DISPOSAL

What is the current traffic situation? When is it necessary to re-route traffic? How long do road users need for certain routes? How often do they overtake each other? Which street lighting provides the best visibility in traffic? We evaluate a large number of surveys and compile clear analyses of the traffic flow for you.

## USING MODERN TECHNOLOGY TO UNDERSTAND TRAFFIC CONDITIONS

In order to plan and optimize traffic in the future, we have to observe and analyse current traffic conditions. To this end, our researchers at AIT leverage cutting-edge technologies. The video and management systems we use collect anonymous data based on GPS, Wi-Fi, and Bluetooth connections, contactless sensor technology and IoT applications.



## COMPREHENSIVELY CAPTURING OVERALL TRAFFIC DATA

We observe traffic conditions, which may include measuring traffic volumes and flows. We observe real-time conditions, assess the effects of measures and draw up comprehensive and detailed concepts. This forms the basis for the use of the AIT Solutions SAFE and IMPACT.



The award-winning Mobility Observation Box is used to evaluate points of conflict. It recognises each vehicle and each pedestrian, and analyses the respective lines of motion.

## TRAFFIC: YOUR BENEFITS

### Highly accurate data surveys of:

- travel times and current road utilisation
- options for efficient construction site control
- traffic flows across the entire road network
- transit count for better bypass planning
- vehicle categories, origin and cross-sectional velocity per vehicle
- utilisation rates for parking and rest areas
- time windows to optimise traffic light timings
- targeted traffic measures for events with a large number of visitors

**Highest privacy standards** through anonymising the collected data (e.g. one-way encryption of license plates)

**Reliable real-time information** on accidents and construction sites

**Customer-specific evaluations** and comprehensive, detailed analyses



Our data collection systems are the result of cooperations with business partners. For example, VIONA is a system for video identification and online analysis of traffic flows, while the IMIS Trailer is a smart advance warning trailer equipped with sensors.